

KEY BOARD TOUR!

When Chris Watts worked as an editor/reporter for the Associated Press in Washington, D.C., he wrote for hours and began getting pains in his forearms. “I had to take some action, so I tried several different ergonomic keyboards that were lying around the office”, he says. “Eventually I switched over to a flat split keyboard that cost me about \$25. I’ve continued to use it for the past five years, and haven’t experienced major RSI pain.”

As you sit at your computer keyboard, look at your fore arms and your hands. If you use a standard keyboard, you may have to angle your left hand to the left so your fingers line up with the home row keys, and angle your right hand to the right. That’s called ulnar Deviation, and when you type in this position, you’re putting extra stress on the ulnar nerve. Chris Watts solved his problem with split keyboard because it put the keys at angle, so hands and forearms stay in a straight line, eliminating ulnar deviation.

Now place your hands so palm faces palm. “This is a neutral position, and forearm muscles are neither contracted nor stretched”, Clogston says, “When you turn your hands palm downward to type, the pronator muscles on the underside of the forearm are working”. If you type all day long, those muscles are working all day long. That’s why manufacturers are now making keyboards with a hump or “tent” in the middle – to reduce that stress.

It’s unlikely that you’ll find an ergonomic keyboard for \$25 today. The widely available Microsoft Natural Keyboard Pro, which sells for \$75, has a gently humped shape and fixed split between left and right slides. “Since there are so many different needs, no one keyboard is right for everyone”, says Edie Adams, MEDes, CPE, manager of hard ware user research for Microsoft. “With a consumer product, you try to make something that will be right for most people”.

For those who need a wider split or more variable tilt, Goldtouch Technologies, Inc. of Irvine, Calif. makes a keyboard that splits horizontally up to 30 degrees and tents vertically up to 30 degrees. Kineses Corp. of Bothell, Wash., offers a similar design, plus a more expensive programmable keyboard that splits into two completely separate parts which each can tilt independently up to 90 degrees. They have also developed a contoured keyboard that uses the strongest finger, the thumb, to strike most-used keys like control, enter, and delete.

Prices for adjustable ergonomic keyboards range from above \$130 to several hundred dollars. This may be worth it, but only if it solves your particular problem. The trick is finding the right one. “There isn’t any single keyboard that fits everyone – that’s why there’re so many different styles”, says Brett Weiss. “Try one to see if it fits your body, and keep your receipts in case you have to return it”.

Watts says some people can’t get used to a new style of keyboard. “My advice is, start learning now”, he says. “If you spend lots of time on the computer, you’ll benefit”.

Lynn Weiss warns that no matter what equipment you have, it cannot compensate for continuous activity. “You still need to take short, frequent rests”, she says.

BY,
A. JAHIR HUSSAIN.
I – B.C.A.

THE WORLD’S SMARTEST MAN?

A pilot, Michael Jordan, Bill Gates, the pope, and a pizza deliveryman were all in a plane together travelling through stormy conditions.

Suddenly, the pilot came running back to the passenger and announced that lightning had hit the plane, and they were going to crash in a matter of minutes. “There are only enough parachutes for four of five of us”, he announced. “Since I’m the pilot, I get one” After saying this, the pilot grabbed a parachute and jumped out of the plane.

“I’m the world’s greatest athlete,” proclaimed Michael Jordan. “This world needs great athletes, so I must live”. Michael Jordan then grabbed a parachute and leaped out of the plane.

“I’m the smartest man in the world,” bragged Bill Gates”. The world needs smart men, so I must also live!” Bill Gates grabbed a parachute and jumped out of the plane.

At this point the pope began to speak. “ have lived a long life compared to you, and you may take the last parachute. I will go down with the plane”.

“You don’t have to stay here! The smartest man jumped out of the plane with my backpack.”



Let's chat on CHAT...!

INTRODUCTION

Chat (online), simultaneous text communication between two or more people via computer. Chat is synchronous—one person types a message on their keyboard, and the people with whom they are chatting see the message appear on their monitors and can respond almost immediately. Other kinds of computer communication are asynchronous. E-mail, for example, may not be delivered or read until minutes or hours after it is sent, and any response need not be immediate.

Chat requires each user to have a computer connected to an electronic network. The network might be a local area network within a business, or it might be the Internet. Users also need a chat system, software that controls the connection between the computers of the people who are chatting. Many chat systems are free.

Chat is most commonly used for social interaction. For example, people might use chat to discuss topics of shared interest or to meet other people with similar interests. Businesses and educational institutions are increasingly using chat as well. Some companies hold large online chat meetings to tell employees about new business developments. Such meetings are particularly useful for companies whose employees are spread out geographically—companies with large sales forces, for example. Small workgroups within a company may use chat to coordinate their work. In education, teachers use chat to help students practice language skills and to provide mentoring to students. Science students may chat with professional scientists.

HOW CHAT WORKS?

There are many chat systems, including Internet Relay Chat (IRC), America Online (AOL) Chat, and Microsoft Chat. The different systems are very similar, but users can generally only chat with other people who are using the same system.

Each chat system may have thousands of users spread throughout hundreds of chat rooms. Chat rooms are a feature of the system's software that allows people with similar interests to send messages to one another without receiving messages from all of the other people using the system. Chat rooms vary in topic and in level of conversation. Usually a chat room's name describes the topic people in it are supposed to discuss.

Most chat systems have both predefined and user-created chat rooms. When people connect to a chat system, they can choose to participate in the rooms they find interesting or useful. Many systems have chat room operators who may remove people from the chat room if they do not obey the chat room's rules.

Chat rooms are usually dedicated to a particular group of people, such as teens, or to discussions limited to a single subject area, such as politics. Some chat rooms cover technical topics and others focus on aspects of popular culture. Chat rooms dedicated to topics such as computer trouble-shooting can be useful sources of information, because many people with expert knowledge enjoy helping others online.

Some chat systems provide special moderated chat rooms, particularly for chats with celebrities. A chat room may have hundreds of people talking at once. A moderator and a set of rules control who receives messages from whom in order to prevent a flood of messages flowing across people's screens too fast to read. The moderator controls who may ask questions of the guest of honor. In some of these special chat rooms, participants are organized into virtual "rows," as if they were in an auditorium. Users may chat freely with others in the same row, but not with people in other rows. Everyone in all rows hears the presentation given by the featured speakers on the "stage."

Chat has its own jargon. People who chat commonly use abbreviations. BRB, for example, means "be right back." IMHO means "in my humble opinion."

PRECAUTIONS FOR USING CHAT

People chatting cannot see one another, and they often do not know one another. As a result of this anonymity, some people are not always truthful while chatting. People on chat channels may lie about almost anything: their age, their sex, where they live, what they look like. Some people think this deception is acceptable and fun. They want to find out whether people will treat them differently if they pretend to be older or the opposite gender. Other people feel that this deception is unethical. Chat users should never assume that the people with whom they are chatting are who they say they are.

Most people who use chat are friendly, but there are a small number of criminals who use chat to take advantage of others, particularly of teenagers. Because chat users often do not know the people they are talking to while chatting, it is important that users never tell anyone their full name, address, or other information that might allow another chat user to find them. Even giving out a phone number can be dangerous; some people who have given a phone number to seemingly friendly strangers online have later been forced to change their number or even get an unlisted one to prevent repeated harassing calls. Most importantly, people should be very careful about arranging to meet in person someone they do not know. Teenagers and children who wish to exchange personal information with someone they meet online should always do so under the supervision of a parent or guardian.

BY,
S.N.SADIQ BASHA,
FINAL B.Sc. (CS) "A"

COMPUTERS – GENDER PLEASE...?

Ten Reasons For Being Female

1. Picky, Picky, Picky.
2. They Hear What You Say But Not What You Mean.
3. Beauty Are Only Shell Deep.
4. When You Ask What's Wrong They Say "Nothing"
5. Can Produce Incorrect Results At Alarming Speed.
6. Always Turning Simple Statements Into Big Productions.
7. Smalltalk Are Important.
8. You Can Do The Same Thing For Years And Suddenly It's Wrong.
9. They Make You Take The Garbage Out.
10. One Missed Period And They O Wild.

Ten Reasons For Being Male

1. They have a lot of data but are still clueless.
2. A better model is just around the corner.
3. They look nice and shiny until you get them home.
4. It is always necessary to have a backup.
5. Even the best of them are unreliable and secure
6. They never live up to the claims made for them
7. To get their attention you have to turn them on
8. Despite years of evolution they still can't think for themselves
9. They'll do whatever you say if you push the right buttons
10. Size does matter.

BY,
I – B.C.A.



COMPATIBILITY

TTL devices are compatible because the low and high output windows fit inside the low and high input windows. Therefore the output of any TTL device is suitable for driving.

SOURCE

The upper transistor of a totem-pole output acts as a source because conventional flow is out of the emitter into the load.

SINK

A place where something is absorbed. When saturated, the lower transistor in a totem pole output acts as a current sink because conventional charges flow through the transistor to ground.

ACTIVE-LOW

Normally, a signal must be high to do something. Active-low refers to the opposite concept: A signal must be low to cause something to happen or to indicate that something has happened.

SATURATION DELAY TIME

The time delay encountered when a transistor tries to come out of the saturation region. When the base drive switches from high to low, a transistor cannot instantaneously come out of hard saturation; extra carriers must flow out of the base region.

POSITIVE TRUE

A signal is positive true when the voltage is high.

POSITIVE FALSE

A signal is positive false when the voltage is low.

NEGATIVE TRUE

A signal is negative true when the voltage is low.

NEGATIVE FALSE

A signal is negative false when the voltage is high.

NOISE IMMUNITY

The amount of noise voltage that causes unreliable operations with TTL is O.L.V. As long as the noise voltage induced on connecting lines are less than O.L.V, the TTL device will work reliably.

SCHMII TRIGGER

A digital circuit that produces a rectangular output. The input waveform may be sinusoidal, triangular, distorted and so on. The output is always rectangular.

FM Vs AM

Over the years Frequency Modulated (FM) transmission has attained wide popularity due to its clarity and accuracy in reproducing the broadcast speech or music. It can also provide a stereophonic effect to the sound produced at the receiving end. FM transmission service has rekindled the hope of regaining the fading popularity of radio. The earlier transmission services were basically Amplitude Modulated (AM) which could not filter the noise and hence lacked the clarity of FM. But what is the fundamental difference between AM and FM transmission?

In both cases radio waves are altered for the transmission of broadcasting signals. In AM transmission, the waves are constant in frequency but the amplitude of the transmitting wave varies in accordance with the signal being broadcast whereas in FM the amplitude is constant and the frequency varies in accordance with the signal being transmitted. In simple terms, in AM the amplitude is modulated and in FM the frequency is modulated.

Modulation is the process of coding the radio wave and is done either by altering the amplitude of the wave or its frequency. Here comes the need of understanding three fundamental concepts: modulating wave, carrier and modulated wave. The modulating wave is the information bearing signal such as human voice or music. It is the message intended to be communicated to a receiver. The carrier is the wave that is varied by the information bearing signal. The modulated wave is the wave developed by impressing the information bearing signal on the carrier. This wave is transmitted to the receiver. Now the curiosity arrives as to why does the FM transmission provided an excellent reception.

Speech itself is represented by an irregular wave pattern. As the receiver using FM had to detect frequency changes only, it did not reproduce any amplitude changes caused by electrical interference. As a result, almost all background noise can be eliminated using filters, giving excellent reception.

FM transmission is used in radio broadcasting services, multi channel carrier telephone, communication satellite links, telegraphy, mobile communications, and navigational and meteorological aids as well as for medical diagnostic instrumentation. FM also exhibits 'channel grabbing', that is, if two FM signals are available, the stronger of the two is received and the other is nearly excluded. This permits low-power radio stations operating in the same frequency to be located close to each other. This advantage is not possessed by the AM stations.

BY,
S. ANUSHA,
I – B.Sc.,(CS)- 'A'.

COMPUTER SECURITY

INTRODUCTION

Computer Security, techniques developed to protect single computers and network-linked computer systems from accidental or intentional harm, including destruction of computer hardware and software, physical loss of data, deception of computer users and the deliberate invasion of databases by unauthorized individuals.

Computers and the information they contain are considered confidential systems because their use is typically restricted to a limited number of users. Confidentiality and the possession of information can be violated by shoulder surfing, or observing another user's computer screen; tricking authorized users into revealing confidential information; wiretapping, or listening in on or recording electronic communications; and stealing computers or information.

A variety of simple techniques can prevent computer crime. For example, destroying printed information, protecting computer screens from observation, keeping printed information and computers in locked cabinets, and clearing desktops of sensitive documents prevent access to confidential information. But more sophisticated methods are also necessary to prevent computer crimes.

ENCRYPTION

One technique to protect confidentiality is encryption. Information can be scrambled and unscrambled using mathematical equations and a secret code called a key. Two keys are usually employed, one to encode and the other to decode the information. The key that encodes the data, called the private key, is possessed by only the sender. The key that decodes the data, called the public key, may be possessed by several receivers. The keys are modified periodically, further hampering unauthorized access and making the encrypted information difficult to decode or forge.

APPROVED USERS

Another technique to prevent computer crime is to limit access of computer data files to approved users. Access-control software verifies computer users and limits their privileges to view and alter files. Records can be made of the files accessed, thereby making users accountable for their actions. Military organizations give access rights to classified, confidential, secret, or top secret information according to the corresponding security clearance level of the user.

PASSWORDS

Passwords are confidential sequences of characters that give approved users access to computers. To be effective, passwords must be difficult to guess. Effective passwords contain a mixture of characters and symbols that are not real words. To thwart imposters, computer systems usually limit the number of attempts to enter a correct password.

FIREWALLS

Computer networks, multiple computers linked together, are particularly vulnerable to computer crimes. Information on networks can be protected by a firewall, a computer placed between the networked computers and the network. The firewall prevents unauthorized users from gaining access to the computers on a network, and it ensures that information received from an outside source does not contain computer viruses, self-replicating computer programs that interfere with a computer's functions.

SECURITY SERVERS

Special computers called security servers provide secure connections between networked computers and outside systems, such as database-storage and printing facilities. These security computers use encryption in the handshaking process, the initiation of the electronic exchange, which prevents a connection between two computers unless the identity of each is confirmed to the other.

INTEGRITY AND AUTHENTICITY

The integrity and authenticity of information are threatened by modifying, removing, or misrepresenting existing data. The most serious threats to integrity and authenticity of information comes from those entrusted with access privileges who commit crimes. These crimes can be prevented by using techniques like check summing (mathematically comparing a file before and after it is accessed), authenticating the source of messages, and limiting the amount of money that can be transferred through a computer.

BY,
S.SRINIVASAV,
FINAL B.Sc. (CS) "A"

AGENT PROGRAMMING AND SCRIPTING LANGUAGES

AOP → PART 3

In AOP, an agent is determined by its beliefs, its capabilities, and its commitments, which together comprise its *mental state*. AOP encourages a social view of computation in which communities of agents interact by exchanging information, sending specific requests, offering services, accepting or refusing tasks, competing with each other for a task to be accomplished or cooperating with each other. A program written in LALO is translated into C++ source code, and then may be compiled with your regular C++ compiler. The agents communicate with KQML (Knowledge Query Manipulation Language). The LALO (a language used in AOP) framework is available on UNIX platforms, Windows NT and Windows 95.

IBM has released a new version of their **Agent building environment** -- a toolkit for software developers that makes it easy to build an application based on agents, or to add them to an existing application. In the alpha version, the intelligent agent watches for a certain condition, decides what to do based on the rules you've given it, and triggers an action as a result. This developer kit comes with a number of pre-built parts, which make it easy for you to add agent technology to applications.

People building agents in Java may find these two Prolog interpreters written in Java of interest. **wProlog** is a simple interpreter for a pure subset of Prolog, which runs as an applet or as a stand-alone application. **jProlog** is an interpreter by Paul Tarau and Bart Demoen, which uses a compiler to produce faster code. It is close to Clocksin-Mellish Prolog, with lots of the typical built-ins. **Tabriz AgentWare** is general-purpose software that enables the creation and interaction of "processes" that can occur and interact with one another, even while users requesting the processes aren't actively connected to a network. Processes can be requests for information, authorization and verification and other tasks that are part of a larger goal.

Phantom is an interpreted language designed for large-scale, interactive, distributed applications such as distributed conferencing systems, multi-player games, and collaborative work tools. Phantom combines the distributed lexical scoping semantics of Obliq with a substantial language core. The language core is based on a safe, extended subset of Modula-3, and supports a number of modern programming features, including static typing with implicit declarations, objects, lightweight threads, and higher-order functions and lambda expressions.

IBM's raise-based **Agentbuilder** Product now available as Alpha version. AgentBuilder is an extensible C++ class library for enhancing applications, especially network-centric applications, with embedded intelligent agents. AgentBuilder has innovative technology for agents to perform reasoning, and for agents to be embedded closely and flexibly with a variety of applications and software environments.

Bits & Pixels's Java Intelligent Agent Library(\$179) provides components for building intelligent agents, implemented entirely in Java. The library is a collection of over 150 Java classes covering various aspects of building intelligent agents. In addition to agent communication and data handling facilities, the library contains rule-based and neural net-based processing modules.

Technology: Sun has released **Tcl Plug-ins** for Netscape Navigator, making it possible to create Web pages that include Tcl/Tk scripts. This provides an interesting alternative to the use of Java applets for Web-based agent programs. Sun's current version of the Tcl plug-in runs only with Netscape Navigator under Solaris, Macintosh, and Windows with support for other browsers and operating systems planned. Technology: IBM Tokyo Research Laboratory is making available an early release of their *Aglets* Library for programming mobile agents in Java. The package is based on JDK 1.0.2 and Object Serialization in the RMI package from JavaSoft. The first beta release includes Java packages, documentation, and a demo application.

Technology: IBM has released an alpha version of AgentBuilder, a developer's toolkit for building agent-based systems. The OS/2 version is currently available for download over Internet. AgentBuilder is based in great part on the research version of the RAISE (Reusable Agent Intelligence Software Environment) class library developed at IBM's T.J. Watson Research Center by Benjamin Grosf, David W. Levine, Hoi Y. Chan, and others.

Technology:**Jess** is a clone of the core of the **CLIPS** expert system shell written by Ernest Friedman-Hill at Sandia National Laboratories in Livermore, CA. Jess contains only the essential features of CLIPS, and leaves out a lot (e.g., COOL) but it is a powerful, fast, and efficient tool with many applications. Jess is downward compatible with CLIPS, in that every valid Jess script is a valid CLIPS script. Like CLIPS, Jess uses the Rete algorithm to process rules, a very efficient mechanism for solving the difficult many-to-many matching problem.

Penguin is a Perl 5 module that provides a set of functions to (1) send encrypted, digitally signed perl code to a remote machine to be executed; and (2) receive code and, depending on who signed it, execute it in an arbitrarily secure, limited compartment. The combination of these functions enable direct perl coding of algorithms to handle safe internet commerce, mobile information-gathering agents, "live content" web browser helper apps, distributed load-balanced computation, remote software update, distance machine administration, content-based information propagation, Internet-wide shared-data applications, network application builders, and so on.

Aglets is the name of a Java class library for mobile Internet agents developed at the IBM Tokyo Research Laboratory. An aglet is a persistent and transportable Java object that executes asynchronously on the host computer in an execution context. The execution context provides a secure environment, protecting both the host computer system and the aglet from malicious Aglets.

Technology: HORB is a free package that supports distributed Java programming -- e.g., remote object creation, remote method call, and object passing. HORB consists of the HORBC compiler, the HORB server (a kind of ORB, Object Request Broker), and the HORB class library. Java objects compiled by the HORBC compiler are ready to be used in distributed environments. HORB works with the Javac compiler, Java interpreter and Java system classes distributed by Sun.

Technology: Autonomous Agent Programming using Java. The Applied Internet Technologies branch of SAIC has developed a framework in Java for the development of autonomous agents. We have provided links to the documentation of the Framework.

Technology: Java-To-Go - Itinerative Computing Using Java. Java-To-Go is an experimental infrastructure developed by William Li that assists in the development and experimentation of mobile agents and agent-based applications for itinerative computing (itinerative computing: the set of applications that requires site-to-site computations. Sites are usually traversed in sequence by a single mobile agent or in parallel by a group of agents). Agents are given the freedom to perform active computations (that is, computations are initiated by the agents at its volition) at one or more remote agent servers. In contrast, standard Java applets can only be invoked passively.

Technology: Ftp Software has released the CyberAgent Software Development Kit which provides numerous agent classes designed to expedite the development of Java-based mobile agents. The CyberAgent classes include templates to create an intelligent agent, start an agent, stop an agent, define a travel plan, allow access to OLE-enabled applications, and support secure agent communications. You can also use the agent classes with various third-party Java integrated development environments (IDEs).

Technology: Oracle Web Agent is a generic procedural gateway, which seamlessly invokes Oracle stored procedures, and provides an object-oriented, user-extendible framework for producing dynamic HTML pages using Oracle's PL/SQL scripting language. The Oracle Web Agent is implemented using CGI, enabling it to function with any Web Server.

Sun Labs has built most of the concepts of Safe-Tcl into Tcl 7.5 , now available in as an alpha release. In addition to running on PCs and Macs (with a Motif look and feel), this new version lets you dynamically load binaries and create additional interpreters and execute untrusted scripts using a generalization of Borenstein's and Rose's Safe-Tcl.

Agent Tcl is a transportable agent system in which the agents are written in Tcl 7.4 and Tk 4.0. Agent Tcl is under continuous use at Dartmouth in a range of information retrieval and information-management applications. It is roughly analogous to Telescript except that it uses Tcl, is lightweight, and currently provides limited security. An alpha release is now available which runs on standard Unix platforms.

Facile is a high-level, higher-order programming language for systems that require a combination of complex data manipulation and concurrent and distributed computing. It combines Standard ML (SML), with a model of higher-order concurrent processes based on CCS. Facile is being used at ECRC to develop Mobile Service Agents.

BY,
G. ANANDHA LAKSHMI,
III – B.Sc.,(CS) – ‘C’.

MEDIA BOX MP3 WORKSTATION 2.0

MP3 is a highly compressed audio format that has become universally accepted as the standard format for delivering music files over the internet. MP3 can easily compress CD audio files to anywhere from 20 to just six per cent of their original size while maintaining near-CD-quality sound. You can find a vast amount of MP3 music on the internet giving you the opportunity to sample tracks from up-and-coming artists and bands before buying albums on-line if you're suitably impressed.

TO play MP3 files on your computer, you'll need an MP3 player such as the one included in media box MP3 workstation. This all-in-one MP3 suite enable you to play song files, encode MP3 files directly off your own CDs and convert MP3s to CD-ready WAV files that can be burnt on to CDs.

TO help manage the MP3 files stored on your hard disk, media box features a built-in database so you can easily search for songs and locate the corresponding files. You can also link colourful text information pages and displayed when you click on an mp3 file within the media box interface.

UPGRADE TO MEDIA BOX 3.4

Features of version 3.4 include:

- Super-fast encode: encode a three-minute song in 1.5 minutes.
- Transamp player: all components can change shape size and position.
- Free plug-ins, such as the alarm clock and info auto-scroller.
- Free upgrades for life to registered users.

Also soon to be added to media box is support for CDDB2, the internet CD database. Media box will automatically add track information from this database during encoding.

BY
J.MOHAMED WASIM
I - B.Sc. (CS) “A”.

EYE 'N' OPTIMOUSE

-- security at your finger tips

This optical mouse has one very unique feature. It has a finger print recognition system integrated into it. This USB mouse, when attached to your system, scans the finger you used to operate the mouse with and then creates a user account. The bundled software can even be configured to scan more than one finger. This is an important feature if your finger is hurt, the mouse will not allow you to access the system. It is therefore advisable to have at least two accounts per machine.

The design of the mouse is not very impressive and the scroll wheel isn't smooth. The mouse was not directly detected and you need to attach an older PS/2 or serial mouse along with it to load the driver. The bundled software gives you an option to feed in all the fingerprints from either hand, but the best thing to do here is to have the impression of a colleague or another family member so that the machine wouldn't be inaccessible if you are not around. Conversely if security is paramount, there is no way another would be able to access the system. This mouse is a great buy for users who are satisfied with adequate functionality as a pointing device, but need additional security for the critical information stored on their computer.

L. RAJ GANESH, I – B.Sc. (CS)-'A'.

GREAT NEWS FOR BILL GATES

Bill Clinton, Boris Yeltsin, and Bill Gates were called in by God. God informed them that he was very unhappy about what was going on this world. Since things were so bad, he told the three that he was destroying the Earth in 3 days. They were all allowed to return to their homes and businesses and tell their friends and colleagues what was happening. God did tell them though, that no matter what they did he was "not" changing his mind.

Bill Clinton went in and told his staff, " I have good news and bad news for you. First the good news... there "IS" a God. The bad news is that he is destroying the earth in 3 days".

Boris Yeltsin went back and told his staff, " I have good news and terrible news. The first is that there "IS" a god. The second is that he is destroying the Earth in 3 days."

Bill Gates went back and told his staff, "I have good news and good news. First, God thinks I am one of the three most important people in the world. Secondly, you don't have to fix the bugs in windows 95.

JURASSIC PARK

What's the difference between IBM and Jurassic park ?

One is a fantasy theme park populated with dinosaurs, and the other is a movie.

M. RAJESH KUMAR, I – B.C.A.

BITZ

BYTES	CHARACTERS
KILOBYTE	1 thousand
MEGABYTE	1 million
GIGABYTE	1 billion
TERABYTE	1 trillion

YEAR	INTRODUCTION
1975	MICROSOFT
1982	MULTIPLAN
1983	WORD
1986	DOS
1987	OS/2

YEAR	INTRODUCTION
1985	WINDOWS
1987	WINDOWS 2.0
1990	WINDOWS 3.0, 3.1, 3.11
1993	WINDOWS NT
1995	WINDOWS 95
1998	WINDOWS 98
2000	WINDOWS 2000, ME
2001	WINDOWS XP
2003	WINDOWS SERVER 2003

M.P.PRABHU, FINAL B.Sc. (C.S) "A"

MARKET MASTI - I

Canon, Olympus, Nikon and Sony have all announced compact digital cameras with 3.3-mega pixel CCDS. The new models produce 2048X1536 – pixel images. Cannons powershot 520 has the least impressive spot with just a 2x optical zoom and no more mode. Its best feature is a Type II compact flash slot that accepts IBM's 340MB micro drives. New features include the ability to record sound and Quick Time motion JPEG movies. Nikons coolfix 990 also has a 3x optical zoom and a movie mode. Finally, Sony's DSC-570 is the company's most conventional camera to date with neither a rotating lens nor an appetite for floppy disks. It has a 3x optical zoom and can record MPEG movies.

K.S. KUMARESAN, I – B.Sc.,(CS) – 'A'.

MURPHY'S LAWS OF COMPUTING

- When computing, whatever happens, behave as though you meant it to happen
- When you get to the point where you really understand you compute, it's probably obsolete
- The first place to look for information is in the section of the manual where you least expect it
- When the going gets tough, upgrade
- To err is human... to blame your computer for your mistakes is even more human, it is downright natural
- He who laughs last, probably made a backup
- A complex system that does not work is invariably found to have evolved from a simpler system that worked just fine
- The number one cause of computer problems is computer solutions
- A computer program will always do what you tell it to do, but rarely what you want it do

By,
G. ANANDHA LAKSHMI,
III – B.Sc.,(CS) – 'C'.

TIME TO CHECK U'R GREY MATTER!

1. Who found Microsoft?
2. What is the name of first personal computer?
3. Where is the headquarters of Microsoft situated?
4. Who developed QDOS?
5. What is the name of first digital computer?

EXPAND THE FOLLOWING:

1. MS-DOS?
2. QDOS?
3. FORTRAN?
4. UNIVAC?
5. WORM?

If your matter isn't Grey don't worry, just check the answers @ 33

BY,
R.BALASUBRAMANIAM,
FINAL B.Sc. (CS) "A".

NET BITS

LARGEST PRIME NUMBER

This youngster sure know how to make a computer sweat!! A student has used his computer to find the largest prime number discovered so far. The new figure, identified by Michael Shafer, contains 6,320,430 digits, and would take some one almost five weeks to write out longhand. Shafer was taking part in a mass computer project known as the Great Internet Mersenne Prime Search (GIMPS). The project spent 25,000 years of computer time to find the new prime number. A prime number is a number that can only be divided by 1 and itself.

RICKSHAWS WITH MOBILES

Mobile food stalls, mobile libraries... and now Chalta Phirta mobile PCOs. A regional mobile phone company, in India is taking a novel approach to drive up business and help the poor at the same time. Shyam Telecom, which operates in the state of Rajasthan, has equipped a fleet of rickshaws with mobile phone. Drivers pedal these mobile payphones throughout the state capital, Jaipur, and the surrounding country side. The rickshaw drivers, numbering around 200, are largely drawn from the neglected segments of society – the disabled and women. Shyam Telecom came up with the idea of its mobile public calling office, dubbed Chalta Phirta (moving) PCA, as a solution.

The hand-pedalled rickshaws are equipped with a battery, a billing machine and a printer. Through these mobile payphones, some drivers are now able to support a family of 5 people, says the company.

MEMORY, THE SIZE OF A PACK OF CHEWING GUM

A USB Flash Drive (UFD) is a portable flash memory hard drive, about the size of a pack of chewing gum, that lets users store and transport computer data and video clips. These drives are often used to transport digital photos or for taking a project from home to the office. The devices are based on the USB standard and inter-operate with most modern Operating Systems on all PCs and devices as long as they are equipped with a USB port. These devices are strictly Plug and Play (PnP) and many of them support a whopping 2 gig of storage.

Experts expect the USB Flash Drive market to grow congruently with the proliferation of multimedia devices that use files, including digital cameras, hand-held computers and smart phones. UDFA will launch participate in events throughout the year to spur the USB Flash Drive movement.

MICROSOFT TO RETIRE WINDOWS 98

Microsoft is retiring several of its older products including Windows 98, to comply with a court order related to its dispute with high-tech giant Sun Micro Systems over Java software.

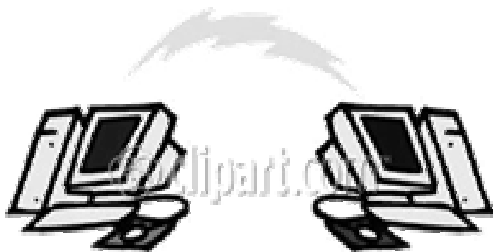
In a posting to Microsoft's developer website, the company listed several older products that are being phased out and that will no longer be available. The products include SQL Server7, Office XP Developer, Windows 98 and a number of Office 2000 related tools and patches. Microsoft said it would also remove the Java VM from some products, including Office XP Professional with Front Page, Publisher 2002, Windows NT 4.0 and Small Business Server 2000. While Microsoft will no longer distribute the products listed, many will still be supported. The company plans to offer SQL server 7 support until the end of 2007, for instance. Windows 98 support is available for a fee, till January 16, 2004. Third party companies will also provide Windows 98 support.

HARD DRIVES GO THE PROCESSOR WAY

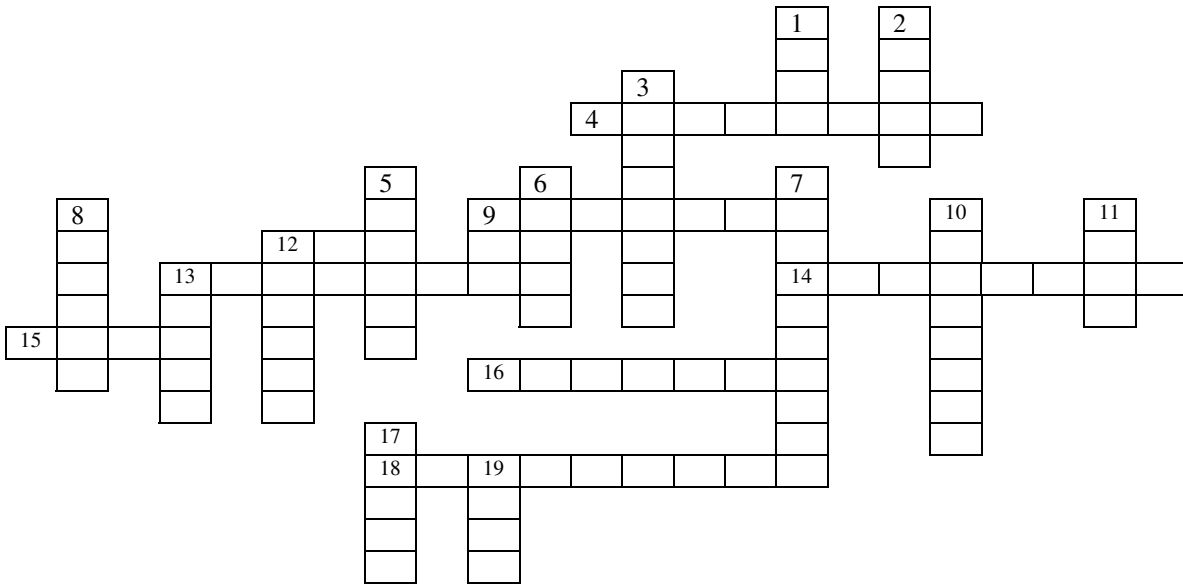
At the **Consumer Electronics Show** in Los Angles (US), in January 2004, Toshiba will unveil a hard drive that measures less than an inch across. The 2.15-cm diameter drive will go inside MP3 players, set-top boxes and other consumer electronic goods. The world's smallest hard disk drive can store about 2 or 3 GB worth of data. Hitachi and others currently sell 2.5-cm diameter hard drives (also known as micro drives) that can hold 1 GB of data.

As the drive war gets hotter; hard drives will get smaller. In the future, small drives may be incorporated into cameras and Televisions. Toshiba was the first major manufacturer to come out with a 4.5 cm drive, which can now hold up to 40 GB of data. Hitachi came out with its first 4.5-cm drive in November 2003.

BY,
G. ANANDHA LAKSHMI,
III – B.Sc., (CS) – 'C'.



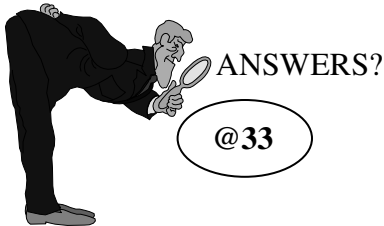
CROSS WORD



- 4. Input device
- 9. Memory a program is no longer using
- 13. Set of communication rules
- 14. Private network
- 15. Tests BIOS
- 16. Unit of heat
- 18. Exchange between two modems



- 1. First in/first out
- 2. Question
- 3. Thousand billion bytes
- 5. Human with technological enhancements
- 6. Data structure used to organize information
- 7. Manners for surfers
- 8. Indicates position to screen
- 10. Protects from intruder
- 11. Internet worm
- 12. Admiral Grace _____
- 13. Quick-repair job
- 17. Cloning product from Symantec
- 19. Unwanted electrical or electromagnetic energy



NET TOOLS

(Part – 2)

TCP/IP (Transmission Control Protocol/Internet Protocol)

TCP/IP set of rules that enable different types of computers and networks on the Internet to communicate with one another. TCP/IP was originally developed by the United States Department of Defense for computers using the UNIX operating system, but it is now used by every computer, regardless of operating system, on the Internet. TCP defines how data are transferred (see Data Transfer) across the Internet to their destination. IP defines how data are divided into chunks, called packets, for transmission; it also determines the path each packet takes between computers.

WAIS

WAIS (**Wide Area Information Servers**), system that allows searches of databases on the Internet. In response to a word or words entered on a computer by a user, WAIS displays a list of names of documents on the server computer that match the query; those containing numerous uses of the keywords appear at the top of the list, whereas those with only a single reference appear at the bottom of the list. The user may choose to view any of the documents or may refine the query and run a new search. WAIS servers are specialized, each dealing with a specific subject, such as astronomy, physics, cooking, or political issues.

URL (Uniform Resource Locator)

URL, method of naming documents or places on the Internet, used most frequently on the World Wide Web (WWW). A URL is a string of characters that identifies the type of document, the computer the document is on, the directories and subdirectories the document is in, and the name of the document.

For example, the URL of the main Web page (a document on the WWW) for the White House is

<http://www2.whitehouse.gov/WH/Welcome.html>

The part of the URL before the colon represents the scheme, or format used to retrieve the document; http means the document is on the WWW. If, instead of http, that part of the URL was ftp, it would mean that that document could be accessed through File Transfer Protocol (FTP), a format that allows a user to list files on, retrieve files from, and add files to another computer on the Internet. Some other schemes are gopher, which indicates the document is on a Gopher system, a menu-driven document delivery system for retrieving information from the Internet; news, which means the document occurs on a Usenet newsgroup, a forum in which users can post and respond to messages; and telnet, which indicates Telnet, an access method in which the user logs on to a remote computer.

The next part of the URL, `www2.whitehouse.gov`, is called the hostname and represents the computer on which the document can be found: `www2` is the name of a specific computer at the `whitehouse.gov` host computer. The `.gov` extension identifies the computer as belonging to the United States government. Some other common extensions are `.com` (commercial) and `.edu` (education —usually a college or university).

The last item to be listed is the document name— in this case, `Welcome.html`. URLs are case-sensitive, which means that uppercase and lowercase letters are considered different letters, so a user has to enter a URL with all letters in the correct case. URLs on the WWW are accessed with browsers, or computer programs that can connect to the Internet and display Web pages.

BY,
V.PALANISAMY,
FINAL B.Sc. (CS) “A”.

GIRL FRIEND 1.0 SOFTWARE

Last year, my friend upgraded his Girl Friend 3.1 to Girl Friend Plus 1.0 (Marketing Name: Fiancee 1.0).

Recently, he upgraded Fiancee 1.0 to Wife 1.0 and it's a memory hogger! It has taken all his space; and Wife 1.0 must be running before he can do anything. Although he didn't ask for them, Wife 1.0 came with Plug Ins such as Mother-In-Law and Brother-In-Law. These too slow down the system and cause a slow drain on the resources and well being of the computer.

Some features of the upcoming Girl Friend 4.0:

- “Don't remind me again” button.
- Minimize button
- Shut down feature - an install shield feature

So that Girl Friend 4.0 can be completely uninstalled if so desired (so one can't lose cache and other objects) and tried running Girl Friend 2.0 with Girl Friend 1.0 still installed; they tried using the same I/O port and conflicted. Then he tried to uninstall Girl Friend 1.0, but it didn't have an uninstall program. He tried to uninstall it manually, but it put files in his system directory.

Another thing that bothers him about all versions of Girl Friend that he'd used is that it is totally '0-0'tated and only supports hardware with gold-plated contacts.

Bug Warning:

Wife 1.0 has an undocumented bug, if you try to install Mistress 1.1 before uninstalling Wife 1.0, Wife 1.0 will delete MS Money files before doing the uninstall itself. Then Mistress 1.1 will refuse to install, claiming insufficient resources.

BY,
G. ANANDHA LAKSHMI,
III - B.Sc.,(CS) - 'C'.



Your Resume Please!

The foundation of your job search should be good, solid resume. The curriculum vitae describe in detail one's professional career over the course of one's life, including both work experiences and qualifications. It is primarily used when pursuing opportunities in an academic setting. Although the curriculum vitae and resume have the same function, the differences between the two are length and format. In the business world, the standard resume is usually no more than two pages in length. An effective resume gets your foot in the door and it may lead to personal interviews. Your resume should be detailed enough to give employers the information necessary to assess your qualifications for the job opening. At the same time, it should be concise.

Resume may also be used for several purposes:

- (a) include one with letter or inquiry about a job opening;
- (b) send one with a cover letter in response to an advertised position;
- (c) attach one to a standard job application; or
- (d) Take it with you on a job interview.

Miscellaneous Information

- Other work experience; include beginning and ending dates
- Languages, level of proficiency
- Honors
- Skills
- License, certifications, credentials

Other Documents You May Need

- Cover Letter
- Longer dissertation abstract
- Research plans
- Reference list

Crispy Tips-----!

- Review the position you're applying for and tailor your CV to match it.
- List information from most important to least important.
- Organize information by relative importance for position.
- List items in reverse chronological order.
- Put presentation and publications as last, if lengthy
- Include your name and page number on all pages after the first one

- Editors

SWEET SONG

Millennium Pie (with apologies to Don McLean)

A long, long time ago... I can still remember how

Computer used to make me smile.

And I knew if I had my chance,

That I could make electrons dance,

And maybe I'd be happy for a while.

But January made me shiver,

it chilled me deep down in my liver,

Bad news I'd collected...

I couldn't get connected.

I can't remember back that day

When I first knew the Y2K

But something touched me anyway,

The day computers died.

So,...Bye, bye to the next digit of Pi

Ran my PC on some DC but the voltage was dry

And good ol' boys were sending e-mail replies

Saying this will be the day I retire

This will be the day I retire

Can you write in C plus plus?

And do you have faith in your local bus

If the driver tells you so ?

Do you believe in Compaq's goals

Can software save your mortal soul

And can you teach me how to type real slow ?

Well I thought that you were prepared

'cause your memo said you weren't impaired
your stationery's swell but you can go to hell
I was a lonely teenage Unix hack
With an incantation and a modem jack
but I knew that cat had left the sack
The day computers died. I started singing...
Now for 10 years we've ignored the threat
And we haven't solved the problem yet
But that's not how it is used to be
When the luddites read for the king and queen
With a light they filed with kerosene
And some manuals they stole from you and me
And while Bill Gates was looking pleased
Time stole his monopolies
The courtroom was adjourned
No verdict was returned

(Bye, bye...)

While Apple tried a color scheme
The engineers returned to steam
And we had purges of their dreams
The day computers died. We were singin'
Intel inside in an iron smelter
The food leftover from my fallout shelter
Twinkies old and aging fast
I'd rather eat the grass
Q and A tried for a system crash
With the tester on the sidelines in a cast
Now the timeshare net was running doom
While mainframes played a marching tune
We all tried to log in
Oh' but we never could begin
'cause COBOL tried to take the field, and Hollerith refused to yield.
Do you recall what was revealed
The day computers died? We started singing
There we were all in state
A generation – really late
With no time left to start again
So come on mouse be nimble, mouse be quick
Don't let my spreadsheet data stick
'cause data is the devil's only friend.
As I watched him on my screen
My hands and face were drenched in steam
No angel born in hell
Could run that stupid shell
And as the ball climbed high into the night

(Bye, bye...)



(Bye, bye...)

To call the sacrificial night
I saw Dick Clark laughing with delight
The day computers died.
I met a girl with a cell phone
And I asked her for a dial tone
But she just smiled and turned away
I went down to the software store
Where I'd seen computers years before
But the man there said the games there wouldn't play
And the three things I connect to most
The website, LAN and the Network host
Every single one was toast
The day computers died
They were singing`
Bye ,bye

BY,
T. SURESH,
I-B.C.A.

RELAX YOUR GAZE

Looking at a computer monitor for hours overstresses your eyes and leads to headaches, sore necks, hunched shoulders, and eyestrain. "You're sustaining a near focus all day long, and that's a problem", says Lance Anderson, OD an optometrist. His advice: sit at arm's length from your screen because the closer you are, the harder your eyes must work. Every 20 minutes, take a 20-second eye break. "Take a deep breath, look out the window or at least across the office", he says. "When you gaze into the distance, the muscles in your eye are at rest".

Another problem is that eyeglasses designed for reading a book or driving a car aren't necessarily suitable for the computer. The PRIO Corporation of Beaverton, Ore, has developed a vision tester that simulates a computer screen, allowing optometrists to determine the best prescription based on each person's preferred distance from the monitor.

BY,
S. THIYANESHWARAN,
I – B.C.A.

MARKET MASTI - II

ZD NOW

Teach News Goliath ZDNet has launched ZDNet Music, a portal dedicated to the exploring digital music scene. Despite adopting the deeply, unfunky interface of its respected parent site ZDNet Music delivers on much quits promise to act as a one-stop resource for MP3 downloads, hardware reviews, top tunes and none.

Obviously there's plenty of free music to download, with daily picks and several Net Music charts covering all generous music, including a Net unknown chart. There is also a Net radio guide, an MP3 software center and some frighteningly comprehensive 'how to' articles on geektastic topics such as setting up a Linux-based streaming server and optimizing music for speedy downloads.

Although it's in a very competitive area, ZDNet Music scores highly for the easy-to-use portal design and the sheer quality and quantity of the information on offer well worth a bookmark..

BY,
V. SARAVANAN,
I – B.Sc.,(CS) – 'C'.

RSI HISTORY

Oct. 8, 2001 – Any athlete knows you maximize performance by stressing a muscle one day, then giving it time to recover the next. Any athlete knows you stretch your muscles before you work out. Any athlete, that is, except for a computer jockey.

If you work at a keyboard for six hours or more, go home to play video games, and then wonder why your hands feel strange – you are a computer jockey. Do marathoners train by running 26 miles a day, every day? No, but computer athletes type five days a week for years and then are surprised when they develop Repetitive Stress Injury (RSI).

Some people have such serious RSI problems they must stop typing and even have trouble with everyday activities like turning a water faucet. But the first signs can be subtle. So it's important to pay attention to early warnings. If you have recurrent tingling, numbness, weakness, or pain in your hand, see your doctor for a diagnosis.

“Carpal tunnel syndrome is a nerve injury, but there are many other potential problems”. Conditions such as diabetes, hypothyroidism, and pregnancy put us at increased risk for nerve problems. Take any of these conditions, add repetitive work, throw in a dash of predisposition to injury – and you've got a recipe for RSI.

That means one secret to preventing RSI is paying attention to the way we work, and developing new, healthier patterns. “First, get up and move”. “At least one minute every hour, stretch to increase circulation to your hands,, arms, and lower back. If you're experiencing discomfort to take longer breaks, more often. Walk over to someone's desk instead of sending an email. Rotate among different tasks”.

Even if you have ergonomic equipment, the way you use it is critical. “Maintain a healthy, relaxed posture, with straight back and flat wrists”. “Use wrist rests to position

your hands when you're not typing, but don't rest your wrists or elbows on anything while you type. Position your chair so you don't have to reach for equipment. When you type, use a gentle touch, and let your whole hand float over the keyboard, instead of stretching out your pinkie. That way, you use the larger shoulder and arm muscles".

In addition, do regular aerobic activity to promote better circulation. "That brings more nutrition to the muscles and tendons", says Nancy Clogstion, OTR/L, CHT, an occupational therapist at Orthopedic & Sports Therapy of Sacred Heart Medical Center in Eugene, Ore.

BY,
A. KARTHIKEYAN,
I – B.C.A.

BEHIND VIDEO CONFERENCING

CAMERA:

A mandatory component in a Video Conferencing system, it should have enough pan, tilt and zoom to cover the entire room. If participation from more than a person is needed, then it is preferable that the camera is voice-activated so that the picture of the speaker is automatically focused.

DISPLAY SYSTEM:

For large rooms, it is preferable to project the display on a screen using a multimedia projector. Two to three large TV monitors will do for smaller ones.

AUDIO:

Large rooms require multiple microphone/speaker pods to be uniformly placed to cover the speakers.

VIDEO CONFERENCING CONTROLLER:

The unit with which the user interacts and controls the Video Conferencing gear.

MULTIPOINT CONTROL UNIT: (MCU)

A system for establishing communication between 3 or more audiovisual terminals. MCU provides audio mixing and video switching capabilities.

VIDEO CODER – DECODERS (CODECS) :

Compress the digital signals from the camera as per the defined standards. Number of frames refreshed per unit time measured in frames per second is an important metric that defines the quality of motion. Higher the refreshing rate, higher the bandwidth requirement of the transmission facility. A value of 10-15 frames per second is acceptable.

NETWORK SERVICE OPTIONS:

The following network services offer solutions to Video Conferencing applications for end-user organizations in India:

E-1 LEASED LINE SERVICE:

With a capacity of 2 MBPS, it can support full-motion Video at 30 frames per second with luminance , and an accompanying audio stream.

ISDN:

Offers capacity up to 128 KBPS, can be used at the desktop level for medium quantity applications.

INTERNET:

Relatively lower quality at rates between 5 and 15 frames per second. The source is a Web Camera that is connected to the desktop/laptop PC through the USB port.

Most of the ISPs also provide VPN services. VPNs use the TCP/IP protocols used on the Internet, but provide guaranteed quality of service levels and security for corporate communications.

VERY SMALL APERTURE TERMINALS (VSAT):

VSAT enables satellite-based Video Conferencing over a closed user group network or across the Internet within the country or abroad. Bit rates through VSAT vary from 128 KBPS to 2MBPS.

Large complex Video Conferencing systems are positioned in a conference room, and deploy high transmission rates (768 KBPS to 2 MBPS) and high frame rates (upto 30 frames per second). These systems cost above Rs. 1,000,000. Medium-range systems provide transmission rates in the range of 128-768 KBPS (with 15-30 frames per second) and cost Rs. 500,000 – 7,00,000. Desktop units are the cheapest of all, costing Rs. 3,000 – 15,000, with transmission rate in the order of 64-128 KBPS and a frame refresh rate of about 5-15 frames per second.

PHYSICAL ARRANGEMENT OF VIDEO CONFERENCING ROOMS:

(1) Video Conferencing Configuration:

- Physical Layout
- Typical Display
- Camera(s)
- Lighting, acoustics
- Microphone, speakers
- Number of Participants

(2) Customized Room:

- Large conference room / auditorium
- Screen projection using a multimedia projector, multiple large TV monitors
- Multipath cameras with pan, tilt and zoom, additional cameras to cover hidden areas of the room.
- Customized
- Multiple microphone pods
- Large group of people

(3) DESKTOP:

- Camera/monitor on desktop PC
- One small TV monitor; PC display
- One small camera; no pan, tilt, zoom
- Usually normal room lighting and acoustics
- Microphone and speakers attached to the sound card of PC
- Single talking head

Top 10 Signs that You've Overdosed on The World Wide Web

- Your opening line is: "So, what's your homepage address?"
- You see a beautiful sunset, and you half-expect to see "Enhanced for Netscape 4.0" on one of the clouds.
- You are overcome with disbelief, anger, and finally depressed acceptance when you encounter a WebPages with no links.
- You felt driven to consult the "Cool Page of the Day" on your wedding day.
- Your bookmark takes 15 minutes to scroll from top to bottom.
- You are driving on a dark and rainy night when you hydroplane on a puddle, sending your car careening towards the flimsy guardrail that separates you the precipice of a rocky cliff and certain death, and you desperately look for the "Back" button.

- You visit "The Really Big Button That Doesn't Do Anything" again and again and again.
- Your dog has his own webpage.
- So does your hamster.
- When you read a magazine, you have an irresistible urge to click on the underlined passages.

BY,
G. ANANDHA LAKSHMI,
III – B.Sc., (CS) – 'C'.

TOP 10 BPO COMPANIES

RANK	COMPANY	HEAD QUARTERS	REVENUE 2002-2003 (\$ Million)	CEO	No. Of PEOPLE
1	WNS Global Service	Mumbai, India	56.1	Neeraj Bhargava (President)	4000
2	Wipro Spectramind	New Delhi, India	41.0	Raman Roy	8500
3	EFunds Global Outsourcing	Mumbai, India	37.0	Atul Kunwar	3210
4	Techbooks	Fairfax, VA, US	34.0	Ranjit Singh	1750
5	Daksh eServices	Haryana, India	29.5	Sanjeev Aggarwal	5000
6	HCL Technologies BPO	Noida, UP, India	29.3	Ranjit Narasimhan	2700
7	EXL Service	Noida, UP, India	29.0	Vikram Talwar	2850
8	GTL (Global CMS)	Mumbai, India	23.7	Aparaup Sengupta	1300
9	Hinduja TMT	Bangalore, India	20.0	R. Mohan	1450
10	Msource	Newyork, US	19.4	Bhaskar Menon	3200

BY,
A.PANNEER SELVAM,
II – B.C.A.

MARKET MASTI - III

NOKIA'S "BLACK BEAUTY":

On the heels of the recently released, Black Album by Super Star Rapper Jay.Z, **Nokia** will produce a special edition of the Nokia 3300 music phone called the **Black Phone**. The Black Phone comes preloaded with the entire Black Album on a multimedia card for MP3 playback. Exclusive to the Black Phones are Jay.Z True Tones (ring tones that sound like real music) and wallpapers. Registered owners of the Black Phone will receive weekly text message and monthly voice messages from Jay.Z for a limited time.

The Black Phone is a special design of the Nokia 3300 music phone, which has a digital music player (supports MP3 and AAC), stereo FM radio and a music hot button for instant music access. It features a horizontal design with a full messaging keyboard optimized for quick text input in messaging and browsing. It supports multiple ways for text chatting including instant messaging (IM), e-mail, MultiMedia Messaging (MMS) and text messaging... The Black Phone is meant to show the personality of its users with True Tones, MultiMedia Messaging templates and color wallpapers. The dual band (850/1900 MHz) Nokia 3300 music phone also has a high-resolution color display (128/128). The Black Phone will be available for approximately US \$124.

INFO ON THE WRIST:

Now a wristwatch using Microsoft's new Smart Personal Object Technology (SPOT) has been developed. SPOT uses FM radio sub-carrier frequencies to wirelessly deliver information like the weather, news, and stock quotes to a whole variety of devices besides watches, like refrigerators, alarm clocks and coffee makers.

The SPOT watch has an integrated radio that allows the watch to receive information over the FM band. There's no need to reset SPOT for daylight savings time or when travelling to a new city as the watch picks up the local times automatically. SPOT also has some very cool custom watch faces; they range from the whimsical, to the cute to the downright cool. By configuring our information feeds at a web site, SPOT will automatically update information including local weather, news headlines, and stock information (with trends and graphs). MSN messenger users can send messages directly to our watch and Outlook will sync our calendar to the watch and automatically remind us of the appointments ahead.

Are you ready to wear information on your hand?

BY,
G. ANANDHA LAKSHMI,
III - B.Sc.,(CS) - 'C'.

ANSWERS:

1. *William H. Gates III and Paul Allen.*
2. *Altair 8800*
3. *Redmond(1986)*
4. *Tim Paterson*
5. *ENIAC(1945)*

1. *MicroSoft - Disk Operating System*
2. *Quick and Dirty Operating System*
3. *FORmula TRANslation*
4. *UNIVersal Automatic Computer*
5. *Write Once, Read Many*

Answers For The Cross Word Puzzle

ACROSS:

- 4.Keyboard
- 9.Garbage
- 13.Protocol
- 14.Intranet
- 15.POST
- 16.Calorie
- 18.Handshake

DOWN:

- 1.FIFO
- 2.Query
- 3.Terabyte
- 5.Cyborg
- 6.Table
- 7.Netiquette
- 8.Cursor
- 10.Firewall
- 11.Klez
- 12.Grace Hopper
- 13.Patch
- 17.Ghost
- 19.Noise