KEY-2013
Keep Educating Yourself

Dept. of Computer Science
Sri Padmavathi Mahila Visvavidyalayam
Tirupati – 517502

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Yet another achievement from the Dept. of Computer Science, Sri Padmavati Mahila Visvavidyalayam… A proud moment to look upon. Yes.. the release of our departmental magazine **"KEEP EDUCATING YOURSELF (KEY)"** to mark the esteem of our students. We look up with joy and pride as this attempt of ours successfully steals the show.

We render our special thanks to Prof. S. Rathna Kumari, Vice-Chancellor of Sri Padmavati Mahila Visvavidyalayam, our devout thanks to Prof. P. Vijaya Lakshmi, Registrar, our warm thanks to Prof. D. Bharathi, Dean, School of Sciences for having permitted our venture. Our heartfelt thanks to beloved Professors Dr. K. Sandhya Rani, Dr. T. Sudha, Dr. S. Jyothi & Dr. K. Usha Rani, Academic Consultants, Technical & Non-teaching staff of the Department of Computer Science for being a constant source of motivation and encouragement.

We appreciate the active participation of our department students who contributed noteworthy articles with a great amount of great energy.

We store our appreciation for viewer's feedback and suggestions on this magazine. Last but not the least we thank Laser Systems Limited and the Almighty for making this release possible and for instigating us to produce many more in the future.

SRI PADMAVATI MAHILA VISVAVIDYALAYAM

Sri Padmavati Mahila Visvavidyalayam (University for Women)was founded in the year 1983 by Sri N.T.Rama Rao, then he is the Chief Minister of Andhra Pradesh, with the fervent desire to train women students as better builders of the Nation and to inculcate skills of leadership in all aspects of life. The University was established under the *Sri Padmavati Mahila Visvavidyalayam* Act of 1983,which has come into force on the 14 of April 1983.It was started with ten faculties and 300 students and twenty staff members. Today the University has a student population of 2700 and an academic staff 250. This year the University is going to have 59 courses at the post-graduate and undergraduate level and a good component of research.

The campus of *Sri Padmavati Mahila Visvavidyalayam* is spread out in a lush green area of 138.43 acres. The University is situated at a distance of 3 km from the railway and bus stations of Tirupati. The campus has the necessary buildings to run its academic programmes and administrative machinery. There are separate buildings for Humanities and Sciences, University's Administration, Central Library, University Auditorium, Sericulture Complex, and School of Pharmaceutical Sciences and also an independent building for Computer Science and Computer centre.

➤ Offered educational services, both general and professional, to women of all age groups, especially in Andhra Pradesh, to shape to their lives and careers.
➤ Facilitated and maintaining excellence in teaching.
➤ Advance knowledge through research and scholarly activity.
➤ Attract the most intellectually able staff and students.
➤ Securing and managing the resources that serve the interest of women through networking and collaboration.
➤ Disseminate knowledge to benefit and serve Andhra Pradesh, Indian and International Community.

"Sri Padmavathi Women's University as the well cut diamond in hand just does not leave good things for people to behold and exclaim".

On the other hand it explains without tiring all the good thoughts there can be that lead good actions and laudable outcome. Each day the commitment and quantum of quality work at the University increases and achievements are becoming gradually incremental. Thirty years of steady rise and still seeking higher scales SPMVV is to live 'forever young' and forever for the young women!

DEPARTMENT OF COMPUTER SCIENCE: A PROFILE

The field of Computer Science has excellent employment potential in the present explosion of technological development. The Department of Computer Science was established in the year 1983 and offering 3 years Master of Computer Applications course since 1987. At present department offers MCA programme following Choice Based Credit System in semester pattern and research programmes: M.Phil. and Ph.D. The department has highly qualified and eminent senior faculty members. The department of Computer Science is with 90 high configured computers having anti-virus in e-class room and computer lab with internet facility and latest equipment & software.

Training at postgraduate level in Computer Science offers immense scope for opportunities in software development and information technology. Employment opportunities through campus interviews are provided to the students. The department is providing text books, MCA, M.Phil., Ph.D. dissertations through departmental library. Online journal accessing facility is provided by university library. Active research is being done in the department through M.Phil. and Ph.D. programmes. Number of scholars enrolled at present in the department is 26. Number of Ph.D.s awarded during last 5 years is 20. Currently 2 major research projects of worth more than 40 lakhs are carrying by department. The department has conducted five National conferences, one International conference and the faculty have attended many workshops and presented more than 250 papers at National and International conferences and published number of articles in reputed journals. The department actively involved in research in the areas like Artificial Intelligence, Data Mining, Neural Networks, Fuzzy Systems, Genetic Algorithms, Computer Networks, Network Security, Parallel Processing, Image Processing, Pattern Recognition, Bio-Computing, Bio Informatics and GIS.

TECHNICAL VINAYAKA
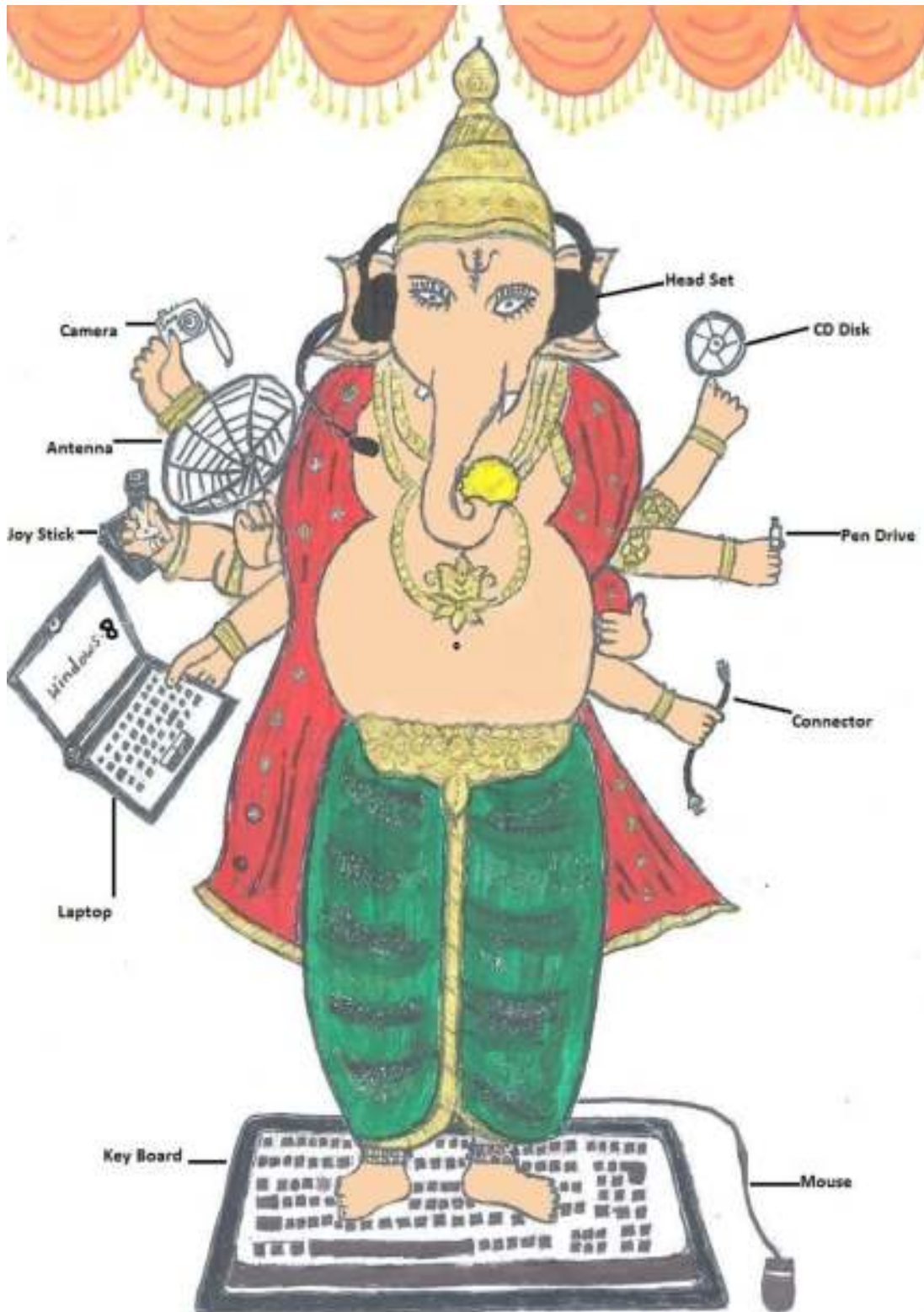
Art by
Thulasi K. (MCA 3rd Year)

.....PRAYER OF A SOFTWARE PROFESSIONAL

Oh! God...

Help me log on without fretting

Guide me as I'm interneting

Bless my downloading and uploading

Keep my browser from exploding

May my website be protected

Let not my password be rejected

Keep my line always connected

And may all my inputs be accepted

Please keep all my programs alive

And to remember to back up my hard drive

And protect my computer from a crashing dive

From a virus that would make it a nesting hive

by
Vijayalakshmi B. (MCA 3rdYear)

QUANTUM COMPUTER

A quantum computer is any device for computation that makes direct use of distinctively quantum mechanical phenomena, such as superposition and entanglement, to perform operations on data.

Need for quantum computer:

➢ It is security in communication between computer in a network.
➢ Quantum computer is more powerful than classical computer and classical computer need more time or memory to match the power of quantum computer.
➢ It can solve large number of factorization.

In classical computer, information is stored as bits; in a quantum computer it is stored as zubits(quantum bits). The basic principle of quantum computation is that the quantum properties can be used to represent and structure data and that quantum mechanisms can be devised and built to perform operations with this data. Classical computer has a memory made up of bits where each bit holds either 0 or 1.
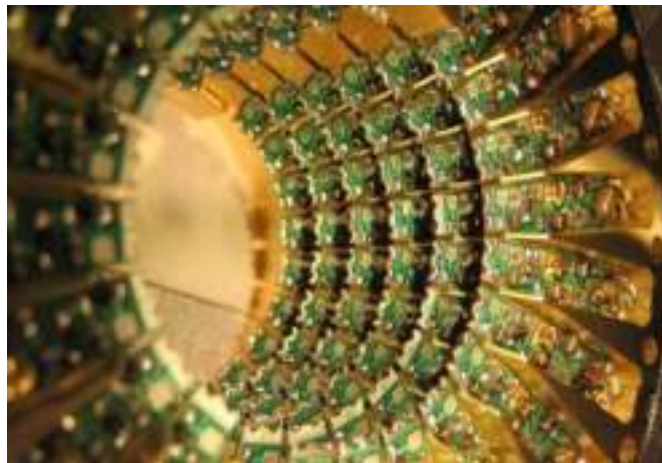
Working:

• Harness the power of atoms and molecules to perform the task.
• Quantum computer wok on qubit.

A single qubit can hold a one or a zero or crucially a quantum superposition of these. A pair of qubits can be in a quantum-superposition of 4 states and three bits in a superposition of 8. In general a quantum computer with n qubits can be in up to $2n$ different states simultaneously. Quantum computer must have at least several dozen qubits to be able to solve real world problems. A quantum. Computer operates by manipulating those qubits with a fixed sequence of quantum logic gates. The sequence of gates to be applied is called a "Quantum Algorithm". Such as Simon's algorithm which run faster than any possible probabilistic classical algorithm.

Quantum computers are different from other computers such as DNA computers and traditional computers based on transistors. This ability would allow a quantum computer to break many of the cryptographic systems in use today, in the sense that there would be a polynomial time algorithm for solving the problem. But for now the technology required to develop such a quantum computer is beyond of our research. Most research in quantum computing is the critical. The most advanced quantum computer have not gone beyond manipulating more than 16 qubit meaning that they are far cry from practical application. If quantum computers can be built they will be valuable in these ways in factoring large

numbers. These are used to protect secure web pages encrypted e-mail and many other types of data. To search large database in a fraction of the time that it would take a conventional computer. Other applications are to study quantum mechanics and to design other quantum computers. But quantum computing is in early stages of development and many computer scientists believe that the technology needed to create a practical quantum computer is years away.

Compiled by
Swetha S. (MCA 3rd Year)

ANDROID CODENAMES

Android is an **operating system** based on the **Linux kernel** and designed primarily for touch screen mobile devices such as smartphones and tablet computers. Android is open source and Google releases the code under the Apache License. Whether it's getting directions, sharing photos with friends, or even slicing virtual fruit, each Android release makes something new possible.

Here the below data about the relative number of devices accessing the Play Store recently and running a given version of the Android platform as of October 2, 2013.

Cupcake (v1.5) - Release on April 30, 2009:

Key additions: Right from the start, Android is an open OS that can run almost any app or widget so you can do what you want to do. Such as speech recognition tools, a virtual keyboard, video upload support for YouTube and support for live data feeds and live folders.

Donut (v1.6) - Release on September 15, 2009:

Key additions: The world's information is at your fingertips - search the web, get driving directions or watch cat videos. Support for CDMA smartphones, additional screen sizes and a text-to-speech engine.

Eclair (v2.0) - Release on October 26, 2009:

Key additions: Make your home screen just how you want it. Arrange apps and widgets across multiple screens and in folders. Stunning live wallpapers respond to your touch. Support for new browser interface, Microsoft Exchange support, single interface for managing multiple online accounts, soft keys support, and camera with digital zoom and flash support.

FroYo (v2.2) - Release on May 20, 2010:

Key additions: Voice Typing lets you input text, and Voice Actions let you control your phone, just by speaking. USB tethering support (for turning a smartphone into a Wi-Fi hotspot), significant speed improvements, Flash 10.1 support, the ability to store apps on external memory cards, updated browser with Google Chrome's V8 JavaScript.

Gingerbread (v2.3) - Release on December 6, 2010:

Key additions: New sensors make Android great for gaming - so you can touch, tap, tilt, and play away.

Honeycomb (v3.1, v3.2) - Release on May 10, 2011(v3.1), July 15, 2011(v3.2):

Key additions: Optimized for tablets, this release opens up new horizons wherever you are. A tablet-centric update that delivered a new interface optimized for devices with larger screen sizes (particularly tablets), video chat support based on Google Talk protocols, new System Bar for global status and notifications and Action Bar for application control, tabbed Web browsing, optimized soft keyboard and a new email interface.

Ice Cream Sandwich (v4.0) - Release on December 16, 2011:

Key additions: Android comes of age with a new, refined design with simple, beautiful and beyond smart. This version can updates the features of Honeycomb(old version), including Face recognition software, tabbed Web browsing capabilities, unified social networking contacts, 1080p video recording capabilities and video chat support based on Google Talk protocols.

Jelly Bean (v4.1, v4.2 and v4.3) - Release on 9 July 2012(v4.1), 13 November 2012(v4.2), 24 July 2013(v4.3):

Key additions: Android is fast and smooth with buttery graphics. With Google Now, you get just the right information at the right time. And with more than 1 million apps on Google Play, and thousands of Android devices, you've got the freedom to do what you want on any device you choose. Advanced natural language voice command capabilities, Improved the Web browser, enhanced file management capabilities and more.

KitKat (v4.4) - Release on October 31, 2013:

Key additions: With KitKat, we've made Android amazing for everyone. Unknown at this time, Originally internally referred to as Key Lime Pie, Google announced in early September 2013 that it would be using the iconic candy bar as the codename for the 4.4 Android release.

Compiled by
Vijayalakshmi B. (MCA 3rd Year)

6 MORE WEB BROWSERS

AOLExplorer uses Microsoft's Trident engine, the same engine that powers Internet Explorer. The latest 1.5 version offers enhanced security, built-in pop-up control, tabbed browsing and a feeds screensaver, use themes to customize the look and feel of your browser, and also create desktop widgets from panels.

GreenBrowser is an open source Web browser that uses Microsoft's Trident engine. It offers some unique features, like the option to search direct by dragging text in the browser.

Swiftfox is a Web browser for Linux platforms that is based on Mozilla Firefox technology, with builds for both AMD and Intel processors.

Lunascape is a 'triple-engine' Web browser that uses Microsoft's Trident, the Mozilla Foundation's Gecko is developed by the Mozilla Foundation, and WebKit (also used for Google Chrome). Lunascape is an excellent browser for Web developers who often find themselves needing to switch between browsers to test functionality of a site. Lunascape-

specific features include anti-crash technology, triple engines that can represent every web site on the planet quickly and precisely, plus design skins customizable to your heart's content.

Konqueror is a Web browser, file manager and file viewer that is a core part of the K Desktop Environment. It runs on most Unix-based operating systems and is licensed under the GNU General Public License.

Apple Safari is a Web browser available for the Macintosh and Windows operating systems as well as the iPhone, iPod Touch and iPad.

Compiled by
SivaTeja K. (*MCA 3rd Year*)

☺ ☺

JOHNNY JOHNNY YES PAPA

Johnny Johnny

Yes Papa

Private computer?

Yes papa

Any motivation?

No papa

Many tension?

Yes papa

Do u sleep well?

No papa

Onsite opportunity?

No papa

Boss scolding?

Yes papa

Increment?

Ha ha ha……

Compiled by

Supriya N. (MCA 3rd Year)

☺ ☺

AUTONOMIC COMPUTING

The millions of businesses, billions of humans that compose them, and trillions of devices that they will depend upon all require the services of the IT industry to keep them running. And it's not just a matter of numbers. It's the complexity of these systems and the way they work together that is creating a shortage of skilled IT workers to manage all of the systems. It's a problem that is not going away, but will grow exponentially, just as our dependence on technology has.

The solution is to build computer systems that regulate themselves much in the same way our autonomic nervous system regulates and protects our bodies. This new model of computing is called autonomic computing. The good news is that some components of this technology are already up and running. However, complete autonomic systems do not yet exist. Autonomic computing calls for a whole new area of study and a whole new way of conducting business.

The Benefits: Autonomic computing was conceived to lessen the spiraling demands for skilled IT resources, reduce complexity and to drive computing into a new era that may better exploit its potential to support higher order thinking and decision making. Immediate benefits will include reduced dependence on human intervention to maintain complex systems accompanied by a substantial decrease in costs. Long-term benefits will allow individuals, organizations and businesses to collaborate on complex problem solving.

The Problem: Within the past two decades the development of raw computing power coupled with the proliferation of computer devices has grown at exponential rates. These phenomenal growths along with the advent of the Internet have led to a new age of accessibility - to other people, other systems, and most importantly, to information. This boom has also led to unprecedented levels of complexity.

The simultaneous explosion of information and integration of technology into everyday life has brought on new demands for how people manage and maintain computer systems. Demand is already outpacing supply when it comes to managing complex, and even simple computer systems. Even in uncertain economic times, demand for skilled IT workers is expected to increase by over 100 percent in the next six years.

As access to information becomes omnipresent through PC's, hand-held and wireless devices, the stability of current infrastructure, systems, and data is at an increasingly greater risk to suffer outages and general disrepair. IBM believes that we are quickly reaching a threshold moment in the evolution of the industry's views toward computing in general and the associated infrastructure, middleware, and services that maintain them. The increasing system complexity is reaching a level beyond human ability to manage and secure. This increasing complexity with a shortage of skilled IT professionals points towards an inevitable need to automate many of the functions associated with computing today.

The Advantages: IBM's proposed solution looks at the problem from the most important perspective: the end user's. How do IT customers want computing systems to function? They want to interact with them intuitively, and they want to have to be far less involved in running

them. Ideally, they would like computing systems to pretty much take care of the mundane elements of management by themselves.

The most direct inspiration for this functionality that exists today is the autonomic function of the human central nervous system. Autonomic controls use motor neurons to send indirect messages to organs at a sub-conscious level. These messages regulate temperature, breathing, and heart rate without conscious thought. The implications for computing are immediately evident; a network of organized, "smart" computing components that give us what we need, when we need it, without a conscious mental or even physical effort.

IBM has named its vision for the future of computing "autonomic computing." This new paradigm shifts the fundamental definition of the technology age from one of computing, to one defined by data. Access to data from multiple, distributed sources, in addition to traditional centralized storage devices will allow users to transparently access information when and where they need it. At the same time, this new view of computing will necessitate changing the industry's focus on processing speed and storage to one of developing distributed networks that are largely self-managing, self-diagnostic, and transparent to the user.

Compiled by
Prashanthi T. (MCA 3ʳᵈ Year)

TIPS TO RECOVER SCRATCHED CD'S

1. Spread a cloth on a flat surface and place the CD on it.
2. Then, hold the disc with one hand, use the other to wipe the polish into the affected area with a soft cloth.
3. Wait for it to dry and buff using short, brisk strokes along the scratch, not across it.
4. A cloth sold to wipe spectacles or camera lenses will work super m8's.
5. When you can no longer see the scratch, wash the disc with water and let it dry before playing. Interesting in it? Try it right now I have used toothpaste with good effects before I have also used car paint cutting compound on deeper scratches. It does leave lots of smaller scratches (as it is a cutting compound after all) but it will remove the worst scratches in most cases. Yeah you are going to be surely benefited by this Operation.

   * Finger marks/prints cause 43% of disc problems!
   * General wear & tear causes 25% of disc problems!
   * Player-related issues cause 15% of disc problems!
   * Remaining Others!

Compiled by
Neelavathi K. (MCA 3ʳᵈ Year)

BIO-DATA OF COMPUTER

Name: Computer
Year of Birth: 1832
Fathers Name: Charles Babbage
Mothers Name: Lady Ad Lovelace
Favorite Snacks: Chips
Favorite Animal: Mouse
Favorite Dress: Software
Favorite Letter: C
Disease I am afraid of: Virus Fever
Friends: Good Programmers
Aim: To think like a man
Lucky Numbers: 0,1

Compiled by
Parvathi E. (MCA 3rd Year)

TYPES OF INTERNET CONNECTIONS

While technology changes at a rapid pace, so do Internet connections. The connection speeds listed below is a general snapshot, representing general average to maximum speeds at the time of publication.

As technology grows, so does our need for bigger, better and faster Internet connections. Over the years the way content is presented via the Web has also changed drastically. Ten years ago being able to center, bold, and produce text in different colors on a webpage was something to admire. Today, Flash, animations, online gaming, streaming HD video, database-driven websites, ecommerce and mobile applications to name but a few are standards.

The need for speed has changed the options available to consumers and businesses alike in terms of how and how fast we can connect to the Internet. The connection speeds listed below represent a snapshot of general average to maximum speeds at the time of publication. This is no doubt will change over time and Internet connection speeds also vary between Internet Service Providers (ISP).

Analog: Dial-up Internet Access

Also called dial-up access, an analog Internet connection is both economical and slow. Using a modem connected to your PC, users connect to the Internet when the computer dials a phone number (which is provided by your ISP) and connects to the network. Dial-up is an analog connection because data is sent over an analog, public-switched telephone network. The modem converts received analog data to digital and vice versa. Because dial-up access uses normal telephone lines the quality of the connection is not always good and data rates are limited. Typical Dial-up connection speeds range from 2400 bps to 56 Kbps. Today, analog has been widely replaced by broadband (Cable and DSL).

ISDN - Integrated Services Digital Network

Integrated services digital network (ISDN) is an international communications standard for sending voice, video, and data over digital telephone lines or normal telephone wires. Typical ISDN speeds range from 64 Kbps to 128 Kbps.

BISDN - Broadband ISDN

Broadband ISDN is similar in function to ISDN but it transfers data over fiber optic telephone lines, not normal telephone wires. SONET is the physical transport backbone of B-ISDN. Broadband ISDN has not been widely implemented.

DSL - Digital Subscriber Line

DSL is frequently referred to as an "always on" connection because it uses existing 2-wire copper telephone line connected to the premise so service is delivered simultaneously with wired telephone service it will not tie up your phone line as an analog dial-up connection does. The two main categories of DSL for home subscribers are called ADSL and SDSL. All types of DSL technologies are collectively referred to as xDSL. xDSL connection speeds range from 128 Kbps to 9 Mbps.

ADSL - Asymmetric Digital Subscriber Line

ADSL is the most commonly deployed types of DSL in North America. Short for asymmetric digital subscriber line ADSL supports data rates of from 1.5 to 9 Mbps when receiving data (known as the downstream rate) and from 16 to 640 Kbps when sending data (known as the upstream rate). ADSL requires a special ADSL modem.

ADSL+2 - ADSL Extension

An extension to ADSL broadband technology that provides subscribers with significantly faster download speeds when compared to traditional ADSL connections. ADSL+2 works in the same fashion as ADSL a special filter is installed on a subscriber's telephone line to split existing copper telephone lines (POTS) between regular telephone (voice) and ADSL+2. ADSL2+ service is most commonly offered in highly-populated metropolitan areas and subscribers must be in close geographical locations to the provider's central office to receive ADSL2+ service.

SDSL - Symmetric Digital Subscriber Line

Short for symmetric digital subscriber line, SDSL is a technology that allows more data to be sent over existing copper telephone lines (POTS). SDSL supports data rates up to 3 Mbps. SDSL works by sending digital pulses in the high-frequency area of telephone wires and cannot operate simultaneously with voice connections over the same wires. SDSL requires a special SDSL modem. SDSL is called symmetric because it supports the same data rates for upstream and downstream traffic.

VDSL - Very High DSL

Very High DSL (VDSL) is a DSL technology that offers fast data rates over relatively short distances the shorter the distance, the faster the connection rate.

Cable - Broadband Internet Connection

Through the use of a cable modem you can have a broadband Internet connection that is designed to operate over cable TV lines. Cable Internet works by using TV channel space for data transmission, with certain channels used for downstream transmission, and other channels for upstream transmission. Because the coaxial cable used by cable TV provides much greater bandwidth than telephone lines, a cable modem can be used to achieve extremely fast access. Cable providers typically implement a cap to limit capacity and accommodate more customers. Cable speeds range from 512 Kbps to 20 Mbps.

Wireless Internet Connections

Wireless Internet, or wireless broadband is one of the newest Internet connection types. Instead of using telephone or cable networks for your Internet connection, you use radio frequency bands. Wireless Internet provides an always-on connection which can be accessed from anywhere as long as you geographically within a network coverage area. Wireless access is still considered to be relatively new, and it may be difficult to find a wireless service provider in some areas. It is typically more expensive and mainly available in metropolitan areas.

T-1 Lines - Leased Line

T-1 lines are a popular leased line option for businesses connecting to the Internet and for Internet Service Providers (ISPs) connecting to the Internet backbone. It is a dedicated phone connection supporting data rates of 1.544Mbps. A T-1 line actually consists of 24 individual channels, each of which supports 64Kbits per second. Each 64Kbit/second channel can be configured to carry voice or data traffic. Most telephone companies allow you to buy just one or some of these individual channels. This is known as fractional T-1access. T-1 Lines support speeds of 1.544 Mbps. Fractional T-1 speeds are 64 Kbps per channel (up to 1.544 Mbps), depending on number of leased channels.

Bonded T-1

A bonded T-1is two or more T-1 lines that have been joined (bonded) together to increase bandwidth. Where a single T-1 provides approximately 1.5Mbps, two bonded T1s provide 3Mbps or 46 channels for voice or data. Two bonded T-1s allow you to use the full bandwidth of 3Mbps where two individual T-1s can still only use a maximum of 1.5Mbps at one time. To be bonded the T-1 must run into the same router at the end, meaning they must run to the same ISP. Typical Bonded T-1 (two bonded T-1 lines) speed is around 3 Mbps.

T-3 Lines - Dedicated Leased Line

T-3 lines are dedicated phone connections supporting data rates of about 43 to 45 Mbps. It too is a popular leased line option. A T-3 line actually consists of 672 individual channels, each of which supports 64 Kbps. T-3 lines are used mainly by Internet Service Providers (ISPs) connecting to the Internet backbone and for the backbone itself. Typical T-3 supports speeds ranging from 43 to 45 Mbps.

OC3 - Optical Carrier

Short for Optical Carrier, level 3 it is used to specify the speed of fiber optic networks conforming to the SONET standard. OC3 is typically used as a fiber optic backbone for large

networks with large voice, data, video, and traffic needs. Speeds are 155.52 Mbps, or roughly the speed of 100 T1 lines.

Internet over Satellite

Internet over Satellite (IoS) allows a user to access the Internet via a satellite that orbits the earth. A satellite is placed at a static point above the earth's surface, in a fixed position. Because of the enormous distances signals must travel from the earth up to the satellite and back again, IoS is slightly slower than high-speed terrestrial connections over copper or fiber optic cables. Typical Internet over satellite connection speeds (standard IP services) average around 492 up to 512 Kbps.

Compiled by
Alekhya M. (MCA 3rd Year)

BYOD - BRING YOUR OWN DEVICE

BYOD is short for *bring your own device*. The term BYOD was mentioned in a paper by Ballagas et al., at UBICOMP 2005.[7] BYOD first entered in 2009.In the consumerisation of IT, BYOD is a phrase that has become widely adopted to refer to employees who bring their own computing devices such as Smartphone, laptops and PDAs to the workplace for use and connectivity on the corporate network. BYOD security relates strongly to the end node problem, wherein a device is used to access both sensitive and risky networks/services. Because of Internet-based risks, some very risk-averse organizations issue devices specifically for Internet use (this is termed Inverse-BYOD).

BYOD Security:

Today, employees expect to use personal Smartphone's and mobile devices at work, making BYOD security a concern for IT teams. Many corporations that allow employees to use their own mobile devices at work implement a BYOD security policy that clearly outlines the company's position and governance policy to help IT better manage these devices and ensure network security is not compromised by employees using their own devices at work.

BYOD security can be addressed by having IT provide detailed security requirements for each type of personal device that is used in the workplace and connected to the corporate network. For example, IT may require devices to be configured with passwords, prohibit specific types of applications from being installed on the device or require all data on the device to be encrypted. Other BYOD security policy initiatives may include limiting activities that employees are allowed to perform on these devices at work (e.g. email usage is limited to corporate email accounts only) and periodic IT audits to ensure the device is in compliance with the company's BYOD security policy.

There are the four main areas to address around BYOD and personal clouds in the workplace:

Policy: A security policy, whether mobile or other, communicates the effects of architectural decisions to the user; highlighting his or her rights and obligations. The policy serves the purpose of illustrating correct and acceptable use, and deterring misuse.

Control: Tools such as mobile device management (MDM) software enable corporate control over vital components of the device, translating the mobile policy into technical actions.

Containment: Containers, dual persona and application wrappers all provide application-level protection for sets of, or individual, applications.

Enterprise tools: Enterprises cannot stop consumerisation. However, they can compete with it by offering their workforce attractive and user-friendly tools (mobile applications) to deter the use of consumer applications for professional activities.

BYOD VoIP Subscription

Another common use of the phrase BYOD can be found in the VoIP industry, and used to describe a specific type of VoIP subscription or plan. Subscribers who have their own VoIP device (a SIP-capable device) when signing up for a VoIP service will usually be able to take advantage of a cheaper subscription plan when they use BYOD – however not all VoIP service providers will offer special rate plans for subscribers with their own equipment. If the BYOD subscription is unavailable through a VoIP provider you will need to use the provider's equipment instead of your own.

Compiled by
Vijitha T. (MCA 3ʳᵈ Year)

☺ ☺

A GOOD FRIEND IS LIKE A COMPUTER

A good friend is like a computer;
me 'enter' ur life,
'save' u in my heart,
'format' ur problems,
'shift' u 2 opportunities &
never 'delete' u from my memory!

ENTER KEY!

….. Dear Computer User,
I Do Appreciate Your Kind Attitude Towards
The Keys of Keyboard,
But one question…
Why Do You Press All Keys Softly n Hit Me
With All Your Power?

Yours' Sincerely,
'ENTER' KEY !

☺ ☺

WIRELESS PC KEYBOARDS 2013

Review of the Latest Wireless Keyboards for 2013

There are many wireless keyboards on the market today to fit any PC or MAC users need. Some are very affordable while others are designed specifically with advanced user in mind. For example, programmers or gamers may spend in excess of $100 just on a keyboard that has a LCD display and many programmable buttons, while if you're looking for a simple keyboard you may be able to find one with a mouse for as little as 20 bucks.

Logitech wireless keyboard k800

This general use keyboard has a lot of really cool features. It has ambient light sensors that automatically adjust to the amount of light in the room which makes it perfect for low lit offices and people who are on their computer on into the night. It comes with rechargeable nickel-metal hydride AA batteries and can sync multiple devices to a single USB receiver. There are hand proximity sensors that detect when you move away from the keyboard to save on energy life. Easy plug and play start up, no software needed to install.

HP Wireless Elite Keyboard

The HP Elite is a great keyboard for those on a budget! It has a very sleek and slim feel with quiet keys. Some drawbacks are the lack of a caps-lock light and have had some complaints about connectivity use. It is very affordable;   it's a great little wireless keyboard.

Kinesis Advantage Contoured Keyboard

For those who tend to type for hours and hours a day, this keyboard is key in the prevention of wrist pain. It has a very unusual key pattern, but is a new standard for ergonomic keyboards. It is both PC and Mac compatible, and has been proven to be very comfortable. It does however; take time to get used to and some normal keystrokes, such as Ctl+Alt+Shift, are almost impossible to do with one hand. It's quite expensive, but for those with wrist and arm pain, the price is well worth it.

Logitech G19

This is a very high tech keyboard. Its great for gaming and has a built-in 320 by 240 pixel LCD display that can show in-game information for over 60 titles.

Microsoft Natural Ergonomic Keyboard 4000

This ergonomic keyboard is very affordable and easier to use than most. With a familiar key layout to help with learning curve, this less expensive and comfortable keyboard competes well with the more expensive keyboards. It offers great features like a zoom button and is compatible with Mac. Some say the keystrokes are quite quiet, but the spacebar tends to be on the noisy side. Plus there's not a USB hub, but with the price reduction, it may not be something that is missed.

Logitech Wireless Desktop MK710

This keyboard comes with a comfortable wrist rest and has a great LED panel. It tells you when cap and num lock is on as well as a battery life status. It is very quiet and actually comes with a wireless mouse.

It has a very low profile design. It boasts a battery life of three years and has great range capability for those living room PC systems.

DAS Keyboard Model S Ultimate Silent

If you're looking for more of a stealth looking keyboard, this is it. The first thing you will notice are the blank keys. This keyboard is not for the faint of heart or for those who don't know their keyboard keys by heart. This is more for the programmer-type people who like things to look cool and know their stuff. For them this keyboard should fit the bill. Not only is it extremely quiet, its functionality is great. It's really unusual and has been a benefit for those people who want to keep other people off their keyboards.

What can you do with the LCD display?

You can view YouTube videos and although it's expensive, the features make it well worth the cost. You can program over 36 macros and has customizable backlighting. It has a comfortable layout and even has 2 USB ports to allow you to plug in and power any USB device you want. There are a few cons with this keyboard though. One is that there is no

instruction manual that comes with this keyboard, but everything you need to know is included in the software. And some feel the keys feel a bit "squishy".

Logitech diNovo Edge

This amazing keyboard offers a built-in touchpad, which eliminates the need for a mouse. It has a great attractive design that is space saving and comfortable. It has Bluetooth capability so it will save a USB plug on your computer and has a rechargeable battery that boasts two months on a single charge. A downfall to the touchpad design is that it takes away a number keypad, but for its sleek design, you may actually want the extra room instead on your desk without a mouse.

Apple Wireless Keyboard

The apple wireless keyboard is extremely lightweight, yet has a sturdy feel. It's great for using with an iPAD and boasts a Bluetooth capability. This allows for one of your USB ports to be free. This works both on Mac and Windows machines and is powered by two AA batteries. The keys have a nice feel and it shuts down when not in use to save on battery life. One complaint has been the lack of a numeric keypad, but when looking at a sleek model keyboard, most don't have one of those.

Compiled by
Umadevi T . (MCA 3ʳᵈ Year)

NETWORKS AND ITS VARIATIONS

A collection of computers, servers, mainframes, network devices, peripherals, various other devices connected to one another allowing for data to be shared and used. A great example of a **network** is the Internet, connecting millions of people all over the world together. Below is an example image of what a home network or small office network may look like. As can be seen below, this network is setup to enable all computers and other **network devices** with network abilities, such as the TiVo, to communicate with each other, as well as share the single Internet connection.
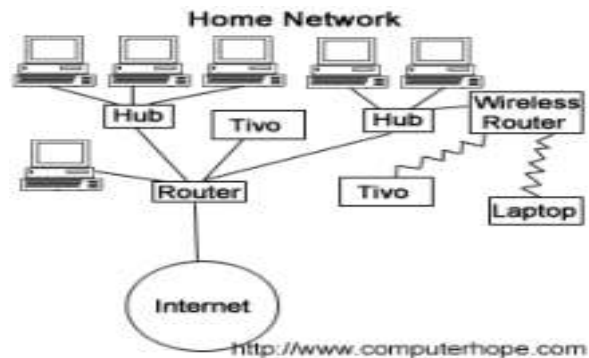
Other examples of network devices:

Any device capable of connecting to a network is considered a network device, below are just a few of the more commonly connected network devices you're likely to find on a home network.

- Computer (e.g. desktop, laptop, or server computer)
- Console
- Firewall
- Hub
- Router
- Smartphone
- Webcam

TYPES OF NETWORKS:

Networking is required to make accessible communication between computers possible by a network connection. Networking allows for many possibilities, such as accessing the internet, file sharing, file transferring, networks attacks and system communication. Let's look at the different types of networking ways in detail.

Types of Networks:

LAN(Local Area Networking)
WLAN(Wireless Local Area Networks)
WAN(Wide Area Networks)
MAN(Metropolitan Area Networks)
CAN(Campus Area Networks)
SAN(Storage or System Area Network
PAN(Personal Area Network)
Dan(Desk Area Network)

LAN (Local Area Networking):

　　　Local Area Networking is used primarily in small areas such as schools, hospitals and office buildings. Local Area Networking is one of the older types of networks. TCP/IP is used as the method of communication between computers in Local Area Networking. Due to its small size, it is possible for one person to administrate a Local Area Network. Local Area Networks are viable to quick change, using a bus network topology that allows for easy access to the Local Area Network.
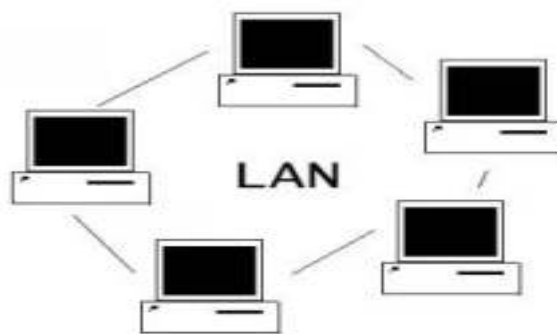

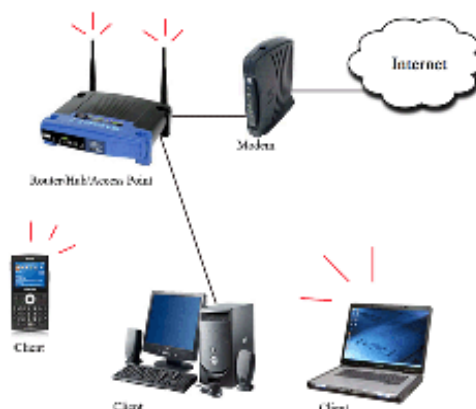Fig: LAN

WLAN (Wireless Local Area Networks):

Fig: WLAN

　　　Wireless Local Area Networks are much like LAN networks, except they do not require network cables to connect each other. Radio and infrared signals are used to

communicate between machines whilst using a wireless local area network. Wireless Local Area Networks allow for small amounts of mobility whilst being connected to the internet. Wireless Local Area Networks work according to the IEEE 802.11 standards. Wireless Area Networks are commonly seen being used by a Wi-Fi internet connection. Wireless LAN connections offer a surprising amount of mobility for users with laptops and smart phones while being able to stay connected to the internet by different networking topology.
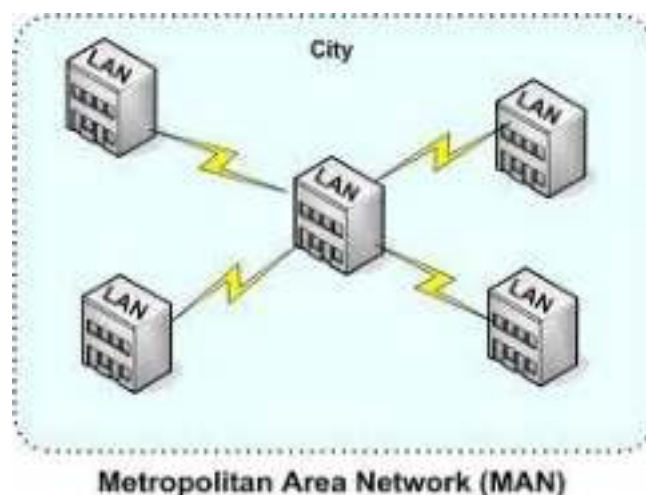
WAN (Wide Area Networks):

Fig: WAN

Wide Area Networks are used to connect server machines and computers across continents are countries for constant information updates. Wide Area Networks, are used across the globe, many networks connect with one another across continents to create one giant Wide Area Network. Wide Area Networks use optic fiber as their communication medium. The largest example of a Wide Area Network is the internet itself, which connects all users to the information and data that is available on the internet.

MAN (Metropolitan Area Networks):

Metropolitan Area Network (MAN)

Metropolitan Area Networks are not commonly used these days; they are used to create communication between systems in an entire city. Hence a Metropolitan Area Network area falls between the sizes Local Area Networks, and Wide Area Networks. Metropolitan Area Networks are used by city specific businesses such as the New York Times in the state of New York.
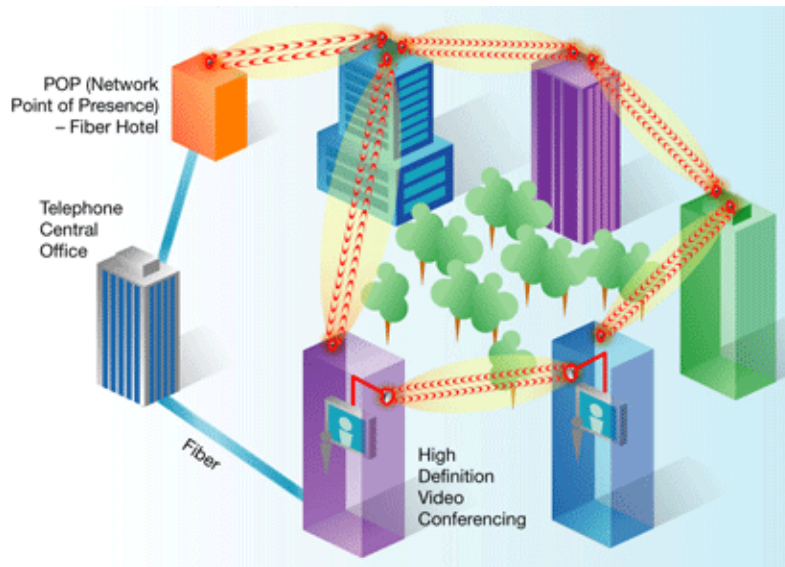
CAN (Campus Area Networks):

Fig: Campus Area Networks

Campus Area Networks are usually a connection of many small LAN networks which are often used on university campuses and office buildings. Campus Area Networks allow for easy file sharing between different departments as all the files are usually shared on the server machines of each LAN network. This type of network offers a lot of simplicity in the transfer and downloading of files.

*SAN (Storage Area Network):*
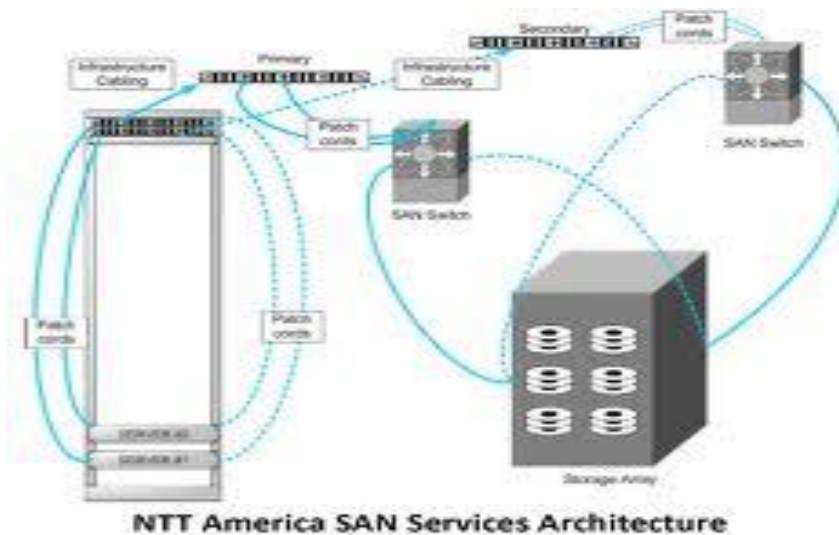
Storage Area Network

Storage Area Networks are primarily used as information databases. They are not usually used by large organizations or similar entities. They are specifically used for the storage of information, and easy retrieval of specific pieces of data whenever required. Storage Area Networks are usually used by websites which offer downloading services.

SAN (System Area Network):
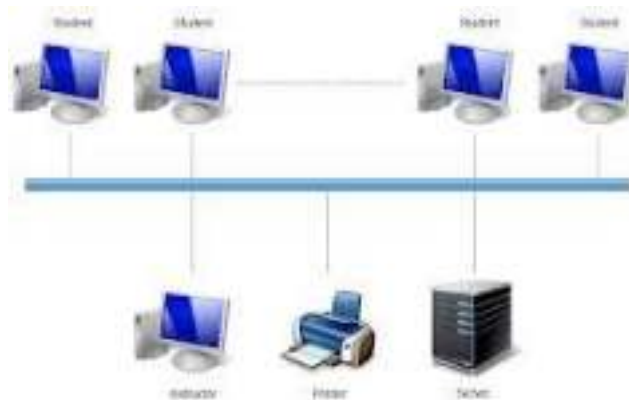
System Area Network

System Area Networks are speed oriented networks which provide high speed internet connections to a cluster of computers. These are primarily used for server purposes, and allow other computers to connect to these System Area Networks. Permission to different access points are given according to what status a system is on the System Area Network, such as administrators or simple users.

Compiled by
Hemalatha R. (MCA 3ʳᵈ Year)

NIRBHAYA   FEARLESS
New mobile app for women's safety

The recent unforgettable incident in our country's capital has raised concerns about women's safety and what our government is doing to ensure a safe and secure environment for women. Apart from all the initiatives taken up by government and NGOs, Smart Cloud team started thinking about what else can we do to make sure that our women employees feel safe and secure when they leave our office premises. That's where the idea of a new mobile app "Nirbhaya -Fearless" was born.

DEVELOPED BY:

Smart Cloud InfoTech Pvt. Ltd. is a mobile apps and games development studio based in "Pune", India. We are an equal opportunity employer. We are also conscious about our responsibility towards our employees as well as the society at large.

Today, technology can be your best friend; before anyone reaches you during an emergency situation, technology can play a vital role in providing required information and support. Smart Cloud has developed a mobile application "NIRBHAYA" – Fearless - to help you with one single click - raise an alarm and share your location details with your near and dear ones, support groups and the authorities etc. during an emergency situation.

"NIRBHAYA" is an emergency call and message application where you can send a message to a group created using contacts from your phone's contact list. The message delivered to the recipients will also have your GPS location. You can also configure it to send the information to the friend nearest to you. And all this happens with ONE single click – to help you reach out to people who can help you during emergency.

This is a free application for download, for EVERYONE and highly recommended for working women, elderly people, kids at home alone etc. This app will be soon available for Windows Mobile and iPhone as well.

We can download this application for Android phones at
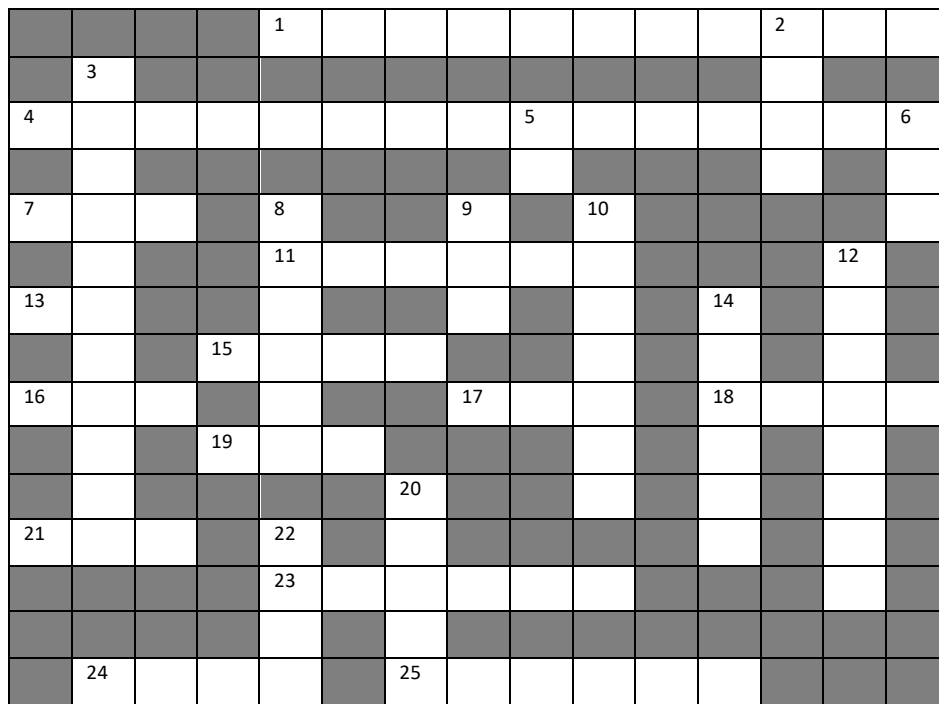
Facebook   :   http://www.facebook.com/NirbhayaBefearless/

Twitter   :   https://twitter.com/smartcloudinfo

YouTube   :   Concept-https://www.youtube.com/watch?v=KDXA6jxE6y4

Compiled by
Thulasi K. (MCA 3rd Year)

CROSSWORD

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	3												
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	24				25								

ACROSS:

1. A small window with options for completing an action (2 words).

4. The low-level software that supports a computer basic function, such as scheduling tasks and controlling peripherals.

7. Alternate.

9. Digital communication.

11. It has our OS and Windows.

13. General-purpose computer.

15. Collection of related data stored on a hard disk.

16. Transfer files.

17. Brain of computer.

18. Data communication equipment.

19. Computer keyboard.

21. 2 Bytes.

23. The object on your screen that lets you point at things.

24. Software agent.

25. Store programs or data.

DOWN:

2. Unit of digital information.

3. The action of putting something into operation.

5. 1024MB.

6. Music form most played on the computer.

8. Domain controller authentication and authorizes all users and computers (Directory).

10. Setting that is automatic unless changed by user.

12. Any physical part of computer.

14. Computer visual area containing some kind of interface.

20. Computers can read but cannot write on them.

22. Sharp in Latin.

SOLUTION

				D	I	A	L	O	G	U	E	B	O	X
	A											Y		
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Compiled by
Vijayalakshmi B. (MCA 3rd Year)

GOOGLE SEARCH TIPS AND SHORTCUTS

In February, Hitwise reported that Google's U.S. market share was 72.11 percent, compared to Yahoo Search (17.04 percent), MSN Search (5.56 percent) and Ask.com (3.74 percent). In other countries, Google market share is even higher, for example 96 percent in Belgium and 89 percent in Argentina. Google Web search is so popular is that is offers fast and powerful searches, plus it has a simple Web page that is quick to load and easy to use. While Google produces fast search results, there several quick and easy shortcuts that will help improve your Google searches.

Area Code

You can search for the geographical location to any U.S. and many other country codes by typing the 3-digit area code into the search box.
Example Search: 876

Book Search

To search for book text, simply use the word "book" in front of your search phrase. This will remove non-book related search results.
Example Search: book The Lord of the Rings

Calculator

Google has a built-in calculator function. To use it, simply type the equation in the search box.
Example Search: 5*4+6/2

Conversions

Google can also convert between many units of measurement of height, weight, and volume. To use unit conversion type in your conversion, using unites like cm in inches, CAD in USD to see foreign exchange rates, or even C ion F for temperature conversion.
Example Search: 15 cm in inches (or) 25 CAD in USD (or) 12 C in F

Definitions

If you see looking for a definition of a word, you can see all dictionary results by typing the word define in front of the search term. The first search result is "Web Definitions". Clicking on this link will show all definitions of the word you searched for on the Web.
Example Search: define technology
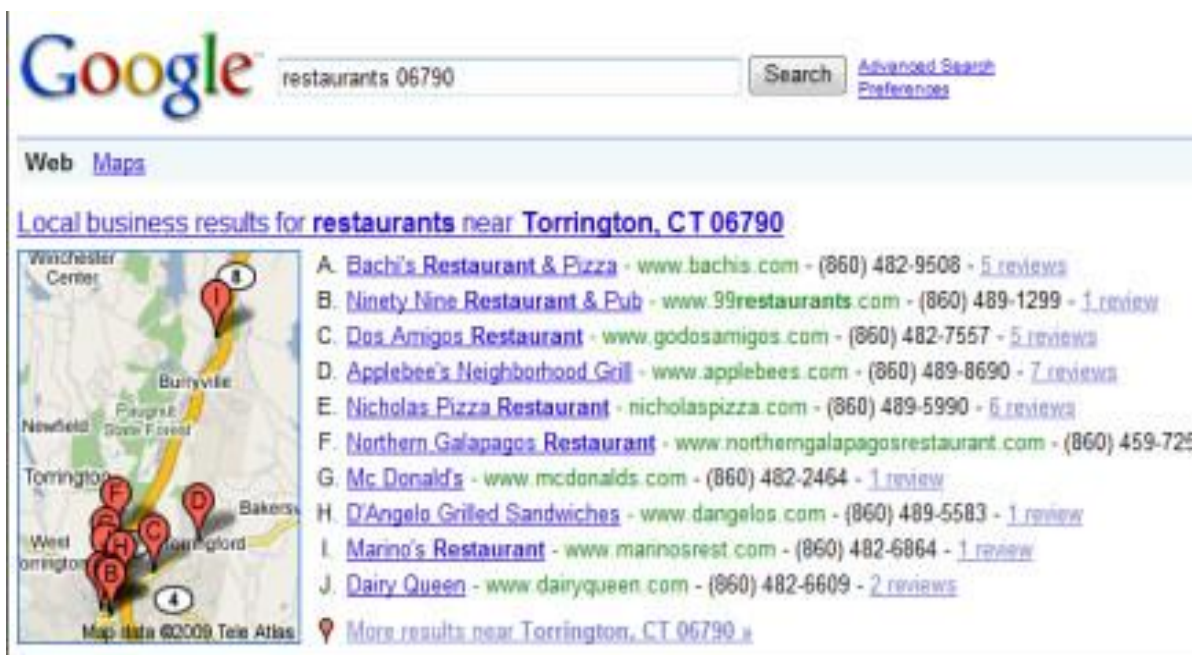
File Type restriction

If you're looking for a specific   file type for example a PDF file you can use "filetype:" after the search term and the file abbreviation.

Example Search: virtualization filetype: pdf

Local Search

Google makes it easy to search for local businesses. To use the local search you simply enter a search phrase (such as restaurant) followed by the zip or postal code. The first search result will show the location on a small Google Map and provide links for all businesses found in that location that match your search.
Example Search: restaurants 06790

Package Tracking

You can track a UPS, Fedex or USPS package from Google. Simply enter in your package shipment number in the search box to get package and delivery information.
Example Search: 1Z9999W99999999999

Related Pages

You can use "related:" in front of a Web URL to see a list of pages that Google sees as having content related to the URL you are searching.
Example Search: related: www.webopedia.com

Safe Search

To search Google and exclude adult content, you simply type "safesearch:" before your search phrase.
Example Search: safesearch: breast feeding

Site Info

To find out more information about a specific Web site, you can use "info:" followed by the domain name.
Example Search: info: www.spmvv.ac.in

Site Search

To see results only from one Web site, you can use "site:"[URL] "phrase". If we wanted to find all information in yahoo related to "CPU" we would use site: wyahoo.com "CPU". The Google search results will only show matching results found via www.yahoo.com in this search. For e-commerce sites, you can select "Shopping" instead the default "Web" results. This would bring up the Products view for the domain.
Example Search: site: yahoo.com "CPU"

Stock Quotes

Simply type a company's ticker symbol into the Google search box to see current market data. To see current market results for Microsoft, for example type MSFT into the search box. The first search result shows current stock prices, open, high, and low figures plus links to see data for that company via Google Finance, Yahoo Finance, MSN Money, AOL Finance, CNN Money, and Reuters.
Example Search: MSFT (or any ticker symbol)

Synonym Search

If you want to include synonyms in your search results, you simply use the ~ character in front of your search phrase.
Example Search: ~healthy food

Time

When trying to figure out time zones and what time it is in another part of the world, you simply need to type time followed by the name of the city in the search box. The first Google result will show the current local time of all cities with the name you entered. If you use Washington, for example, you will see the time for Washington D.C., and Washington, United Kingdom.
Example Search: time Washington (or any city name)

Weather

To look up your local weather forecast type the word "weather" followed by your city and state or province. The first search result will show current conditions plus show a brief 4-day outlook for the city you have entered.
Example Search: weather New York, NY (or any city and state/province)

Compiled by
Harshavardhini B. (MCA 3rdyear)

WHAT YOU NEED TO KNOW ABOUT MOTHERBOARDS

How a motherboard works inside your computer

The main circuit board inside your computer is called a motherboard. Motherboards are the central nervous system of your computer. Motherboards are the most complex component in your computer. Fitted with hundreds of components and dozens of options it can be difficult to choose. The motherboard contains the connectors for attaching additional boards, such as the CPU, BIOS, memory, mass storage interfaces, serial and parallel ports, expansion slots and all the controllers that are required to control standard peripheral devices such as the display screen, keyboard, and hard drive. Collectively, all these chips that reside on the motherboard are known as the motherboard's chipset.

Example of what a physical motherboard looks like that is inside your computer.

Chipsets:

The chipset is how your CPU, RAM, video card, and peripherals communicate. It is a combination of your Northbridge and Southbridge and can add some very nice features depending on your needs.

The Northbridge is typically responsible for the very fast communication between your CPU, RAM, and video card. It is where you will get features like SLI/CrossFire and DDR3. With the current Intel and AMD processors the northbridge functions are all included in the processor. This means less complexity for your motherboard and typically less latency for the processor to access the high speed components like RAM.

The Southbridge will give you features like support for the latest PCI-E, SATA, USB 3, and many more future technologies. It is also essential to know what options you need because some south bridges may not support every feature you might expect like RAID and surround sound The purpose of the motherboard is to provide the means for all the other components and peripherals to talk to each other. You may be able to upgrade to a faster PC by replacing the CPU chip (processor) or improve performance by adding RAM (memory).

There are different types of motherboards depending on the type of CPU is designed to use. Motherboards are divided into categories based on what type of socket it has. Socket 478, for example, is used for Intel Pentium 4 and the Celeronseries CPUs. Socket 939 is used for the AMD64 range of processors. It's important to ensure any motherboard you buy will support the type of CPU you want to use in the system. If you already have a CPU you'll need to purchase a motherboard that will accept that same processor. For those building or upgrading a system, you can also invest in a motherboard & CPU combo, which is often cheaper than buying the two components separately and it also ensures compatibility.

It's important to remember that all of the system components must be supported by the motherboard itself. So, if you were to upgrade your memory you can't just search online for "system memory" and buy whatever falls into your price range. You must make sure the type of memory you buy (SDRAM, DDR-SDRAM, RDRAM) and the size (512-MB, 1-GB) is supported by the motherboard.

NOTE: *The manual that came with your motherboard will detail these types of specifications. Also, motherboard manufacturers tend to keep updated manuals and specifications on their Web site should you happen to lose your paper copy.*

When upgrading your system you should keep in mind that not all components of your system can be upgraded due to limitations of the motherboard. For example, an older motherboard will not support dual channel memory or PCI Express. Some upgrades that you may want to make may mean upgrading to a new motherboard first.

The form factor of a motherboard determines the specifications for its general shape and size. It also specifies what type of case and power supply will be supported, the placement of mounting holes, and the physical layout and organization of the board.

Motherboard Diagram

In the example below, which use a PGA370 (Socket 370) motherboard, several common slots, controllers and plug-ins are highlighted. Remember that motherboards support different features, and as such, all motherboards do not look the same.

Motherboard Parts

1) CPU
2) Memory Slot
3) PCI Slot
4) AGP Slot
5) Power Supply Plugin
6) CMOS Battery
7) ISA Slot
8) IDE controller (hard drive CD- ROM)
9) CPU fan plug-in
10) PS/2 Port (keyboard/ mouse)
11) USB
12) Parallel Port (Printer)

Compiled by
Prabavathi D. (MCA 3rd Year)

☺ ☺ ☺ ☺ ☺ ☺ ☺☺ ☺

IF YOUR CURSOR

➢ There was once a young man who, in his youth, professed his desire to become a great writer.
When asked to define "Great" he said,
"I want to write stuff that the whole world will read, stuff that people will react to on a truly emotional level, stuff that will make them scream, cry, howl in pain and anger!"
He now works for Microsoft, writing error messages. Women are like computer virus...they ENTER your life...SEARCH your pocket...SHIFT your balance ...CONTROL your life...when you become an old version DELET you from the system

➢ If your cursor finds a menu item followed by a dash,
And the double-clicking icon puts your window in the trash,
And your data is corrupted cause the index doesn't hash,
Then your situation's hopeless and your system's gonna crash

☺ ☺

SMART PHONE BECOME MORE IMPORTANT THAN THE 'PHONE'

*A **smartphone*** is a mobile phone built on a mobile operating system, with more advanced computing capability and connectivity than a feature phone.

5 ways your smartphone's 'smarts' have become more important than the 'phone:

1. Email

One of the greatest things about a Smartphone is that it's capable of accessing an downloading email over either a Wi-Fi network or a cellular data connection. That means that your email is available in your pocket 24/7.

2. Texting/Instant Messaging

Texting or instant messaging is a nice middle-ground between email and voice calls. It's an immediate form of communication, and it's often way more convenient and courteous than a voice call.

3. Global Positioning System(GPS)

Maps, and turn-by-turn directions are one of the most valuable functions of a smartphone. Whether you're driving in your car or hoofing it, your Smartphone can help you get from Point A to Point B as efficiently as possible.

Smartphone Could Do:

1. PC/Mac Webcam:

Mobiola. Mobiola WebCamera by Shape (free) is available for the iPad and iPhone, Blackberry, Windows Mobile or Symbian Smartphone's.

2. Scanner:

TurboScan, WorldCard or CardScan. TurboScan ($1.99) lets you scan and send multi-page documents and WorldCard Mobile or CardScan (both $6.99) let you scan and sync business cards.

3. MobileHotspot:

Some phones allow you to create a Wi-Fi network that multiple devices usually up to5 or 7 can use at once. This allows your phone to get your iPad or laptop on to Wi-Fi, without a router or another peripheral device. Of course, there is an upcharge, usually around $20 to $30 extra a month. If you're a frequent traveler, you may think it worth it since you usually have to pay extra fees for Internet coverage on each of your devices anyway. Application to download: This one doesn't require an app - it's a feature that's included with on phones and requires an extra charge.

4. LiveTV:

If you just want to be able to watch live TV on the go and are unaffiliated - you can download an app like netTV or TVUPlayer. While the image and audio quality isn't the best, it beats missing a critical moment in sports or breaking news. Applications to download: netTV. NetTV (free for lite version) offers a suite of programs from around the world.

Compiled by
Deeparani G. (MCA 2ⁿᵈ Year)

HOW TO STOP VIRUSES AND MALWARE

Computer virus: A computer virus is a type of malware that, when executed, replicates by interesting copies of itself(possibly modified)into other computer programs, data files, or the boot sector of the hard drive; when this replication succeeds, the affected areas are then said to be "infected", Viruses often perform some type of harmful activity on infected hosts, such as stealing hard disk space or CPU time, accessing private information, corrupting data, displaying political or humorous massages on the user's screen, spamming their contacts, or logging their keystrokes.

ANTI-VIRUS SOFTWARE?

Anti-virus software is a program or set of programs that are designed to prevent, search for, detect, and remove software viruses, and other malicious software like worms, trojans, adware, and more. These tools are critical for users to have installed and up-to-date because a computer without anti-virus software installed will be infected within minutes of connecting to the internet.

There are several different companies that build and offer anti-virus software and what each offers can vary but all perform some basic functions:

1. Scan specific files or directories for any malware or known malicious patterns.
2. Allow you to schedule scans to automatically run for you.
3. Allow you to initiate a scan of a specific file or of your computer, or of a CD or flash drive

at any time.

4. Remove any malicious code detected –sometimes you will be notified of an infection and asked if you want to clean the file, other programs will automatically do this behind the scenes.

5. Show you the 'health' of your computer.

What is malware?

Malware is a term that is used for malicious software that is designed to do damage or unwanted actions to a computer system. Examples of malware include the following:

- Viruses
- Worms
- Trojan horses
- Spyware
- Rogue security software

How to stop viruses and malware:

Without protecting your PC with security software, there's a strong chance that malware could infect your computer or expose your private information to criminals.

The best way to protect your computer from malware, spyware and viruses is to have three types of security software installed on your computer. Most paid-for security software includes all three elements as a security suite.

A firewall – a firewall is a software or hardware-based network security system that controls the incoming and outgoing network traffic by analyzing the data packets and determining whether they should be allowed through or not, based on a rule set. A firewall acts as a gatekeeper to protect your computer from incoming attacks from the internet, by monitoring and filtering data traffic leaving and arriving on your computer.

Antivirus software – this helps to protect against viruses, Trojans and other security threats by scanning and stopping viruses being installed on your computer. If you do get a virus installed on your PC, anti-virus software will be able to remove it.

Antispyware software – spyware is malicious software that secretly downloads to your computer. Once installed, it can monitor your activity, collect information about you and send it out onto the internet, and even take over your web browser (called 'hijacking'). Anti-spyware software scans your computer to detect this, and removes any spyware it finds. By keeping anti-spyware software running, it can prevent spyware from being installed in the first place.

TOP 5 ANTI-VIRUS FOR WINDOWS 7

Windows 7 final release is just round the corner and you must be panicking over the best anti-virus software that can optimize the security of the latest OS. Well, it's overtly apprehended that although, Windows 7 is smarter than its predecessor, it might be less secured than Vista, compromising with the security. Microsoft's indigenous free anti-malware solution **Live OneCare** doesn't even install under Windows 7. Now that it has been dropped and we have to wait for Microsoft's much-hyped free real-time anti-malware solution **Morro**. But Microsoft's products seem nowhere near the top brass anti-virus software. We decided to provide you the top 5 antivirus for Windows 7.

1. *Avira AntiVir Personal Edition:*

Avira is one of the most powerful freeware antivirus solution compatible for Windows 7. It's carries out quick and effective scans, and doesn't consume much system resources. Avira offers real time protection with AntiVir Guard. Thepersonal version is completely free from private use. The personal version works without any issues. It also offers the ability to pause, stop, and resume a scan from this panel.

2. *Norton Antivirus 2009:*

Symantec's Norton Antivirus 2010 and Norton 360 Version 3.0 introduction. It's is scheduled on Microsoft's list of most compatible software solutions for Windows 7. Norton Internet Security 2010 and Norton Antivirus 2010 have been specifically designed to support Windows 7. Those with Norton Antivirus 2009 would receive automatic upgrade to Norton Antivirus 2010.

3. *McAfee:*

McAfee Total Protection provides full Suite of products for Windows 7. For those already using Windows 7 Beta with McAfee will receive an upgrade to MTP 3.11 for Security Center, Virus Scan and Personal Firewall.

McAfee combines the best of antivirus ,firewall ,anti virus, firewall, and intrusion prevention technology.

4. avast! Antivirus Home:

Another popular Anti-Virus package that includes Spyware and Rootkit detection and even offers an interesting skinning ability. avast! provides a standard shield for real-time protection against viruses and other malware threats. Moreover, it offers a skinnable user interface enhancing the ease-of-use. avast! Home Edition is a freeware version of avast! that you can avail to protect Windows 7 from malicious infections.

5. AVG:

AVG is one of the most widely used anti-virus solution that works perfectly under Windows 7. AVG offers comprehensive protection against malicious threats. AVG antivirus offers protection against viruses, worms and Trojans, spyware, adware and identity-theft.

Compiled by
Hemalatha R. (MCA 3rd Year)

BILL GATES AND BANTA SINGH

Dear Bill Gates,

This letter is from Banta Singh from Punjab. We have got a computer in our home and we face some problem, which I want to bring to your notice. After connecting to Internet we planned to open an email account. But whenever we fill the Form of Hotmail, in password field only * comes. But in rest of the fields whatever we typed comes but we faced the problem only in password field. We checked with Hardware vendor and he said that there is no problem in keyboard. Because of this we have opened the email account with password *****. But I requested u to check this as we ourselves don't know what is the password!!!.

The next one is that we are unable to enter anything after we shut down the computer. There is a button for start but not for pause, stop as in stereo recorder. We request u to add the same in future.

There is an option as RUN in menu. This one of my neighbor after clicking started running and he has run up to Amritsar from Chandigarh. So we request u change that to SIT. So that we can click that by sitting.

One doubt is that can I click Recycle bin. I own a scooter in my home. Is there a separate option as Re scooter bin available in the system?

In Microsoft outlook we are able to see the outer view of the mail. Is there an in look through which we can have inner view of the mail?

The last one is my wife has lost the door key of our house. So I searched for the same in search option of start icon. But I did not find the same there also. Is it a bug?

Compiled by
Manimala G. (MCA 2ⁿᵈ Year)

☺ ☺

GODS ARE ALSO I.T. ENGINEERS

BRAHMA: System installer
VISNU: System supporter
SHIV: System Programmer
NAARAD: Data transfer
YAM: Deleter
MENKA: Virus!

☺ ☺

What is IncrediMail?

IncrediMail is an advanced, feature-rich email program that offers you an unprecedented interactive experience. Unique multimedia features will enable you to tailor your email experience so that it fits your mood and personality. Visual effects will entertain your every sense. Go ahead. Express yourself like never before.

Why should I use IncrediMail?

Have you ever found that the common task of sending and receiving emails is dull, redundant and tedious? Ever wanted to send emails that look livelier than standard emails? Would you like to add some thrill and experience to your email, a message that goes beyond text?
Well, look no further, IncrediMail will easily give you all that and much more and it's 100% FREE! Welcome to IncrediMail. Email has finally evolved!

What are IncrediMail's special features?

Not all email programs are created equal! IncrediMail offers a wide array of customizable and personalized special features and an ever-growing Web-Gallery packed with exciting content that will not only make your email recipients appreciate your creativity but also leave them impressed. Check out the Feature list below to learn more about what IncrediMail has to offer you.

Notifiers: Vivid animated characters will announce the arrival of new email. Select a Notifier that best suits you from our online collection. Contrary to other email products, IncrediMail Notifiers will let you know that you've got new mail even if your email program is closed (as long as you are connected to the Internet, of course).

*Letters***:** IncrediMail lets you take full control over what your emails look like. Whether you need to be formal or informal, or are feeling happy or sad, IncrediMail's Web Gallery offers you a constantly updated collection of Letter backgrounds that fit every occasion. Go ahead, breathe some life into your emails!

3D Effects: Emailing just like in the movies. With IncrediMail you can feel the thrill while you send and receive your emails. When you send an email, you will see it fly away into oblivion or sail into the deep ocean blue. When you delete, see your emails shredded before your very eyes or crumpled up like your ordinary office paper. These are just a few of the 3D effects you will see using IncrediMail. (See demo to see more examples).

Animations: Enhance your emails with exciting and lively animations embedded into the body of the email message and not as attachments. What better way to express yourself than to incorporate a relevant animation in your message to convey your thought and to set the mood.

Emoticons: Add some life to your emails by inserting emotion icons (emoticons) into the text of your email message. Why use :) when you can use.

Sounds: The IncrediMail Online Gallery offers you an ever-growing collection of diverse sounds and sayings that can be added to the background of your emails at a click of a button.

Multimedia Attachment Preview: Automatic preview of attached media files including images, movies, flash and sound.

Capturing Animations from the Web: Grab any gif animation from your Internet browser and insert it directly into your IncrediMail Style Box.

Ecards: Sending and receiving ecards has never been so quick and easy. For IncrediMail, ecards are just another type of email. Your friends will appreciate receiving a real self-contained ecard directly to his or her inbox rather than a link to an ecard on somebody else's web site. Make everyday a holiday with IncrediMail.

Handwritten Signatures: IncrediMail offers a simple tool for you to add your handwritten signature into your emails. We are committed to making things seamless and hassle-free.

Where can I get additional IncrediMail graphic content?

IncrediMail's ever-growing online gallery is a rich source of *Letter, Animation, Sounds, Ecards and Notifiers*. Just click on any item in the Gallery and it's yours, ready to be used in IncrediMail. IncrediMail's Daily Gallery offers fresh new content for every collection every single day of the week for those IncrediMail users that just can't get enough.

Is using IncrediMail complicated?

On the contrary! Our development team really went the extra mile in order to make IncrediMail simple, intuitive and easy to use, without compromising on functionality.

Can I send an IncrediMail email to a friend who does NOT use IncrediMail?

Of course! Your friend will receive your IncrediMail email regardless of the type of email program or service he or she uses. There is no need to download IncrediMail or any plug-in in order to view IncrediMail emails.

Can I send regular emails with IncrediMail?

You sure can. It is only natural that in some cases plain text email is the most appropriate to send. With IncrediMail the choice is in your hands, from plain text emails to more extravagant ones.

Ok, so how much does it cost me?

NOTHING! IncrediMail is 100% FREE! Go ahead.

Accessing Hotmail from IncrediMail and the Web

IncrediMail includes this great feature that lets you send and receive Hotmail messages from within IncrediMail. If you don't want to lose the ability to access Windows Live Hotmail from any web browser, however, you should configure IncrediMail to leave a copy of every message it downloads at Hotmail.

Accessing Windows Live Hotmail from IncrediMail and the Web **To access your Windows Live Hotmail account from both IncrediMail and the web:**
- ➢ Click on Properties.
- ➢ Go to the Advanced tab.
- ➢ Make sure Leave a copy of messages on server is checked.
- ➢ Click OK.
- ➢ Select Close.

Email is nice, and creating emails in IncrediMail with letters and styles is fun, too. But email can do even more: you can send any file on your computer with it to anybody with an email address.

Compiled by
Maheswari G. (MCA 3rd Year)

LAPTOP CONCEPT WOULD ROLL UP LIKE A YOGA MAT

The Roll top concept proposes wrapping a flexible OLED display around a central column for easy transport, and unrolling it when needed for tablet, monitor or laptop functionality Notebooks and tablets already offer pretty convenient computing on-the-go solutions, but Germany's Orkin Design proposes rolling up both devices into one ultra-portable package. The Roll top concept will take advantage of advances in flexible OLED and touch screen technologies to create a cylinder-shaped laptop computer that can be rolled out to form a notebook, a tablet, or display monitor. The concept has been floating around for a while, but has recently received a few tweaks to the design. Although specifics are in short supply.

Rather than carry around a notebook in a laptop bag, full to the brim with all manner of cables, the Rolltop concept proposes bringing everything together in a flat panel display that's wrapped around a central cylinder. The top of the column detaches and acts as a power plug while the carry strap doubles as a power cord (presumably some sort of battery technology is also included, although this has not been mentioned). The central column also contains speakers, a camera, USB ports, and a LAN port.

After unlocking the catch, the user would roll out the Roll top display like a mat and then either leave it flat for 17-inch tablet computing, or raise one end up for something resembling a notebook. The lower part of the screen is then used for keying on a virtual, onscreen keyboard while the upper part becomes a 13-inch display for viewing content. A pull-out support at the back also allows the flattened device to be used as a monitor-like display, and a stylus pen has been incorporated into the body of the panel.

When rolled up, Roll top will be 11 inches (28 cm) long and have a 3.26-inch (8.3-cm) diameter – and that's about all we can tell you. As it's a concept designed to be built in the future, some of the technology kinks are still being worked on, but Orkin has stated its intention to see this design through to an actual, real-world product. There are, of course, quite a number of technical hurdles to overcome before that happens and unfortunately the designers do little to shed light on how such difficulties will be dealt with, leaving us to speculate.

It requires no great stretch of the imagination to visualize the various technologies already used in dual-screen notebooks, all-in-one computers and cutting edge tablets being incorporated into the Roll top. Recent developments in bendy screen technology might also make this device a current possibility. However, details on how the internal components like processors, memory, storage and graphics cards will be dealt with have not been forthcoming, so it looks like we're just going to have to wait until there is more substance to this project.

Compiled by
VenkataTeja D. (MCA 3rd Year)

LCD VERSUS PLASMA

An introduction to flat screen television technologies

If you're looking a flat-screen TV this holiday season one question, other than price, that plagues consumers is which is better, LCD or Plasma?

LCD enthusiasts will tell you an LCD flat-screen television is better, and Plasma users will tell you Plasma displays are better. Your own decision is mainly going to based on the television size you want, where in your home it will be used, and, of course, your budget. To help you figure out which type of television is best for you, we'll discuss both technologies in terms of how it works, and also compare common features between standard consumer-level LCD and Plasma televisions in the 32 to 50 inch range.

How Plasma Technology Works

Plasma TV's create a picture from a gas (plasma) filled with xenon and neon atoms and millions of electrically charged atoms and electrons, that collide when you turn the power on. The collision increases the energy level in the plasma and the neon and xenon release photons of light (similar to the way neon lights work).

How LCD Technology Works

Short for liquid crystal display, LCD is a type of display that uses two sheets of polarizing material with a liquid crystal solution between them. An electric current passed through the liquid causes the crystals to align so that light cannot pass through them. Each crystal,

therefore, is like a shutter, either allowing light to pass through or blocking the light.

One of the biggest problems facing consumers shopping for either an LCD or Plasma television is old information. Because these technologies change so often and get better with each new model released by a manufacturer, some issues concerning LCD televisions from even a year ago aren't much of an issue today and the same holds true for Plasma displays. For example, a year ago you could expect to see a full 15 degree difference in the viewing angles between LCD and Plasma displays. Today, Samsung offers a 178 degree viewing angle on many of its Plasma displays, and up to 175 degrees on its LCDs of similar sizes.

While the chart below offers some general observations on features of both types of televisions, consumers need to remember that the numbers and features change between each type of display and also between exact models and manufacturers. If you're undecided about choosing Plasma over LCD, and vice versa, the best thing to do is read the technical specifications of each television and decide based on the up-to-date manufacturer's specifications.

Features For Consumers	*What To Expect With LCD*	*What To Expect With Plasma*
Size	Commonly 13 to 52 inches. Larger sizes are available but very expensive.	Commonly 42 to 63 inches. More choice is available for 50 inch and above. Larger sizes are available but are very expensive.
Viewing Angle & Off Angle	Standard of 160, but up to 175 degrees (depends on model). Slight picture fading at extreme angles.	Up to 178 degrees (depends on model). Off-angle viewing is excellent and better than LCD.
Resolution, Brightness and More	Generally offers slightly higher resolution than Plasma. Not as good contrast ratio. Anti-glare makes it better for viewing in bright rooms. Newer technology offers improved black levels, but still not as good as plasma for producing blacks.	Higher levels of brightness and contrast. Viewing quality best where lighting can be controlled. Better display of black.
Weight, Durability, Power Consumption	Lighter than Plasma. Also more durable than Plasma. Consumes 30 to 40 percent less power than plasma of similar size.	Very heavy and usually needs special wall-mount brackets. Plasma are more fragile and also consumes more power than LCD.
High Altitude Performance	Not affected by high altitude.	Anything above 6,500 feet can affect the performance.
Inherent Issues	LCD televisions may suffer from a defective pixel (also called a stuck pixel or dead pixel). This is a single pixel on the display that always remains lit or dark, usually the result of a transistor malfunction or uneven distribution of liquid in the LCD.	Plasma can suffer from "burn in" the term used to describe a ghosting of an image that can remain on the screen if a stationary image has been left on too long. Burn in has been reduced in newer models.

Lifespan 60,000 hours is equivalent to five years of 24/7 usage, or approximately 27 years of typical family TV use.	Typically you can expect 50-60,000 hours. With some LCDs you may be able to replace the flouroscent lamps. Compare with older CRT televisions that typically had a lifespan of 25,000 hours.	Many newer plasma displays also have reached a lifespan of 60,000 hours and higher. Plasma displays, however, will slowly lose some brightness over a long period of time. This brightness lose is called LTHB (Life to Half Brightness).
Price	Typically, you can expect LCD televisions in the 42-inch and below range to be a better-price when compared to plasma televisions below 42 inches.	Typically you can expect plasma televisions in the 42-inch and above range to be a better price when compared to LCD televisions above 42 inch.

Compiled by
Mythili B. (MCA 3ʳᵈ Year)

☺ ☺

DREAMS IN PROGRAMME

```c
#include<night.h>
#include<food.h>
#include<bed.h>
#include<dreams.h>

void  me()
{
      char  person;
      clrscr();
       If (person= =atefood)
         {
             printf("The person wants to go to bed and
                    fell into dreams");
             printf("gud night");
         }
      else
             printf("please have  your dinner");
}
```

Compiled by
Thulasi K. (MCA 3ʳᵈ Year)

☺ ☺

BURN A CD ON WINDOWS XP WITHOUT USING SOFTWARE

Windows XP comes with a built-in CD-copy feature that not many people are aware of. Although almost everyone has his/her favorite CD-copy software to stick with, it is still good to know about this CDR feature from Windows XP. You will find it very useful when you come to another PC that doesn't have a CD-copy software, and you can't just install your favorite software to it. With this feature, you can write some data orMP3 files to a CD/DVD, or erase a re-writable CD/DVD.

If you're using a Re-Writable CD (CD-RW), make sure the disc is blank. You might need to erase (or "format") it before use. For information how to erase a CD-RW on Windows XP without using any other software.

Requirements: You need to enable the CD-R feature on Windows XP. If you haven't done.

1. Insert a Formatted –Re Writable CD or a Recordable (CD-R) disc into the CD drive.
2. From Desktop, double-click on "**My Computer**".
3. Navigate to the files/folders you want to copy to CD. Select them and press "**Ctrl-c**" to copy.
4. Browse back to the CD-ROM, and press "**Ctrl-V**" to paste. The files/folders will show up As temporary files/folders at this time.

5. On the left panel, select "**Write these files to CD**".
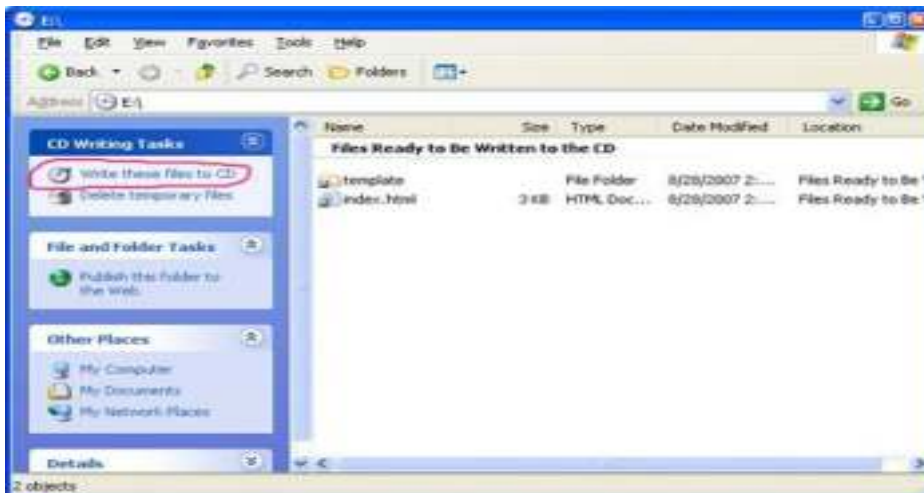
6. The window "**CD Writing Wizard**" appears with the default CD name. Change the CD name if you wish, then click "**Next**".

7. The "**CD Writing Wizard**" starts to write files/folders to the CD.

Once the writing process is complete, the wizard will disappear and the CD-Rom will be ejected.

Compiled by
Swetha S . (MCA 3rd Year)

COMPUTER GENDER

Is your computer male or female? As you are aware, ships have long been characterized as being female (e.g., "Steady as she goes", or "She's listing to starboard, Captain!").Recently, a group of computer scientists (all males) announced that computers should also be referred to as being female. Their reasons for drawing this conclusion follow:

Reasons to believe computers are female:

1. No one but the Creator understands their internal logic.
2. The native language they use to communicate with other computers is incomprehensible to everyone else.
3. The message "Bad command or file name" is about as informative as, "If you don't know why I'm mad at you, then I'm certainly not going to tell you".
4. Even your smallest mistakes are stored in long-term memory for later retrieval.
5. Picky, picky, picky.
6. They hear what you say, but not what you mean.
7. Beauty is only shell deep.
8. When you ask what's wrong, they say "nothing".
9. Can produce incorrect results with alarming speed.
10. Always turning simple statements into big productions.
11. Smalltalk is important.
12. You do the same thing for years, and suddenly it's wrong.
13. They make you take the garbage out.
14. Miss a period and they go wild!!!
15. As soon as you make a commitment to one, you find yourself spending half your paycheck on accessories for it.

However, another group of computer scientists (all female) think that computers should be referred to as if they were male. Their reasons follow:

Reasons to believe computers are male:

1. They have a lot of data, but are still clueless.
2. They are supposed to help you solve problems, but half the time they are the problem.
3. A better model is always just around the corner.
4. They look nice and shiny until you bring them home.
5. It is always necessary to have a backup.
6. As soon as you commit to one you realize that, if you had waited a little longer, you could have obtained a better model.
7. The best part of having either one is the games you can play.
8. In order to get their attention, you have to turn them on.
9. Big power surges knock them out for the rest of the night.

10. They'll do whatever you say if you push the right buttons.

11. Size does matter.

Fun idea: How to know your computer's gender

Computer's gender

How to..?

Simple, easy ways to do.

There are simple trick to know your computer's "gender", no need to worry about it. Its easy, I keep my words ^^. No headache with HTML codes or anything related with BIOS. Everybody could do this. Just follow the instruction below.

1 . First thing to do is opening the "notepad" section. Well, if you don't know how to find it, just click "Start" -> "All programs" -> "Accessories" -> "notepad".

2 . Write down this one: CreateObject("SAPI.SpVoice").Speak"Hello".

3 . Save the notepad as "Hello.vbs" (please notes that the execution .vbs is important), you could save it anywhere as you like.

4 . Open the file by double clicking the file that you've made. Don't forget to turn on your computer speakers and hear the sound, you'll know the "gender" of your computer by the sound of it ^^

How about it? Have you try it at your computer? What is your computer's "gender"?

Take a poll below if you wish and see other people's computer "gender".

Just for fun guys .!

Compiled by
Priyamvada G. (MCA 3ʳᵈ Year)

☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺

Exam pattern

1995: Answer all questions.

2000: Answer any 5 questions.

2010: Answer A (or) B.

2015: At least read the question paper.

2020: Thanks for coming. . .

☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺

SOFTWARE WORLD

Definition: Sometimes abbreviated as S/W, software is a collection of instructions that enable a user to interact with the computer or have the computer perform specific tasks for them. Without software, the computer would be useless. For example, without your Internet browser software you would be unable to browse the Internet or read this page and without a software operating system the browser would not be able to run on your computer.

How do you get software?

Software can be purchased at a local retail computer store and online and is usually included in a box similar to the one shown to the right, this box usually contains all the disks (floppy diskette, CD, DVD, or Blue-ray) required to install the program onto the computer, manuals, warranty, and other important documentation. Software can also be downloaded to the computer over the Internet. Once downloaded the setup file can be run to start the installation of the program on your computer.

Examples of types of software

Below is a short list of the different types of software that a computer may have installed as well as an examples of each program.

1. Antivirus Program

Alternatively referred to as an **Antivirus Software**, **AVS**, **antivirus**, or just **AV**. An **antivirus program** is a software program designed to protect your computer or network against computer viruses. If and when a virus is detected, the computer will display a warning asking what action should be done, often giving the options to remove, ignore, or move the file to the vault. These are classified as paid, free, paid and free antivirus**.**
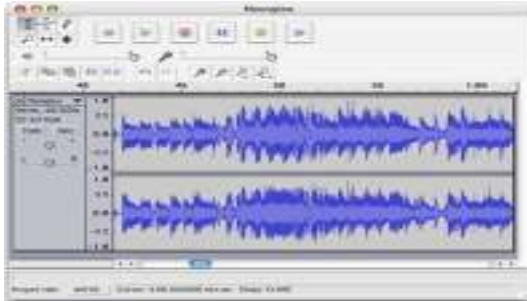
Examples

2 . Audio/Music Program

Audio is a term used to describe any sound or noise that is in a sound range the human ear is capable of hearing.
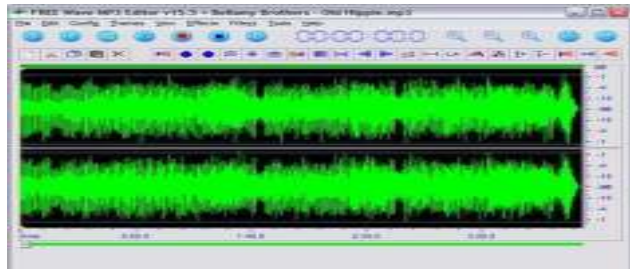
Examples: Audacity   Power Sound Editor

Mp3 Direct Cut   Free Wave Mp3Editor

3 . Database

Alternatively referred to as a databank and sometimes abbreviated as DB, a database is a large quantity of information that can be searched, referenced, compared, changed or otherwise manipulated without a lot of work.

Examples: Access, Addition record, DBASE, DBMS, Distributed database, exist, Flat file, FoxPro, MySQL, Pick,PostgresSQL, QBE, RDBMS, RDMS, Schema, SQL.

4 . Device Driver

More commonly known as a **driver**, a **device driver** is a group of files that enable one or more hardware devices to communicate with the computer's operating system. Without

drivers, a hardware device such as a computer, printer would not be able to work with the computer.

Examples: Disk driver, DLL, Drivers CD, Hardware definitions, INF, Input driver, Mouse driver, Network device driver, Printer driver, Patch, Software definitions.

5 . Internet Browser

A software program that allows a person to explore the Internet in an easy to use way. Navigating the Internet through a series of links the user is able to browse the Internet. Examples of popular **browsers** are Chrome, Internet Explorer, Firefox, Safari, and Opera. In the picture to the right, is an example of Mozilla Firefox 1.0.7 Internet browser.

Each browser has a navigation toolbar, like the ones shown below that help also illustrate how the Internet browser toolbar has changed over the history of Internet browsers. This navigation bar is the most essential portion of the browser and will always at least contain the Back arrows and address bar.

6 . Operating System

An **operating system** or **OS** is a software program that enables the computer hardware to communicate and operate with the computer software. Without a computer operating system, a computer and software programs would be useless. In the picture to the right, is an example of Microsoft Windows XP, a popular operating system and what the box may look like if you were to visit a local retail store to purchase it. When computers were first introduced the user interacted with them using a command line interface, which required the user to perform a series of commands in order to interact with the computer and its hardware and software. Today, almost every computer is using a Graphical User Interface (GUI) operating system that is much easier to use and operate.

Examples of computer operating systems

Microsoft Windows 7 - PC and IBM compatible operating system. Microsoft Windows is the most commonly found and used operating system.

Apple MacOS - Apple computer operating system. The only Apple computer operating system.

Ubuntu Linux - A popular variant of Linux used with PC and IBM compatible computers.

Google Android - operating system used with Android compatible phones.

iOS - Operating system used with the Apple iPhone.

7 . Programming Languages

 A **programming language** is a computer language programmers use to develop applications, scripts, or other set of instructions for a computer to execute. Below is a listing of several different programming languages and scripting languages currently listed in our database.

Examples: ALGOL, ADA,AIML, ASSEMBLY, BASIC, Java, JavaScript, JCL, HTML, HDML FORTRAN, FoxPro, SQL, Prolog, Perl, PHP, Visual Basic, SGML, Ruby, XML, Python, C#, C++, COBOL, LOGO, Smalltalk, Tcl, WML, dBase etc.

8 . *Movie Player*

A **movie** is an electronic signal of moving graphics, pictures, or text used to combine a smooth source of images used for entertainment, education, or other uses. This term is often used to describe a video that is longer than ten minutes or something you would watch on your TV or at the theater. Video is often used to describe short clips or files on the Internet, see the video definition for further information and an online example.

Examples: Free FLV Player, GOM Player, KM Player, Quick Player, AVS Media Player, Window Media Player, Blaze Video HDTV Player, Real Placer, VLC Media Player etc.

9 . *Photo/Graphic Program*

Alternatively referred to as a **graphics editor**, a **graphics program** is a software application that allows you to draw, edit, and manipulate an image or graphic file. A good example of a graphics program is CorelDraw.

Examples: Picasa, Caloric, Pixel Toolbox1.1, Favicon Generator, Fast Stone Image Viewer, Icon Studio 1.2, Anim8or, Synfig, Minds Eye, Daz 3D, Blender, Google Sketch Up, Terragen, IcoFX etc.

10 . *Utility Program*

Computer software program utilized to help use, maintain and protect a computer software operating system or other software programs. A good example of a software **utility** is Microsoft's Disk Cleanup utility used to delete unnecessary files and recover disk drive space.
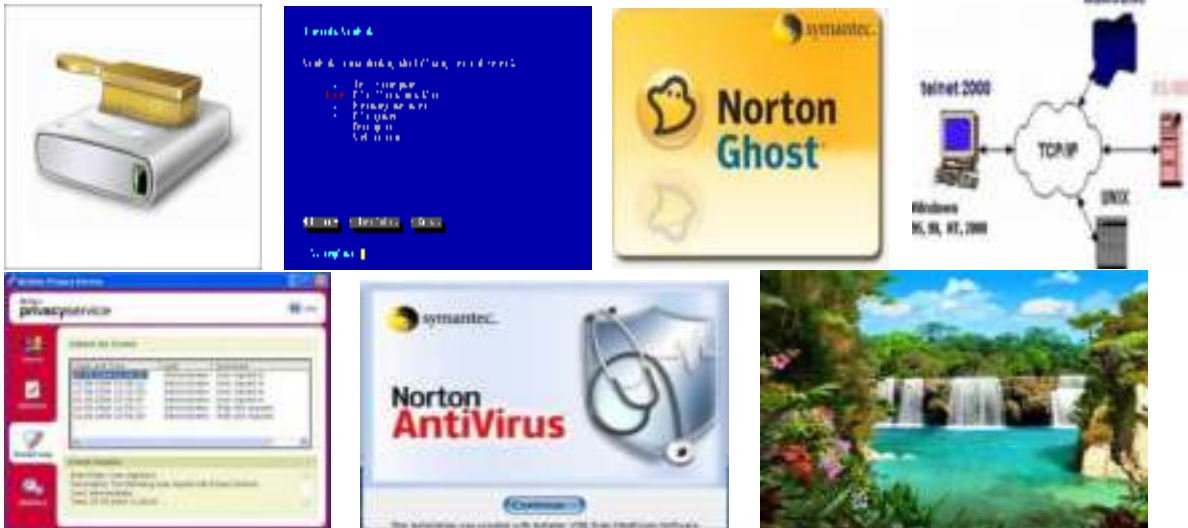
Examples: Telnet, Screensaver, Defrag, Register Cleaner, Drive Image, Nortoon Ghost, Scandisk, Microsoft Backup, MacAfee Virus Scan, First aid, Nartoon Antivirus etc.

Word Processor

Word processing describes the process of manipulating or creating a text document using a Word processor. For example, a student could do word processing to create a book report.
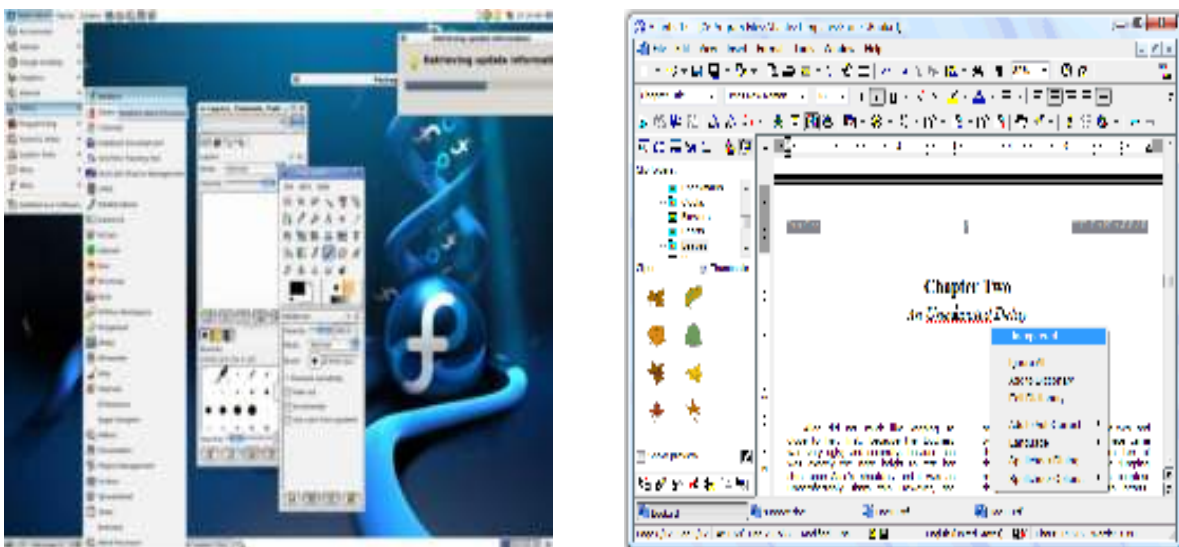
Examples: Microsoft Word, Open Office Writer, WordPerfect, AbiWord, Pages (part of work   suite) etc.

11 . Spreadsheet

Alternatively referred to as a **worksheet**, a **spreadsheet** is a data file made up of rows and columns that are used to sort data and allow a user to manipulate and arrange data easily, commonly numerical data. What makes a spreadsheet software program most unique is its ability to calculate values using mathematical formulas and the data in the cells. A good example of how a spreadsheet may be used is creating an overview of your bank's balance. Below is a basic example of what a Microsoft Excel spreadsheet looks like as well as all the major portions of a spreadsheet highlighted.
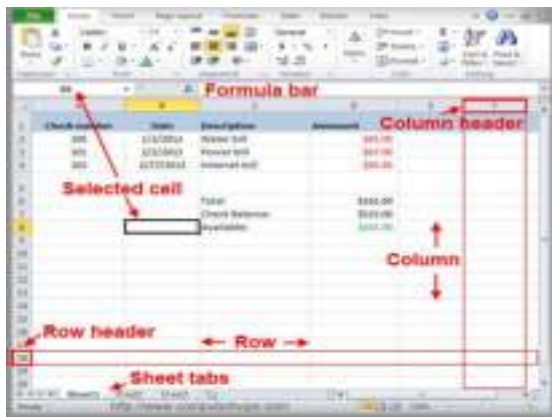
Examples: **King soft Spreadsheets** -powerful spreadsheet software, **Microsoft Excel** - commercial spreadsheet, **Open Office Impress** - free software for making spreadsheets.

12 . Simulation

1. In general, **sim** or **simulation** refers to a computerized imitation of a real object or real action.

2. Short for **flight simulation**, this type of **sim** simulates real world flying.

3. A **sim** is a shortened version of a SIM card.

4. Sometimes abbreviated as **sim** and not to be confused with SIMM, a sim is short for simulation and is a game series developed by Maxis or EA that enables the player to simulate another life or other environment. Some examples of these sim games are The Sims, Sim Ant, Sim Tower, and Sim Isle.
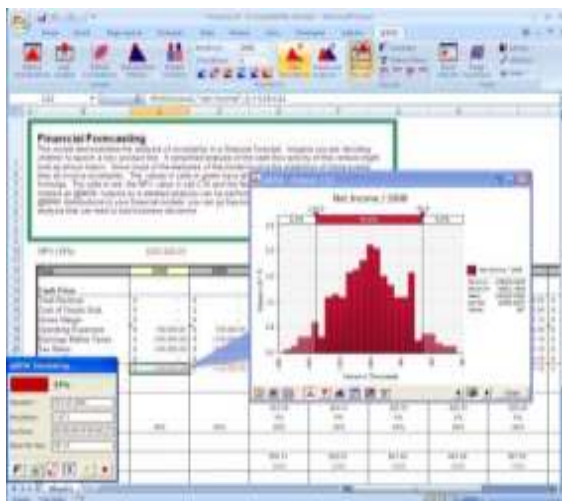
***Examples* :** Incisive Enterprise simulator, Active HDL/Riviera-PRO, CVC, MPSim, ISE Simulator, Model Sim and Questa, SMASH, SILOS.

Compiled by
Maheswari G. (MCA 3ʳᵈ Year)

COMPUTER MONKEYS

A tourist walked into a pet shop and was looking at the animals on display. While he was there, another customer walked in and went over to a cage at the side of the shop and took out a monkey. He fit a collar and leash, handed it to the customer, saying, "That"ll be $5000." The customer paid and walked out with his monkey.

Startled the tourist went over to the shopkeeper and said, "That was a very expensive monkey. Most of them are only a few hundred dollars. Why did it cost so much?"

The shopkeeper answered, "Ah, that monkey can program in C- very fast, tight code, no bugs, well worth the money."

The tourist looked at the monkey in another cage. "That one's even more expensive - $10,000! What does it do?"   ."Oh, that one's a C++ monkey; it can manage object-oriented programming, Visual C++, even some Java.

All the really usefully stuff," said the shopkeeper. The tourist looked around for a little longer and saw a third monkey in a cage of its own.

The price tag around its neck read $50,000. He gasped to the shopkeeper, "That one costs more than all the others put together!

What on earth does it do?"

The shopkeeper replied, "Well, I haven't actually seen it do anything, but it says it's a computer consultant."

Compiled by
Sita Devi CH. (MCA 2nd Year)

☺ ☺

GOOD PROGRAMMER

Teacher Gave Him Punishment
To Write 5000 Times
"I Will Not Throw Paper Airplanes In Class…"
And Submit It Tomorrow…
Day, He Submitted The Paper Write

```
#Include
Void Main( )
{
    clrscr( );
    for(int N=1 ; N<=5000 ; N++ )
    printf("I Will Not Throw Paper Airplanes In Class")
}
```

Be A Programmer… Think Differently

☺ ☺

"WORLD'S FIRST" BITCOIN ATM OPENS IN CANADA

Bitcoin is a distributed peer-to-peer digital currency that functions without any central authority, such as the Bank of England. The currency was launched in 2008 and is traded within a global network of computers.

Bitcoins can be bought with near anonymity, which supporters say lowers fraud risk and increases privacy. But critics say that also makes bitcoins a magnet for drug transactions, money-laundering and other illegal activities. Bitcoins are currently worth about $210 (£130.87) each. Their value arose from $13 (£8.10) in January to a high of $266 (£165.76) in April as more businesses and consumers used them to buy and sell online. A bitcoin investor, Norwegian Kristoffer Koch, made a huge profit, after he forgot he bought £17 of currency four years. He recently found out he was sitting on a small fortune now worth more than half a million pounds.

The world's first cash machine for buying and selling the online currency Bitcoin has been installed at a coffee shop in Canada.

Robocoin, the company which manufactured the ATM, claimed transactions can be made in less than 15 seconds.

Bitcoin is a peer-to-peer payment network invented in 2010.
Money does not pass through banks, with payments made directly to individuals or a growing number of online businesses using computer or smartphone software.

"It's as easy as walking up to a machine, scanning your hand, entering some cash and buying bitcoin," said Jordan Kelley, chief executive of Las Vegas-based Robocoin, the company that builds the ATMs. "With this, it's a 2-minute process. For any online exchange, it's at least two days."Bitcoins, currently worth about $210 each, can be transferred without going through banks or clearing houses, thereby cutting fees. Users can buy products and services online or in a handful of stores, including the Waves coffee shop where the ATM is located. With the bitcoin ATM, users scan their hand to confirm identity, then funds move to or from a virtual wallet on their smartphone. The system limits transfers to $1,000 a day, in an effort to curb money laundering and other fraud.

Bitcoiniacs, the local dealer that operates the ATM, will roll out four other kiosks across Canada in December. Robocoin said Canada was the ideal place to launch the kiosk due to a critical mass of users and less stringent oversight than in the US, where the bitcoin trade is monitored by anti-money laundering regulators.

"We think the Vancouver market is enormous and we're excited to be here," said Kelley. "By the end of 2013, we'll be all over Canada. By the end of 2014, we'll be all over the world, including the US."

Compiled by
Supriya N. (MCA 3rd Year)

LIST OF HTTP RESPONSE CODES

- ➤ *400 Bad File Request:* Usually means the syntax used in the URL is incorrect (e.g., uppercase letter should be lowercase letter; wrong punctuation marks).
- ➤ *401 Unauthorized:* Server is looking for some encryption key from the client and is not getting it. Also, wrong password may have been entered. Try it again, paying close attention to case sensitivity.
- ➤ *403 Forbidden/Access Denied:* Similar to 401; special permission needed to access the site -- a password and/or username if it is a registration issue. Other times you may not have the proper permissions set up on the server or the site's administrator just doesn't want you to be able to access the site.
- ➤ *408 Request Timeout:* Client stopped the request before the server finished retrieving it. A user will hit the stop button, close the browser, or click on a link before the page loads. Usually occurs when servers are slow or file sizes are large.
- ➤ *500 Internal Error:* Couldn't retrieve the HTML document because of server-configuration problems. Contact site administrator.
- ➤ *501 Not Implemented:* Web server doesn't support a requested feature.
- ➤ *502 Service Temporarily Overloaded:* Server congestion; too many connections; high traffic. Keep trying until the page loads.
- ➤ *503 Service Unavailable:* Server busy, site may have moved, or you lost your dial-up Internet connection.
- ➤ ***Connection Refused by Host:*** Either you do not have permission to access the site or your password is incorrect.

- *File Contains No Data;* Page is there but is not showing anything. Error occurs in the document. Attributed to bad table formatting, or stripped header information.
- *Bad File Request:* Browser may not support the form or other coding you are trying to access.
- *Failed DNS Lookup:* The Domain Name Server can't translate your domain request into a valid Internet address. Server may be busy or down, or incorrect URL was entered.
- *Host Unavailable:* Host server down. Hit reload or go to the site later.
- *Unable to Locate Host:* Host server is down, Internet connection is lost, or URL typed incorrectly.
- *Network Connection Refused by the Server:* The Web server is busy.

Compiled by
Vanaja C. (MCA 3rd Year)

WEBSITES USED PROGRAMMING LANGUAGES

WEBSITE	*VISITS*	*PROGRAMMING LANGUAGE*
Facebook.com	80,000,000	PHP
youtube.com	790,000,000	Python
live.com	540,000,000	ASP.NET
wikipedia.org	460,000,000	PHP
microsoft.com	280,000,000	ASP.NET
ask.com	190,000,000	SSI
twitter.com	160,000,000	Ruby on Rails
adobe.com	160,000,000	PHP
Youku.com	160,000,000	PHP
wordpress.com	140,000,000	PHP
windows.com	140,000,000	ASP.NET
amazon.com	120,000,000	CG
apple.com	97,000,000	PHP
ebay.com	97,000,000	CGI
flickr.com	67,000,000	PHP
linkedin.com	89,000,000	Java
yahoo.co.jp	82,000,000	PHP*
Yahoo.com	590,000,000	PHP
aol.com	73,000,000	JSP
mozilla.com	73,000,000	PHP/Python

Compiled by
Manvitha B. (MCA 3rd Year)

30 FREE WEB TOOLS AND OPEN SOURCE SOFTWARE FOR STUDENTS

Commercial software purchases can quickly eat away at the budget you have. The good news is that there are many free Web tools and open source software for students that will help you stay on task and organize your busy student life.

If you are a student you're probably wondering how to manage the cost of tuition, books and living expenses and still pay for the software you need for your student laptop or desktop computer for research and assignments. Commercial software purchases can quickly eat away at the budget you have.

The good news is that there are many free Web tools and open source software for students that will help you stay on task and organize your busy student life. From typing reports to taking and sharing class notes, this list of 30 free Web tools and open source software will help you get through your courses without spending a dime on software.

➢ *Free Web-Based and Open Source Software Communication Tools:*

1. *Gmail* is Google's online email (Web mail) service. You can register for a free email account and access a number of feature including storage, search, built-in chat, mobile access, voice chat, spam filters and more. Google frequently rolls out updates and new features to the Gmail service.

2. *Meebo* integrates a number of online communication channels and platforms into a single service. The Meebo Messenger lets you access your buddies on all the major networks (AIM, Yahoo!, Windows Live Messenger, Google Talk, ICQ, Jabber) in a single buddy list, right from your Web browser.

3. *Opera* Mail is a free email client that is built into your Web browser. Opera Mail organizes, indexes, and sorts your messages. It also integrates RSS feeds and a smart spam filter.

4. *Thunderbird 3.1* is a free, customizable messaging and email client. All you need is your name, email address, and password to get started. Thunderbird is help individuals manage their online communications including email, instant messaging and social networking messages. Thunderbird is available for Windows, Mac OS X and Linux systems.

➢ *Free Web-Based and Open Source Software Collaboration and Scheduling Tools:*

5. *GanttProject* is a free and open source desktop tool for project scheduling and management. The software can be used by students to Share projects and collaborate. GanttProject runs on Windows, Mac OS X and Linux systems.

6. *TimetoMeet* is a web-based scheduling tool that lets students find a common time to meet with others to work on assignments and projects. TimetoMeet can automatically synchronize your calendar from Outlook, iCal or Google and show your appointments all in one place.

➢ *Free Web-Based and Open Source Software Document Editing and Management Tools:*

7. *EditGrid* An online spreadsheet service that offers many of the same features found in Excel. EditGrid allows you to share, collaborate and publish your spreadsheet online.

8. *Google Docs* is a free Web-based productivity spread that gives students free software to work with documents (word processing), spreadsheets, presentations, drawings and forms. You can upload files from your desktop, access the files from any Internet-connected computer, and collaborate with classmates and teachers.

9. *PDFCreator* is an open source program that lets you create PDF files from any Windows program. The software is used like a printer in Word, StarCalc or any other Windows application.

10. *Zoho Writer* is an online word processor that lets students create documents on an individual basis or within a group for real time collaboration. Zoho Writer features a WYSIWYG editor for publishing to blog and you can import (or export) documents from your desktop, Google Docs or anywhere on the Web.

➤ *Free Web-Based and Open Source Software Presentation Tools:*

11. *Embeddable Presentations* from Google Docs lets you create and collaborate on slideshow presentations. You can add text, images, video and more directly to your presentation slides. Google Docs accepts most popular file formats, including PPT.

12. *Zoho Show 2.0* is an online tool for creating presentations. Zoho Show offers pre-built themes, clipart and shapes coupled with features like drag-and-drop makes it an easy application to use.

➤ *Free Web-Based and Open Source Software Task & Time Management Tools:*

13. *Google Calendar* is a free web-based tool from Google. The service provides an easy way for busy students to create, organize and schedule assignments, lectures, social events and more. You can also share your schedule so family and friends can view schedules that others have shared with you. Google Calendar also helps you to send invitations, track RSVPs and it syncs with desktop applications like Microsoft Outlook, Apple iCal and Mozilla Sunbird.

14. *Remember The Milk* is a free Web service that can help you manage your tasks online. Remember The Milk lets you create and manage tasks, set due dates and then get reminders about your scheduled tasks through email or instant messenger. You can also create lists and Share, send and publish tasks with other contacts.

➤ *Free Web-Based and Open Source Software Mathematics and Modeling Tools:*

15. *GNU Octave* is an open source high-level interpreted language intended for numerical computations. It provides capabilities for the numerical solution of linear and nonlinear problems, and for performing other numerical experiments. GNU Octave also provides extensive graphics capabilities for data visualization and manipulation. The current version is Version 3.4.0 and it is available for Linux, Mac OS X and other projects have contributed to a Windows binary distribution of Octave and a binary distribution of Octave for Sun systems. There is also a collection of contributed packages for Octave available.

16. *Graphing Calculator from e-Tutor* is an online Web tool that lets students enter functions of x using a standard mathematical format. Students simply type one or more equations into the Graph box on the site to use the graphing calculator.

17. *Mathway* is an online tool that provides students with the tools they need to solve their math problems. Mathway solves problems from the following subjects: Basic Math, Pre-Algebra, Algebra, Trigonometry, Precalculus, Calculus and Statistics.

18. *Sage* is a free open-source mathematics software suite system licensed under the GPL. It combines the power of many existing open-source packages into a common Python-based interface. Sage mathematical software is designed for research and teaching. It is a viable free open source alternative to Magma, Maple, Mathematical and Matlab.

➢ ***Free Web-Based and Open Source Software for Note Taking:***

19. *NoteMesh* is a free online service that allows students in the same classes to share notes with each other. It works by creating a wiki for individual classes that users can edit. Users are free to post their own lecture notes or contribute to existing lecture notes.

20. *WebNotes* (Lite version) is a free online service that lets students highlight and add notes to Webpages from within your web browser. The notes are saved automatically and will reappear any time you visit the page. Highlighted web pages and PDFs can be shared with others through email, permalink, or Twitter.

➢ ***Free Web References and Educational Guides for Students:***

21. *EasyBib* is a free Web tool that provides automatic bibliography and citations. The service lets you search for a source, build the bibliography and then print or export it.

22. *Google* is a multi-functional "app" for students. The search engine can help you find articles for research and it also serves as a calculator, definition finder, a conversion tool and more.

23. *Google News search* (with the archive search option) is a good tool for students who need to research historical or current events.

24. *Bookfinder* is a search-based online resource that can help students find the best prices on new and used textbooks, rentals, old editions, and international edition textbooks.

25. *SparkNotes* is a Web resource designed to help students understand books, write papers, and study for tests.

26. *SpellJax* is a handy little online Ajax spell checker. Just type (or paste) in the text to spell check it.

27. *Webopedia* (That's us!) is a free online searchable database of computer, Internet and technology definitions.

➢ ***Open Source E-Learning Platforms for Educators:***

28. *Claroline* is an Open Source e-learning and e-working platform that allows teachers to build effective online courses and to manage learning and collaborative activities on the web. The software package is based on PHP/MySQL and has been translated into 35 languages. It is available for Windows, Unix, Linux and Mac OS X.

29. **Dokeos** is online learning suite software. It is open source and offered as a free download with community-based support. Some features of the platform include SCORM compliant course import, support for multimedia content, test creation, course sequence building, forums, and videoconferencing.

30. **Sakai** is a Java-based e-learning platform that provides all the tools needed for online teaching, learning, research and collaboration for education. Those who want to experiment on their own hardware and operating system can download and install an already compiled binary for their platform of choice.

Compiled by
Santhoshi G. (MCA 3rd Year)

JESUS AND SATAN ARE HAVING A CONVERSATION…

Jesus and Satan were having an ongoing argument about who was better on his computer. They had been going at it for days, and God was tired of hearing all of the bickering.

Finally God said, "Cool it. I am going to set up a test that will run two hours and I will judge who does the better job".

So Satan and Jesus sat down at the keyboards and typed away. They mused. They did spreadsheets. They wrote reports. They sent faxes. They sent e-mail. They sent out e-mail with attachments. They downloaded. They did some genealogy reports. They made cards. They did every known job. But ten minutes before their time was up, lightning suddenly flashed across the sky, thunder rolled, the rain poured and, of course, the electricity went off.

Satan stared at his blank screen and screamed every curse word known in the underworld. Jesus just sighed. The electricity finally flickered back on and each of them restarted their computers.

Satan started searching frantically, screaming "It's gone! It's all gone! I lost everything when the power went out!". Meanwhile, Jesus quietly started printing out all of his files from the past two hours .Satan observed this and became irate.

"Wait! He cheated, how did he do it?"

God shrugged and said, "Jesus saves".

Compiled by
VijayaLakshmi S. (MCA 2nd Year)

WINDOW'S SHORTCUTS

Desktop Shortcut keys

To get to your Windows desktop when you have several different windows open.
Win key + M Win key + Shift + M gets them all back again.
Win key + D toggles between open applications and the desktop.
To close all windows and applications quickly press Alt + F4
Win Key (Wk) Shortcuts
Wk Show Start Menu
Wk + D Desktop (toggle)
Wk + E Windows Explorer
Wk + F Find
Wk + R Run
Wk + Pause System Properties
Wk + Tab Steps through the programmes on the taskbar
Wk + F1 Windows Help
Wk + M Minimizes all open windows (+ shift M undoes the minimizing)
Wk + BREAK System properties
Wk + L Lock Keyboard
Wk + U Utility Manager
Wk + SHIFT + M Restore minimized Windows
Wk + CTRL + F Search for computers
WK + BREAK Display system properties dialogue box

Expand All Folders in Windows Explorer

If you want to expand all the folders and subfolders for a particular drive, click on that drive and press the ' * ' key on the numeric keyboard Expand individual highlighted folders press '+'

Microsoft Access keyboard shortcuts

 Enter the Value that Appears in the Same Field in the Previous Record Keyboard Shortcut: Ctrl+' (apostrophe).

To undo typing CTRL + Z or ALT + BACKSPACE
To Undo changes Hit ESC once for current field, ESC twice for current record
To insert the current date CTRL + SEMICOLON (;)
To insert the current time CTRL + COLON (:)
To insert the default value for a field CTRL +ALT + SPACEBAR
To insert the value from the same CTRL + APOSTROPHE (') field in the previous   record
To add a new record CTRL + PLUS SIGN (+)
To delete the current record CTRL + MINUS SIGN (-)
To recalculate the fields in the window F9

Paint Shop Pro shortcuts

CTRL+Z Undo
CTRL+N Create a new image
CTRL + Shift + T Displays all toolbars
CTRL+A Select All
CTRL+D Deselects the current selection
CTRL+S Save
F12 Save As
CTRL+C Copy
CTRL+X Cut
CTRL+V Paste as a New Image
CTRL+L Paste as a New Layer
CTRL+E Paste as a New Selection
Shift +S Resize an image
CTRL+R Rotate an image
CTRL+B Browse your images (display images in a folder)

Microsoft Excel

HOME Beginning of row
CTRL + END Bottom of worksheet
CTRL + PAGE UP / PAGE DOWN Different sheet
END + RETURN End of row
CTRL + SPACEBAR Entire column
SHIFT + SPACEBAR Entire row
CTRL + A Entire worksheet
F8 Extend selection
CTRL + F6 Go to next workbook
CTRL + SHIFT + F6 Go to previous workbook
PAGE UP / PAGE DOWN Previous / next screen
CTRL + HOME Top of worksheet
ALT+= Autosum
CTRL + B Bold
CTRL + I Italic
CTRL + U Underline
CTRL + SHIFT+& Border cells (outline)
SHIFT + File Menu Close all workbooks
CTRL + F4 Close workbook
CTRL + SHIFT + S Currency number format
CTRL +X Cut
CTRL + ; Date
CTRL + SHIFT + : Time
CTRL + - Delete cells
F2 Edit cell
CTRL + D Fill down
CTRL + R Fill right
F1 Help
CTRL + 9 Hide rows

CTRL + 0 Hide columns
CTRL + SHIFT + + Insert cells
F11 Insert chart
ALT + SHIFT + F1 New worksheet
CTRL + O / CTRL + F12 Open workbook
CTRL + P / CTRL + SHIFT + F12 Print workbook
CTRL + FV Print preview
CTRL + SHIFT + _ Remove borders
F4 Repeat last action
CTRL + S / SHIFT + F12
CTRL + ALT + TAB Tab in cell
CTRL + Z Undo
CTRL + SHIFT + (Unhide rows
CTRL + SHIFT +) Unhide columns
Microsoft Word
CTRL+SHIFT+A All caps
CTRL+B Bold
CTRL+I Italic
CTRL+U Underline
CTRL+E Centre
SHIFT+F3 Change case of letters
CTRL+SHIFT+F Change font
CTRL+W Close document
CTRL+C Copy
CTRL+V Paste
CTRL+X Cut
CTRL+2 Double line spacing
CTRL+SHIFT+D Double underline
CTRL+END End of document
CTRL+HOME Start of document
CTRL+F Find
CTRL+D Format font
SHIFT+F5 Go back to last position
CTRL+G /F5 Go to
CTRL+F6 Go to next document
CTRL+M Indent
ALT+SHIFT+D Insert date field
CTRL+J Justify
CTRL+L Left justify
SHIFT+RETURN Line break
CTRL+N New document
CTRL+SHIFT+8 Show/Hide
CTRL+SHIFT+N Normal style
ALT+CTRL+N Normal view
CTRL+O Open document
CTRL+RETURN Page break
ALT+CTRL+P Page layout view
CTRL+P Print document
CTRL+F2 Print preview
CTRL+SHIFT+M Remove indent

CTRL+R Right justify
F12 Save as
CTRL+S/SHIFT+F12 Save document
CTRL+A Select document
ALT+5 Select table
CTRL+1 Single line spacing
CTRL+SHIFT+K Small caps
F7 Spelling and thesaurus check
SHIFT+F7 Thesaurus

Internet Explorer 8

CTRL + F Find
F11 Full Screen
F12 Developer Tools
CTRL + + Zoom In
CTRL + - Zoom Out
CTRL + N Open current webpage in new window
CTRL + 0 Zoom to 100%
ALT + HOME Go to home page
ALT + LEFT Go backwards

Know your Internet browser shortcuts

There are dozens of different shortcut keys that can be used with Internet browsers. Below are a few of our top suggested Internet browser shortcuts.

- Pressing **Alt + D** in any major Internet browser will move the cursor into the address bar. This is a great way to quickly enter an Internet address without having to click the mouse cursor in the address bar.
- Hold down the **Ctrl key and press the + or -** to increase and decrease the size of text.
- Press the **backspace key** or hold down the **Alt key + left arrow** to go back a page.
- Press **F5** to refresh or reload a web page.
- Press **F11** to make the Internet browser screen full screen. Press F11 again to return back to the normal view.
- Press **Ctrl + B** to open your Internet bookmarks.
- Press **Ctrl + F** to open the find box in the browser to search for text within the web page you're looking at.

Compiled by
Sumalatha N. (MCA 3ʳᵈ year)

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Written by
Geetha G. (MCA 3rd year)

UPCOMING TECHNOLOGY THAT MAY CHANGE THE ""WORLD""

☺

EYE TRIBE

Just imagine what will happen if you don't have hands? You won't be able to play android games. Is that so? Put down your worries when eye tribe is with you. The Eye Tribe is a company which develops eye tracking software for android. They have decided to launch developers' kit for apps and games. The Eye Tribe has been the first ever in the world of android to make eye controlled software for the Android devices. It is said that Samsung galaxy S4 have the eye tracking software, but it can recognize whether your face is looking away from it or at it.

Eye tracking is a technology enthusiasts throughout these years, but it's really challenging to implement. But *Eye Tribe* actually did this. They successfully created the technology to allow you to control your tablet, play flight simulator, and even slice fruits in Fruit Ninja only with your eye movements.

(Image Source: Eye Tribe)

You can play games, move your web pages up and down, lock unlock your screen only using your eyes with the help of this software. You need to tilt the phone in case of smart scroll. With this you can scroll up and down without moving the device. The only disadvantage is that it cannot be operated on every android phone. It will require some hardware add-ons.

It's basically taking the common eye-tracking technology and combining it with a front-facing camera plus some serious computer-vision algorithm, and voila, fruit slicing done with the eyes! A live demo was done in Le Web this year and we may actually be able to sent it in action in mobile devices in 2013.

Currently the company is still seeking partnership to bring this sci-fi tech into the consumer market but you and I know that this product is simply too awesome to fail.

Compiled by
Anusha M. (MCA 3rd Year)

WIRELESS BLUETOOTH BRACELET WITH SPEAKERPHONE

Bluetooth bracelet with OLED caller's ID display.

1. The Bluetooth bracelet can be applicable for every brand bluetooth mobile phone.
2. When not in use it can perform as a bracelet with special design, showing time.
3. After pair with the mobile phone, the bracelet will remind you by vibrate and show caller's ID while receiving a call.
4. You can answer the call via this bluetooth watch by press side button three times. There are loud speaker and microphone inside.
5. Rechargeable battery, with 100 hours standby time.
6. Compatible bluetooth 2.0 standard.
7. Accessories: Bluetooth Bracelet, Charger, Connecting Cable.

Model NO.	QT09	Material	ABS+PC	Screen	OLED
Functions	Timer,show caller ID/Name,vibrate,answer and reject calling, build-in speaker and microphone				
Colors	White,black, pearl white,red			Diameter	65mm or 58mm
Bluetooth Version	V2.1	Frequency	2.4GHz	Charge time	2-3hrs
Standby time	72hrs	Battery	Li battery	Imput voltage	110~240v
Transmission range	5meters	NW/GW	45g/200g	Packing	1pc/gift box, 100pcs/ctn
Carton size	75*36*30cm	GW/ctn	22kgs		
Sample	$35/pc	Sample time	with 2days		

BW13 Bluetooth Bracelet

1. The elegant watchcase matches the delicate and smooth band perfectly for BW13. Once you wear it, you will be the focus of attention wherever you work, study, make friends, or take part in party.
2. The built-in Bluetooth technology can connect your mobile conveniently. It will remind you whether there is a coming call or warn you if your mobile is stolen. Undoubtedly, it would be your best mobile helpmate.

3. If you stand in the strong sunshine, it can still normally work to display accurate time.
4. It is easy to use by the two-button operation system.

We specialize in the manufacturer of mobile watch phone, Bluetooth watch and Bluetooth bracelet. Our watch mobile can also make customization function and combines the utility as follows:

(1) Health Management.
(2) GPS Navigation (GPS +Compass).
(3) Smartphone +Smart watch (with Android OS 2.2).
(4) Security Monitoring (including SOS emergency call, etc).
(5) For sports (Movement speed/distance/heart rate/calorie monitoring, etc).

Main Features:

Watchcase: Made by ABS plastic cement, solid curved shape, 99°perfect curve figure, smooth and dynamic, delicate and elegant.

Movement: Adopt semiconductor crystal oscillator, provide accurate signal to watch system.

Function: Accurate time display, incoming call reminder, anti-theft alarm.

Dial plate: Fashionable and beautiful OLED display, can normally display in outdoor strong light.

Watch band and chain: Made by ABS plastic cement, the inner side is made by compounded rubber, soft but not easy to fall.

1. The Bluetooth bracelet with clock works as a timer.
2. The bluetooth bracelet is compatible with every brand Bluetooth mobile phone, when not in working, it can be fashion jewelry.
3. The rest of the band is silica gel and is soft, different colors is available.
4. The best mobile phone helpmate: when your mobile gets call, it will remind you by lighting & vibrating. There is function for you to reject & mute your mobile.
5. Avoid loss: when your mobile breaks away from the bracelet's Bluetooth range control (general distance: 5m to10m based on the signal strength), the bracelet will send vibration warning to avoid lose.
6. Built-in rechargeable battery. The charge time is within 3 hours.
7. Automatic pairing: no need to operate repeatedly.
8. Bluetooth V2.0.
9. Standby Time: 72 hours.
10. Accessories: Data/USB line +charger.

Accessories:

Bluetooth bracelet*1
USB charger clip*1
Power Adapter*1
User Manual*1

Packing:

80pcs/carton
GW/NW:17/16KGS
Size of carton: 61*35*28cm
QTY:80pcs

Compiled by
Neelaveni K. (MCA 3rd Year)

GOOGLE GLASS

Google's project program for developing a line of hands-free, head-mounted intelligent devices that can be worn by users as "wearable computing" eyewear. The first product release from Project Glass, Google Glass, is expected to become available for purchase in 2013, and should retail for less than $1500.

Google Glasses will look like a pair of normal eyeglasses, but the lens of the glasses will be an interactive, smartphone-like display, with natural language voice command support as well as Bluetooth and Wi-Fi connectivity. Google Glass will be powered by the Android mobile operating system and is expected to offer compatibility with both Android-powered mobile devices and Apple IOS-powered devices.


Advantage of Google glasses :
➢ Fast access of maps, documents, videos, chats and much more.
➢A new trend for fashion lovers together being an innovative technology.
➢ A useful technology for all kinds of handicapped/disabled people.
➢ Capacity of battery is one full Day.

➢Easy to wear and use.

➢You don't need extra time to open your camera or smart phone to take a picture. Just say 'Take a Picture' to capture a photo.

➢We can record video using Google Glass and we can also share this through Google, Facebook and Twitter. IF users already wear glasses. Then also Google Glasses will work.

Compiled by
Saritha D. (MCA 1ˢᵗ Year)

PARALLELLA

Parallella is going to change the way that computers are made, and Adaptive offers you chance to join in on this revolution. Simply put, it's a supercomputer for everyone. Basically, an energy-efficient computer built for processing complex software simultaneously and effectively. Real-time object tracking, holographic heads-up display, speech recognition will become even stronger and smarter with Parallella.
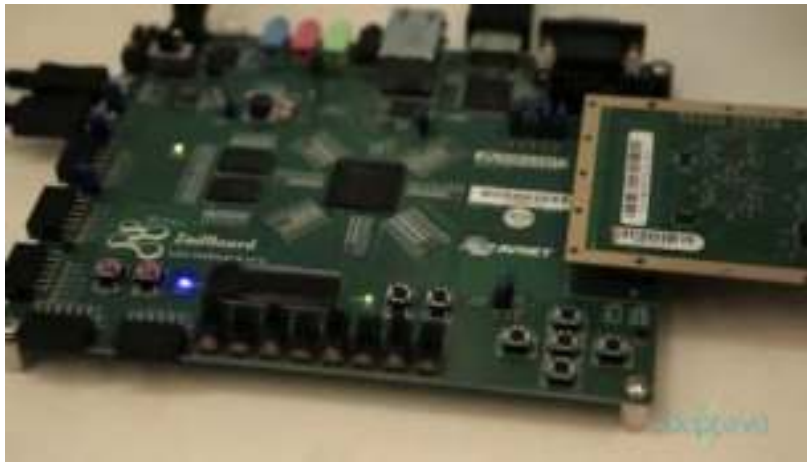
The project has been successfully funded so far, with an estimated delivery date of February 2013. For a mini supercomputer, the price seems really promising since it's magically $99! It's not recommended for the non-programmer and non-Linux user, but the kit is loaded with development software to create your personal projects. I never thought the future of computing could be kick-started with just $99, which is made possible using crowd funding platforms.

FORM 1

Just as the term suggests, 3D printing is the technology that could forge your digital design into a solid real-life product. It's nothing new for the advanced mechanical industry, but a personal 3D printer is definitely a revolutionary idea. Everybody can create their own physical product based on their custom design, and no approval needed from any giant manufacturer! Even the James Bond's Aston Martin which was crashed in the movie was a 3D printed product!

Form 1 is one such personal 3D printer which can be yours at just $2799. It may sound like a high price but to have the luxury of getting producing your own prototypes, that's a reasonable price. Imagine a future where every individual professional has the capability to mass produce their own creative physical products without limitation. This is the future where personal productivity and creativity are maximized.

FIREFOX OS

IOS and Android are great, but they each have their own rules and policies that certainly inhibit the creative efforts of developers. Mozilla has since decided to build a new mobile operating system from scratch, one that will focus on true openness, freedom and user choice. It's Firefox OS. Firefox OS is built on Gonk, Gecko and Gaia software layers – for the rest of us, it means it is built on open source, and it carries web technologies such as HTML5 and CSS3.

Developers can create and debut web apps without the blockade of requirements set by app stores, and users could even customize the OS based on their needs. Currently the OS has made its debut on Android-compatible phones, and the impression so far, is great. You can use the OS to do essential tasks you do on IOS or Android: calling friends, browsing

web, taking photos, playing games, they are all possible on Firefox OS, set to rock the smartphone market.

GOOGLE DRIVERLESS CAR

I could still remember the day I watch the iRobot as a teen, and being skeptical about my brother's statement that one day, the driverless car will become reality. And it's now a reality, made possible by… a search engine company, Google.

While the data source is still a secret recipe, the Google driverless car is powered by artificial intelligence that utilizes the input from the video cameras inside the car, a sensor on the vehicle's top, and some radar and position sensors attached to different positions of the car. Sounds like a lot of effort to mimic the human intelligence in a car, but so far the system has successfully driven 1609 kilometers without human commands!

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"You can count on one hand the number of years it will take before ordinary people can experience this." Google co-founder, Sergey Brine said. However, innovation is an achievement, consumerisation is the headache, as Google currently face the challenge to forge the system into an affordable gem that every worker with an average salary could benefit from.

OCULUS RIFT

Virtual Reality gaming is here in the form of Oculus Rift. This history-defining 3D headset lets you mentally feel that you are actually inside a video game. In the Rift's virtual world, you could turn your head around with ultra-low latency to view the world in high resolution display.There are premium products in the market that can do the same, but Rift wants you to enjoy the experience at only $300, and the package even comes as a development kit. This is the beginning of the revolution for next-generation gaming.

The timing is perfect as the world is currently bombarded with the virtual reality topic that could also be attributed to Sword Art Online, the anime series featuring the characters playing games in an entirely virtual world. While we're getting there, it could take a few more years to reach that level of realism. Oculus Rift is our first step.

PROJECT FIONA

Meet the first generation of the gaming tablet. Razer's Project Fiona is a serious gaming tablet built for hardcore gaming. Once it's out, it will be the frontier for the future tablets, as tech companies might want to build their own tablets, dedicated towards gaming, but for now Fiona is the only possible one that will debut in 2013.

This beast features next generation Intel® Core i7 processor geared to render all your favorite PC games, all at the palm of your hands. Crowned as the best gaming accessories manufacturer, Razer clearly knows how to build user experience straight into the tablet, and that means 3-axis gyro, magnetometer, accelerometer and full-screen user interface supporting multi-touch. My body and soul are ready.

SMARTTHINGS

The current problem that most devices have is that they function as a standalone being, and it require effort for tech competitors to actually partner with each other and build products that can truly connect with each other. SmartThings is here to make your every device, digital or non-digital, connect together and benefit you.

With SmartThings you can get your smoke alarms, humidity, pressure and vibration sensors to detect changes in your house and alert you through your smartphone! Imagine the possibilities with this. You could track who's been inside your house, turn on the lights while you're entering a room, shut windows and doors when you leave the house, all with the help of something that only costs $500! Feel like a tech lord in your castle with this marvel.

LEAP MOTION

Multi-touch desktop is a (miserably) failed product due to the fact that hands could get very tired with prolonged use, but Leap Motion wants to challenge this dark area again with a more advanced idea. It lets you control the desktop with fingers, but without touching the screen.

It's not your typical motion sensor, as Leap Motion allows you to scroll the web page, zoom in the map and photos, sign documents and even play a first person shooter game with only hand and finger movements. The smooth reaction is the most crucial key point here. More importantly, you can own this future with just $70, a price of a premium PS3 game title!If this device could completely work with Oculus Rift to simulate a real-time gaming experience, gaming is going to get a major make-over.

Compiled by
Sowjanya M. (MCA 3rd Year)

ANDROID APPS FOR EDITING WORD DOCS ON TABLETS

Can a tablet replace a laptop? Probably, if you're willing to load it up with the right apps. If you're considering carrying an iPad or Android device around instead of your laptop, you're most likely concerned about sacrificing the functionality of a full PC--especially the office software that allows you to view and edit documents.

Choosing the right tablet for your business needs can be tough; fortunately, no matter what tablet you buy, you can find excellent apps for both iPad and Android that duplicate the functionality of popular document-editing software packages such as Microsoft Office. This guide will help you select an editing app and get started in editing documents on your table.

Top Rated Office Apps for Android Smartphone's & Tablets Today Android Fan Club will share best Android office apps with our loyal and valuable readers. As there are no native / default apps for handling office documents on Android Smartphone's, therefore we will share third party office apps to boost your productivity. These apps have already received excellent user ratings and have been rigorously tested and optimized for touch Android smartphones & tablets. You can even connect mouse & keyboard with your smartphone & tablet either via bluetooth or through USB-OTG & can enjoy the ease of editing your official documents in a traditional PC experience.

The Google Play store has several applications for working with Microsoft Word files. When shopping for an app, check the feature list carefully, as some free programs allow you only to view files on your Android device, not edit them.

Apps that offer document editing include the $15 full versions of Documents To Go or OfficeSuite Pro 7, the free Kingsoft Office or the free Olive Office Premium. Features and user reviews vary by app, so study up before downloading to make sure you get everything you want.

Quickoffice, another popular app for working with Word files, was recently withdrawn from the Google Play store, but for a reason. Last year, Google bought the company behind the software, and last month it made Quickoffice free for Android and iOS users.

The new Quickoffice app requires a free Google account and stores files online with Google Drive. The new version does not support online syncing and storage to other services like Dropbox, as previous versions did.

PC first aid kit on a pen drive

Just like every home has a First Aid Kit for *medical emergencies*, it pays to have something similar for your PC. All you need is a pen drive that's loaded with essential, troubleshooting software. The tools listed in this piece are free, and run straight out of a USB stick, so you don't even need to install them. And yes, it also means you can carry this 'First Aid Kit' along whenever you want to help friends with their computer problems…

ClamWin

The portable version of ClamWin antivirus can be used to scan your PC for viruses. This is extremely useful because malware can sometimes disable the antivirus software installed on your PC. With ClamWin on your flash drive, you will be able to identify and remove infections.

Ccleaner

If your PC seems sluggish while performing basic tasks like opening a document, or during web browsing sessions, it's probably because of the temporary files created by the software you use. To purge your system of this junk, try Ccleaner. Extract the contents of Ccleaner's '.zip' file to a folder of the same name on your pen drive. Now, launch the software by double-clicking the '.exe' file and start spring cleaning your machine.

Recuva

Recuva comes with a simple, wizard-driven interface that makes it easy to retrieve files that you might have permanently deleted from your PC. A 'deep scan' lists deleted files in a friendly searchable format, along with the option to preview them if they are images. That said, there is no guarantee that you will always be able to retrieve deleted data.

Revo Uninstaller

Uninstalled software sometimes leave residue in the form of files and Registry entries. These are not easy to find and end up hogging precious space. Revo Uninstaller saves you the trouble of manually clearing these files by thoroughly uninstalling a program. It can also be used to remove those stubborn toolbars that refuse to go away. An alternative to Revo Uninstaller is PC Decrapifier – a portable tool that does just as its name suggests.

AutoRuns for Windows

If your PC takes time to boot to the desktop, then it is probably because of the number of programs that are configured to launch during the Windows start-up process. With AutoRuns, you can cut down on these programs. It analyses your machine and shows you the services and programs that are scheduled to run during the boot process. Carefully deselect the ones that are not required at launch and you will improve start-up times. You can also use WinPatrolToGo to The same effect.

How to prep your USB flash drive

* To create your PC First Aid Kit you will need a pen drive with at least 2GB capacity. If possible, invest in one that supports USB 3.0 – this will guarantee faster read-write speeds on newer PCs that support the standard.
* Format your drive: Double-click My Computer and right-click the external drive icon that appears under Devices with Removable Storage.
* Click on Format and select FAT32 from the drop-down list as the file system of choice.
* Check the Quick Format box and click Start to initiate the process.
* Your USB flash drive is now ready to be filled with portable apps. It is recommended that you regularly replace the software on the flash drive with latest revisions. For example, an up-to-date antivirus will be more capable of detecting new threats.

Compiled by
Tejaswini R. (MCA 3rdYear)

TOP TRENDS FOR 2013

IEEE Computer Society journals, magazines, and conferences are continually at the forefront of current technology trends. That's just one of the reasons that IEEE Computer Society is the community for technology leaders. As a technology professional, keeping on top of trends is crucial. Below are a list of technology topics that Computer Society magazines, journals, and conferences will be focusing on next year.

1) Internet of Things

The Internet of Things is more than just the newest buzzword. The IOT promises to be the most disruptive technological revolution since the advent of the World Wide Web. Projections indicate that up to 100 billion uniquely identifiable objects will be connected to the Internet by 2020, but human understanding of the underlying technologies has not kept pace. This creates a fundamental challenge to researchers, with enormous technical, socioeconomic, political, and even spiritual consequences. In recognition of the importance of IOT.

2) Big Data Visualization

We've entered a data-driven era, in which data are continuously acquired for a variety of purposes. The ability to make timely decisions based on available data is crucial to business success, clinical treatments, cyber and national security, and disaster management. Additionally, the data generated from large-scale simulations, astronomical observatories, high-throughput experiments, or high-resolution sensors will help lead to new discoveries if scientists have adequate tools to extract knowledge from them.

3) Cloud Computing in Science and Engineering

Cloud computing has emerged as a dominant paradigm, widely adopted by enterprises. Clouds provide on-demand access to computing utilities, an abstraction of unlimited computing resources, and support for on-demand scale-up, scale-down, and scale-out. Cloud platforms are also rapidly becoming viable for scientific exploration and discovery, as well as education. As a result, it is critical to understand application formulations and usage modes that are meaningful in such a hybrid infrastructure, the fundamental conceptual and technological challenges, and ways that applications can effectively utilize clouds. The goal of this 2013 special issue of *IEEE Computing in Science &* Engineering is to explore how cloud platforms and abstractions, either by themselves or in combination with other platforms, can be effectively used to support real-world science and engineering applications. Topics of interest include algorithmic and application formulations, programming models and

systems, runtime systems and middleware, end-to-end application workflows, and experiences with real applications.

4) Mobile Computing Meets the Cloud

It could be argued that two of the most important technological developments of the last few years are the emergence of mobile and cloud computing. By shifting the hardware and staffing costs of managing computational infrastructure to third parties such as Google, Microsoft, or Amazon, cloud computing has made it possible for small organizations and individuals to deploy world-scale services; all they need to pay is the marginal cost of actual resource usage. At the same time, the deployment of 3G and 4G networks, the rapid adoption of feature-rich smartphones, and the growing integration of computation into consumer products such as cars and home appliances, have brought mobile and pervasive computing into the mainstream.

5) Internet Censorship and Control

The Internet is a battleground where fights for technical, social, and political control are waged, including between governments and their citizens, separate governments, and competing commercial interests. These fights take many forms, including Internet filtering versus circumvention, surveillance versus anonymization, denial of service attacks and intrusion attempts versus protection mechanisms, and on- and offline persecution and defence of online activists. These battles impact and are impacted by the Internet's technical structure. As the Internet continues to embed itself into our world, its structural changes will have an increasing effect on our social and political structures, and our social and political structures will have increasing impact on the Internet's technical structure.

6) Interactive Public Displays

Recent trends show an increasing prevalence of interactive displays of varying sizes in public and urban life. With their prominent visibility and the integration of diverse methods for interaction, they can offer new opportunities to enrich user experiences beyond the personal sphere, for instance in public knowledge institutions such as museums and libraries, or integrated within public plazas or architectural facades. The public context with its social and cultural particularities and constraints provides a large variety of intriguing but challenging settings and use-case scenarios for interactive displays of varying sizes.

7) Next-Generation Mobile Computing

Ubiquitous, pervasive mobile computing is all around us. We use mobile computing not only when we interact with our smartphones to connect with friends and family across states and countries, but also when we use ticketing systems on a bus or train to work or home, purchase food from a mobile vendor at a park, watch videos and listen to music on our phones and portable music playing devices. In other words, mobile computing is not only the interaction of smart phones with each other. Any computation system that is expected to move and interact with end users or other computational systems despite potential changes in network connectivity—including loss of connectivity or changes in type of connectivity or access point—participates in mobile computing infrastructure, and the number of such systems is expected to grow significantly each year over the coming decades.

Many of these systems in urban areas take advantage of robust networking infrastructure, gigabit bandwidth backbones, high-speed relays, and unlimited power and recharging capabilities. However, many of these systems operate within degraded network, power, or

computing environments, such as for first-responders in a catastrophe, mobile phone users in remote regions or in countries where communication infrastructure is degraded or even millions of people watching fireworks along a river and overwhelming the local networking infrastructure in a major metropolitan area.

8) 3D Imaging Techniques and Multimedia Applications

With the advances in sensing, transmission, and visualization technology, 3D information has become increasingly incorporated into real-world applications—from architecture to entertainment, manufacturing, and security. Integrating depth perception into such application can help present an even richer media interface. For example, in immersive telecommunication, specialised audio and 3D parallax increases the effectiveness of communication; in medicine, 3D instrument tracking enables more precise and safer operations; and new low-cost 3D cameras are starting a new chapter in interactive gaming and human-computer interaction.

One of the fundamental requirements of these applications is the estimation of scene depth information. The extraction of 3D information has been studied in the field of computer vision for more than three decades, but it remains a challenging problem, in particular under unconstrained environments that can include variable lighting, specular and deforming scene surfaces, and occluded objects, among other things. Multimedia researchers must account for imperfect depth information when designing their systems, making this a unique research opportunity.

9) Safety-Critical Systems: The Next Generation

Safety-critical computer-based systems are woven into the fabric of our lives. These days, they can't be safe without being secure—yet security is just one of many challenges. These systems must be trusted to work adequately given user behaviour, system interactions, changing environment and expectations, organizational turbulence, regulatory caution, routine component and operator failure, the complexity of international projects, and adaptation and refurbishment. In addition, there are the security-related issues such as intentional, malicious attacks and supply-chain risks.

10) Haptics in Rehabilitation

Robotic devices have been shown to be effective at delivering the intensive and repetitive therapy that is known to induce brain plasticity and foster restoration of motor coordination after stroke, spinal cord injury, and other neural impairments. Engagement of the sensor motor system, including haptic feedback to the participant during rehabilitation, is an important factor in regaining motor control. Further, haptic feedback can enhance the natural control, utility, and efficacy of advancement of prosthetic and orthotic devices that restore mobility and manipulability to lower- and upper-extremity amputees. However, advanced prosthetic devices, for example, have decoupled the normal afferent-efferent loop and rely heavily on visual feedback to the amputee for control in the absence of haptics. The science and technology of haptics thus has great potential to affect the outcomes of rehabilitation and adoption of advanced prosthetic and orthotic devices.

Compiled by
Padmavathi P. (MCA 3rdYear)

EDUCATION is the most

powerful WEAPON

which you can use

to change the WORLD
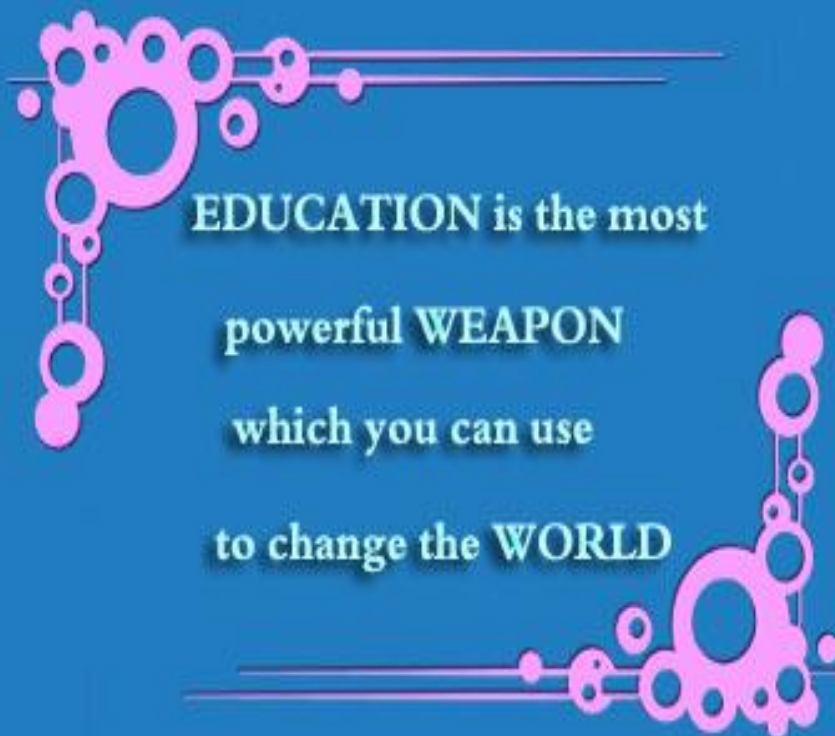
DEPARTMENT OF COMPUTER SCIENCE

SRI PADMAVATHI MAHILA VISVAVIDYALAYAM

(Women's University)

Tirupati – 517502, ANDHRA PRADESH, INDIA.

www.spmvv.ac.in