

DIFFERENCE THAT MADE THE DIFFERENCE!

Birth of Napoleon - 1760

Birth of Hitler - 1889

Difference 129

Napoleon came to power - 1804

Hitler came to power - 1933

Difference 129

Napoleon captured the Vienna - 1809

Hitler captured the Vienna - 1938

Difference 129

Napoleon fought against Russia - 1812

Hitler fought against Russia - 1941

Difference 129

RIDDLES 7'o CLOCK No. 1

1. What is the computer's favorite food?
2. Which air cannot be used for breathing?
3. What comes after tea (t)?
4. Name the bird, which lifts heavy load?
5. What kind of key kicks very hard?
6. What goes up and never goes down?
7. What is it never was, never will be, and yet is?
8. In what month children talk the least?
9. What is that which takes out its cap before going for work?
10. It takes off a piece of its clothing each day,
by the end of the year it has nothing.

ANSWERS
@ 32



BY,
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Anywhere You Hang Your @ Is Home

MULTIMEDIA AN OUTLOOK!

Computers have become an integral part of our lives today. Their invasion into every sphere of our life has made them indispensable for us. And the field of media is no exception. Multimedia is the outcome of a sophisticated blending of both visual and audio communications. This explanation is just the tip of iceberg, the fact remains that it is the integration of various communication networks into our desk that produces amazing results.

But what is Multimedia as we understand it today? Multimedia software combines two or more media for presentation or analysis. It is the result of co-ordinated work of video, audio and graphics. The earlier personal computers were monomedia as they displayed only one medium. The monomedia computers could not play sounds when they displayed the text on screen. A platform for multimedia emerged with the gradual development of newer technologies that extended the power and scope of personal computers.

Now one fundamental question arises: What specific functions does a multimedia computer perform? A multimedia computer can recreate the sounds of musical instruments and also it can playback record sounds. It can show pictures and movies on a computer disc. Record sounds, movies, pictures and texts have been around for years but what a multimedia computer does is to intervene these things and produce a combined effect of all these mediums. It can show animated images and create graphic designs. The computer-based learning becomes easier and quicker when the text is supplemented with audiovisual assistance and for this reason, it has become an effective mode of education for children as well as adults. The text on the screen is supported by audio instructions and visual aids, which add to the grasping ability and memory retention of the students.

All multimedia programs include six common elements texts, pictures, movies, animation, sound and increased control.

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A Journey Of A Thousand Sites Begins With A Single Click

MULTIMEDIA – A PERFECT FEAST!

What is meant by “Multimedia”?

- A definition
- A brief history of multimedia
- Enter the MPC

DEFINITION:

The term *multimedia* was originally used to describe packages of learning materials that consisted of a book, a couple of audiocassettes and a videocassette. Such packages are still available, but the preferred terms to describe them seem to be *multiple media or mixed media* – although there is a considerable disagreement as to what they should be called now that the term *multimedia* has acquired a different sense. Nowadays *multimedia* refers to computer-based materials designed to be used on a computer that can display and print text and high-quality graphics, play pre-recorded audio and video material recordings. Because of its capability of integrating the four basic skills of listening, speaking, reading and writing, multimedia is of considerable interest to the language teacher.

A BRIEF HISTORY OF MULTIMEDIA:

The first popular microcomputers that appeared in the 1970's were incapable of playing or recording sound and video, and they had very limited graphics capabilities. Language teachers were often critical about CALL because it lacked the essential ingredient of *sound*. From the early 1980's various tricks were employed to get computers to playback and rewind functions – but this was not very efficient as the tape stretched with use and bits of audio were cut off or appeared in the wrong place. All sorts of other Heath-Robinson devices were invented by inspired CALL enthusiasts in order to get computers to produce high-quality authentic sound. The analogue videodisc player also appeared in the early 1980's, offering the possibility of playing back high-quality sound and video and presenting thousands of photographic-quality pictures. The 12-inch *videodiscs, or laser discs* as they were sometimes called, could hold around 30 minutes of video or 54,000 still images on each side. By linking a videodisc player to a computer it was possible to produce CALL programs that today would be desired as *multimedia*. In those days however, the term *interactive video* was used.

The e-mail Of The Species Is Deadlier Than The Mail.

One of the best interactive videodiscs ever produced is MIT's *A la rencontre de Philippe*, which wraps up language learning in a real-life simulation set in Paris. Philippe is a freelance journalist from the provinces currently living in Paris with his girlfriend, but in the first scene she dismisses him and the learner has to find an apartment for Philippe, reconcile Philippe with the girlfriend, and help Philippe to get a better job. A plan of Paris with clickable street names and a notebook are provided, and the learner has access to a telephone, Philippe's answering machine, classified ads, and list of accommodation agencies. The learner can telephone to find information about different apartments and look around them, and follow story lines in which various characters (e.g. a plumber, an aunt, and a best friend) appear. At various points in the story, Philippe will ask the learner a question and the next segment depends on what the player answers: e.g. if the learner clicks on "Your boss called" a different story line will be engaged than if the learner says "I found you a great apartment". The material, at least the video portions and many of the stills, was filmed in Paris. The learner can read a description of the scene or review its essential bits before watching it, but must watch from beginning to and before being able to access a transcript or selective review.

ENTER THE MPC:

The multimedia computer (MPC) was the next major landmark in the history of multimedia, appearing in the early 1990s. The MPC was a breakthrough in terms of its compactness, price and user-friendliness. An MPC is basically the same as a standard PC, with the following additions:

- a soundcard
- twin loudspeakers or a set of headphones
- a microphone
- a CD-ROM drive

Modern MPCs are also likely to be equipped with a DVD-ROM drive as standard. There were earlier computers that qualified as multimedia computers, e.g., the Apple Mac and the Acorn Archimedes in the UK, but the dominant multimedia computer at the time of writing this module (July 2000) is the MPC. Apple computers appear to have a commanding position in the print and graphic designing industries, while Acorn computers only ever gained a foothold in the UK schools sector and are now losing their market share to the MOC.

*BY,
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You Can't Teach A New Mouse Old Clicks.

MODEMS, HO!

A modem connects the computer to the phone line or cable system. Unless your computer is at an office or school that is already wired for a direct Internet connection, you need a modem that comes in all sorts of shapes and sizes. Some are separate boxes, known as external modems, with power cards and with cables that plug in to the computer and the phone line. Others are inside the computer, with just a cable for the phone, and some are tiny credit-card-size things into the side of your computer laptop computer.

Matching the variety of physical sizes is an equally wide variety of internal features. The speed at which a modem operator or the rate at which it can stuff computer data into a phone line ranges from a low of 2,400 bits per second to 56,000 BPS. Some modems can act as fax machines, and some can't. Some have even more executive features, such as built-in answering machines.

- K.G. NANDHA KUMAR, I- B.Sc.,(CS) – 'A'.

LOVE MARRIAGE Vs ARRANGED MARRIAGE

LOVE MARRIAGE	ARRANGED MARRIAGE
1) Resembles procedural programming Language. We have some set functions like flirting, going to movies together, making long conversations on phone and then try to fit all functions to the candidate we like.	1) Similar to object oriented programming approach. We first fix the candidate and then try to implement functions on her. The main object is fixed and various functions are added to supplement the main program. The functions can be added or deleted.
2) It is a throwaway type of prototype as client requirements rises with time thus it is a dynamic system and difficult to maintain.	2) Requirements are well defined so use of waterfall model is possible.
3) Family system hangs because hardware Called parents are not responding.	3) Compatible with hardware parents.
4) You are the project leader so you are responsible for implementation and execution of PROJECT-married life.	4) You are a team member under project leader parents so they are responsible for successful execution of project married life.
5) Client expectations include exciting feature as spouse cooking food, washing clothes etc.	5) All these features are covered in the SRS (Software Requirement Specification) as required features.
6) Acceptance test possible.	6) Product is sold as it is where it is basis. Product once sold will not be taken back.

- S. RAKESH KUMAR, III – B.C.A. – 'A'.

COOKIE ALERT

You may have heard horrible stories about things called cookies that web sites repeatedly use to spy on you, steal your data, ravage your computer, inject cellulite into your hips while you sleep, and otherwise make your life miserable. After extensive investigation, it is found that most cookies aren't all that bad; when you're shopping online, they can even be quite helpful.

A cookie is no more than a little chunk of a text a Web site sends to a PC with a request to send the cookie back during future visits to the same Web site. The cookie is stored on your computer in a form of a tiny (upto 4K text) file. That's all it is. You can see the Cookies now on your PC called something like Cookies.txt. (If you use Netscape, it's probably in your C:\Program Files\Netscape\Users\name folder. If you use Internet Explorer, your cookies are in the C:\Windows\Cookies folder.) For online shopping, cookies let the Web server track your "Shopping Cart" of items you have selected but not yet bought, even if you log out and turn off your computer in the interim.

PLEASE PASS THE COOKIES:

To enhance your online experience, the makers of Web browsers, such as Netscape and Internet Explorer, have invited a type of special messages that lets a web site recognize you when you revisit that site. They thoughtfully store this info, called a cookie, on your very own machine to make your next visit to the same site smoother.

Usually this info can in fact make your next transaction smoother. When you're using an airline-reservation site, for example, the sites using cookies to keep the flights you're reserving separate from the ones other users may be reserving at the same time. On the other hand, suppose that you use your credit card to purchase something on a Web site and the site uses a cookie to remember your credit card number. Suppose that you provide this information from a computer at work and the next person to visit that site uses that same computer. That person could, possibly, make purchase on your credit card. Oops!

It may be true that cookies can make your life more convenient. You have to be the judge. Every Web Server can offer you cookies. You need to know that this kind of software exists so that if you're concerned about your privacy, you can take steps to protect it.

Great Groups From Little Icons Grow

Cookie files usually have the name cookie associated with them – cookies.txt on Windows and MagicCookie on a Mac, for example. You can delete your cookie files --- your browser will create new, empty one. Modern browsers can tell you tell about cookies and ask you whether to accept them as servers offer them to you. When carol checked her Macintosh, she found two cookie files --- one from Netscape and one from Internet Explorer. If she hadn't been looking for them, she never would have known that they were there.

Contrary to rumor, cookie files cannot get other information from your hard disk, give you a bad haircut, or otherwise mess up your life. They collect only information that the browser tells them about.

In addition to the cookie file, Internet Explorer keeps a History file of where you've been on the web. If anyone other than you uses the computer you use, you may want to delete its contents after you use, unless you don't care who sees it.

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BTW,WHAT DOES IMHO MEAN?

E-mail users are often lazy typists and many abbreviations are common. Here are some of the most widely used:

ABBREVIATION	WHAT IT MEANS?
AFAIK	As far as I know
BTW	By the way
IANAL	I am not a lawyer, (but...)
IMHO	In my humble opinion
ROTFL	Rolling on the floor laughing
RSN	Real soon now (vaporware)
RTM	Read the manual – you could have and should have looked it up yourself
TIA	Thanks in advance
TLA	Three letter acronym
YMMV	Your mileage may vary

LEARNING HOW TO LEARN

Build Good Habits.

The key to success in any activity is to develop effective skills.

Practice builds skills.

Athletes develop athletic skills; musicians develop musical skills; managers develop managing skills; learners need to develop learning skills. Developing skills means building good habits.

Develop the Habit of Mental Self-management.

Mental self-management or metacognition is the art of planning, monitoring and evaluating the learning process. To be good at metacognition means you have to know the options. Here are the major choices.

Identify your best learning styles - visual, verbal, kinesthetic, deductive or inductive.

Monitor and improve your learning skills - reading, writing, and listening, time-management, note-taking, problem-solving.

Use different learning environments - lecture, lab, discussion, study groups, study partner.

Try to complete the learning cycle - For most courses, the learning cycle goes like this:

Memorize new information, rules and concepts - often tedious and boring.

Assimilate and organize this information - often hard, but interesting.

Use this information to analyze, synthesize and problem-solve - often difficult, but satisfying.

Incorporate this information into evaluations, judgments and predictions - often powerful and exhilarating.

Many students never get past the first step. They never experience the joy of learning.

Develop the Habit of Positive Thinking.

Use it for increasing confidence and self-esteem. Use it for setting goals and enjoying learning. Use it for taking charge of your own education. See Section 2 for more ideas.

Develop the Habit of Hierarchical Thinking.

Use it for setting priorities and for time management. Use it for summarizing ideas and for organizing information.

Develop the Habit of Creative and Critical Thinking.

Use it for making decisions and solving problems. Use it for synthesizing and creating new associations.

Develop the Habit of Asking Questions.

Use it for identifying main ideas and supporting evidence. Use it for generating interest and motivation. Use it for focusing concentration and improving memory.

10 STEPS FOR BUILDING NEW HABITS

1. Select a new habit or technique you want to develop, like one found in this book.
2. Convince yourself it's important.
3. Make it fairly easy to do.
4. Write out a schedule for working on it.
5. Practice using the technique, keep track of progress.
6. Reward yourself after each practice period.
7. Use your habits as often as possible, both in simple and in new situations.
8. Use a coach, teacher, tutor, group or friend.
9. Identify internal blocks, e.g., lack of time, poor self-esteem, procrastination, poor techniques, lack of success, lack of confidence, stress, poor organization, poor reading and math skills.
10. Seek help if necessary.

*By,
EDITORS.*

C:\ Is The Root Of All Directories

WHERE DID THE INTERNET COME FROM?

The Ancestor of the internet was the ARPANET, a project funded by the department of defense(DOD) in 1969,both as an experiment in reliable networking and to link DOD and military research contractors, including the large number of universities doing military-funded research.(ARPA stands for advanced research projects administration, the branch of the DOD in charge of handing out grant money. For enhanced confusion, the agency is now known as DARPA the added D is for defence, in case anyone had doubts about where the ARPANET started small, connecting three computers in California with one in utah, it quickly grew to span the continent.

In the early 1980s,the ARPANET grew into the early Internet, a group of inter-linked networks connecting many educational and research sites funded by the national science foundation along with the original military ones. By 1990 it was clear that the INTERNET WAS HERE TO STAY,AND DARPA and the NSF bowed out in favor of the commercially run networks that comprise today's Internet.

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NEWS GROUP

WHAT IS A NEWS GROUP?

Messages are sent or “Posted” to a news group by its members. The Messages are stored on a computer called a news server. This computer is maintained by your ISP(Internet Service Provider). Once you have joined a newsgroup or “Subscribed”, you can read the message or send in articles of your own.

NEWSGROUP NAMES:

Each newsgroup has a unique name. The name acts as a guide to its theme. The first part of the name describes the category the group belongs to, such as recreational activities or science. Here is a guide to some of the main categories:

- ◆ Comp – computer related groups
- ◆ Rec – recreational and sports group
- ◆ Misc – all the groups which don't fit into any other category
- ◆ Sci – science related groups
- ◆ Soc – groups which debate social issues such as politics religion or philosophy.

The second part of a newsgroup's name might be *rec-music*. *Presley*. This tells you that the newsgroups is in the recreational activities category and it is for the music of Elvis Presley.

BY,
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WHICH TYPE OF WOMAN IS YOUR GIRL FRIEND?

- is she an...
- **INTERNET WOMAN:**
Woman of difficult access.
- **SERVER WOMAN:**
Always busy when you need her.
- **WINDOWS:**
Every one knows that she can't do anything right, but no one can live without her.
- **EXCEL WOMAN:**
They say, she can do a lot of things but you mostly use her for your four basic needs.
- **SCRENSAVER WOMAN:**
She is not worth for anything, but at least she is fun!
- **RAM WOMAN:**
She forgets everything you say, when you disconnect her.
- **HARDDISK WOMAN:**
She remembers everything FOREVER.
- **MULTIMEDIA WOMAN:**
She makes horrible things look beautiful.
- **USER WOMAN:**
She messes up everything she does and she asks always more than she needs.
- **CD-ROM WOMAN:**
She is always faster and faster.
- **E-MAIL WOMAN:**
Every ten things she says, eight are nonsense.
- **VIRUS WOMAN:**
Also known as "wife", when you are not expecting her, She comes, installs herself and uses all your resources if you try to uninstall her you will lose something, if you don't try to uninstall her you will lose everything.

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Don't Put All Your Hypes In One Home Page

HASH IT AROUND

Swish 2.0 is the quick, easy and affordable way to create flash animations for your web site. You can create animated effects, shapes, text, buttons, sprites motion paths and your own dazzling effects or make an interactive movie by adding actions to objects. Swish has 150 ready-to-use animated effects such as explode vertex, 3D spin and wave. Swish exports the same SwF file format used by macromedia flash, so almost all web surfers can see your animation without having to download a plug in.

One problem you might face with this software is its inability to export your work in GIF format. The other feature it lacks is image compatibility; swish is only good for its intended purpose, which is basically text animation.

This version includes movie scene, transform and action tabs that were not available in earlier versions. Swish 2.0 delivers a 'kinder garden' level text 'fx' solution for flash wannabes.

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MY GRANDMOTHER AND THE COMPUTER

My grandmother challenges the computer. She has more memory than the computer. She can recall in detail the Jalianwalabagh tragedy.

Her hard disk is more powerful than the most powerful Computer as she has with stood the great famine.

Her eyes are like the monitor displaying every emotion with Preasion.

Her mind is more efficient than the computer as she can process a lot of information.

Her movements are subtle and quick like the mouse she is the motherboard in our joint family.

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NET TOOLS (PART – I)

TELNET:

Telnet, protocol or set of procedures, that enables a user of one computer on the Internet to log on to any other computer on the Internet, provided the user has a password for the distant computer or the distant computer provides publicly available files. Telnet is also the name of a computer program that uses those rules to make connections between computers on the Internet. Many computers that provide large electronic databases, like library catalogs, often allow users to telnet in searching the databases. Many resources that were once available only through telnet have now become available on the easier-to-use World Wide Web.

SEARCH ENGINE:

Search Engine, computer software that compiles lists of documents, most commonly those on the World Wide Web (WWW), and the contents of those documents. Search engines respond to a user entry, or query, by searching the lists and displaying a list of documents (called Web sites when on the WWW) that match the search query. Some search engines include the opening portion of the text of Web pages in their lists, but others include only the titles or addresses (known as Universal Resource Locators, or URLs) of Web pages. Some search engines occur apart from the WWW, indexing documents on a local area network (LAN) or other system.

SPIDER:

Spider , computer program that automatically monitors documents (called Web pages) on the World Wide Web (WWW); also called robot, softbot, wanderer, crawler, and fish. Most Web pages include at least one link (an automatic connection) to another Web page, and some include hundreds of links. A spider takes advantage of this structure by starting at one Web page and working its way out by following every link on a Web page and then following every link provided by the new Web pages.

Pentium Wise; Pen And Paper Foolish.

Some spiders save the URL (Uniform Resource Locator), or address, of every Web page they visit. These spiders are used by search engines to build indexes of Web pages that users can access to search for information on a particular topic. Indexing spiders, as they are called, often also store the title and partial or complete text of a Web page so users can do more detailed searches.

Some spiders store only URLs of Web pages that have not been listed yet in order to update lists or provide lists of new Web pages. Some spiders make note of URLs that are no longer valid in order to correct lists.

HOST COMPUTER:

Host Computer, a computer directly connected to the Internet that provides services to other computers on the network, such as e-mail connections or access to program and data files. Each host computer has a unique Internet address, or IP, and a unique domain name, which identify the computer to other computers and users on the Internet.

WEB CRAWLER:

Web Crawler, a search engine, computer software program for locating World Wide Web (WWW) information. WebCrawler was developed by University of Washington graduate student Brian Pinkerton in 1994 but is now maintained by America Online, Inc., a commercial Internet service provider. WebCrawler uses a program called a spider to search the WWW for new documents (called Web pages) and to index all the words in the documents. A person using WebCrawler enters a key word or phrase, and WebCrawler provides a list of all documents that contain the word or phrase. Each title is linked to the document's site on the WWW, so users can go directly from the list to any document on the list.

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Too Many Clicks Spoil The Browse.

NETWORK GROUNDUP

(PART – II)

LOCAL AREA NETWORK:

Local Area Network (LAN), in computer science, collection of interconnected computers that can share data, applications, and resources, such as printers. Computers in a LAN are separated by distances of up to a few kilometers and are typically used in offices or across university campuses. A LAN enables the fast and effective transfer of information within a group of users and reduces operational costs.

Other connected computer resources are wide area networks (WANs) and private branch exchanges (PBXs). WANs are similar to LANs but they connect computers separated by longer distances, typically across the country or internationally, and they use specialized and expensive hardware and leased communications services. PBXs provide continuous computer connections for the transfer of specialized data such as telephone transmissions, but they are not ideally suited to send and receive the short bursts of data used by most computer applications.

INTERNAL LAN CONNECTIONS:

A LAN usually consists of a collection of computers, but it also may include printers or data storage devices, such as hard drives. The physical connection between LAN devices can be a coaxial cable, pairs of copper wires, or optical fiber. Wireless connections also can be made using infrared or radio frequency transmissions.

A LAN device can send and receive signals from all other devices in the network. Alternatively, each device may be linked to a repeater or hub, specialized equipment that selectively pass information from one device to one or more destinations in the network.

Networks use protocols, or rules, to exchange information through a single shared connection. These protocols prevent collisions of data caused by simultaneous transmission between two or more computers. Computers on most LANs use protocols known as Ethernet or Token Ring. An Ethernet-linked computer checks if a shared connection is in use. If not, the computer transmits data.

Since computers can sense an idle connection and send data at the same time, transmitting computers continue to monitor their shared connection and stop transmitting if a collision occurs. Token Ring protocols pass a special message called a token through the network. A computer that receives the token is given permission to send a packet of information or, if the computer has no packet to send, it passes the token to the next computer.

EXTERNAL LAN CONNECTIONS:

Connections that link LANs to external resources, such as other LANs or remote databases, are called bridges, routers, and gateways. A bridge creates an extended LAN by passing information between two or more LANs. A router is an intermediary device that connects a LAN to a larger LAN or to a WAN by interpreting protocol information and selectively forwarding packets to different LAN or WAN connections through the most efficient route available. A gateway connects and translates between networks that use different communications protocols.

LAN computers use a gateway or router to connect to a WAN such as the Internet, the worldwide consortium of computer networks. Such connections are a security risk because the LAN has no control over users on the Internet. Applications transferred from the Internet to the LAN may contain computer viruses that can harm the components of the LAN, or external and unauthorized users may gain access to sensitive files or erase or alter files. A special type of gateway called a firewall keeps external users from accessing resources on the LAN while letting LAN users access the external information.

ADVANCES:

Progress in how a network routes information will allow data to move directly from a source computer to a destination computer without interference from other computers. This will enhance the transmission of continuous streams of data, such as audio and video. The wide use of notebook and other portable computers has produced advances in wireless networks. Wireless networks use infrared or radio frequency transmissions to connect mobile computers to networks. Infrared wireless LANs connect computers within a room, while wireless radio frequency LANs can connect computers separated by walls.

New LAN technologies will be faster and will support multimedia applications. Asynchronous Transfer Mode (ATM) and Ethernet LANs that are 10 to 15 times faster than standard LANs are now available. To take advantage of faster LANs, computers must become faster, especially the connection called the bus that links the computer's memory to the network. In addition, computer software must be developed that is able to efficiently transfer large amounts of data from networks to computer applications.

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The Geek Shall Inherit The Earth.

SMART DRAW 6.0 STANDARD EDITION

EASY DRAW:

Professional flowcharts, network diagrams, floor plans and more... Smart Draw 6.0 allows for easy creation of all the above. The program comes with an Explorer type template viewer, which proves quite handy while selecting and using the various templates provided. Another plus point of this application is its ability to download templates as and when required, giving you a lot of flexibility in case of a space crunch. It supports various file formats including PDF, JPEG, TIFF, HTML, WMF AND GIF to name a few.

Another noteworthy feature is its ability to integrate office suite files like Microsoft word, Excel and PowerPoint. For mathematical calculations, you can also incorporate equations and special symbols not generally supported by the keyboard. It also allows you to create timeline calendars in the form of Gantt charts, yearly timelines or a monthly calendar, with around 11 categories of templates and with each category having around five to seven different samples, this software has one of the most elaborate lists.

However, everytime you start the program for a new design, the application takes you to the template selection screen, which is rather cumbersome.

This software is available in three different versions: the standard version with 1000 standard symbols; the professional versions with 1000 standard symbols plus features supporting MS applications as well as file import and export facility; and the professional plus with all the professional features and a collection of 111 symbol categories including Business, networks, Engineering and Maps.

SPECIFICATIONS:

Works with windows 95/98/Me/2000 and XP, needs a minimum of 30-MB free disk space.

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A Cat Has Nine Lives

YOU MIGHT BE AN ISP IF...

- you know 56k means 'reliable 33.6' and 33.6 means 'reliable 28.8' and so forth.
- you know the win98 setup wizard by heart and can walk a user through it without even interrupting your Quake/MUD/IRC session to do so.
- you know where the email settings are in Internet Mail, Outlook Express, Pegasus, Eudora, Netscape Mail, Messenger Mailbox, and you don't use any of those programs for personal use.
- you maintain more than four websites and do not have time for a personal web page.
- you know all of the following people by reputation and can explain what they've done that is relevant to your world: Steve Case, Linus Torvalds, Eric Allman, Sanford Wallace.
- you know what TCP/IP stands for, not to mention DNS, HTTP, SNMP, BGP, OSPF, and DUN. You like acronyms.
- you know more IP addresses than phone numbers. Sometimes you just find it easier to type the dotted quad.
- you know more phone numbers to modem banks than you know phone numbers to people.
- you can name two web browsers other than Netscape or Microsoft's.
- you find telnet a helpful daily tool instead of wondering what it is for.
- you loathe the dancing baby and other large file attachments sent through email to unsuspecting users who can't pick them up off the server and then have to call and whine that their email doesn't work anymore.
- you despise Microsoft FrontPage as a web-editing tool and as extensions to your webserver.
- you can answer the question 'is the internet broken' without laughing.
- you can spot the theme behind the following list: RedHat, SuSE, Debian, Caldera, and Slackware.
- you can feel the load a server is under without actually checking statistics. It 'just isn't running right' actually makes sense.

BY,
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Oh, What A Tangled Website We Weave When First We Practice

WIRELESS COMMUNICATION

(PART I)

INTRODUCTION:

Wireless Communications, various telecommunications systems that use radio waves to carry signals and messages across distances. Wireless communications systems use devices called transmitters to generate radio waves. A microphone or other mechanism converts messages, like sounds or other data, into electronic impulses. The transmitters change, or modulate, the radio waves so they can carry the impulses, and then transmit the modulated radio signals across distances. Radio receivers pick up these signals and decode them back into the original messages. Commercial radio and television are also wireless telecommunications systems, but radio and television are mainly public broadcast services rather than personal communications systems.

HISTORY:

The idea of wireless radio communications arose in the mid-1800s from the theories of two English physicists, Michael Faraday and James Clerk Maxwell. In 1888 Heinrich Hertz applied these theories to construct a spark-gap transmitter, a device that generated radio waves from an electric spark. In 1895 Italian electrical engineer Guglielmo Marconi extended the range of such transmissions and adapted the technology to send and receive wireless telegraph signals. In 1901 Marconi built the first transoceanic telegraph transmitter, which had a 3200-km (2000 mi.) link from Poldhu, Cornwall, England, to St. John's, Newfoundland, Canada. Developments in vacuum tube technology in the early 1900s by English professor Sir John Ambrose Fleming and American inventor Lee De Forest made it possible to modulate and amplify wireless signals to send voice transmissions. The range and clarity of voice transmissions increased as advancements in technology were made, and in 1915 the American Telephone & Telegraph Company transmitted a voice message by radio between the United States and France. By the 1930s, small two-way radio transmitters were in common use among law enforcement and civil emergency authorities. Improvements in technology have made two-way communications systems smaller and lighter, with extended range and capabilities.

Don't Bite Off More Than You Can View

WIRELESS COMMUNICATION:

Wireless communications allow people greater flexibility while communicating, because they do not need to remain at a fixed location, such as a home or office. Wireless technologies make communications services more readily available than traditional wire-based services (such as ordinary telephones), which require the installation of wires. This is useful in places where only temporary communications services are needed, such as at outdoor festivals or large sporting events. These technologies are also useful for communicating in remote locations, such as mountains, jungles, or deserts, where telephone service might not exist. Wireless services allow people to communicate while in a car, airplane, or other moving vehicle. Police, fire, and other emergency departments use two-way radio to communicate information between vehicles that are already responding to emergency calls, which saves valuable time. Construction and utility workers frequently use hand-held radios for short-range communication and coordination. Many business people use wireless communications, particularly cellular radiotelephones, to stay in contact with colleagues and clients while traveling.

All wireless communications devices use radio waves to transmit and receive signals. These devices operate on different radio frequencies so that signals from one device will not overlap and interfere with nearby transmissions from other devices. The number of companies offering wireless communication services has grown steadily in recent years. In 1988 about 500 companies offered cellular radio telephone (cell phone) services. By 1995 that number had grown to over 1500 companies serving millions of subscribers. Wireless communication is becoming increasingly popular because of the convenience and mobility it affords, the expanded availability of radio frequencies for transmitting, and improvements in technology.

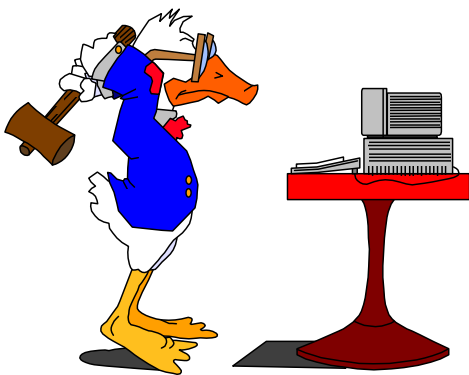
PRINCIPLES OF WIRELESS COMMUNICATIONS:

Wireless communications begin with a message that is converted into an electronic signal by a device called a transmitter. The transmitter uses an oscillator to generate radio waves. The transmitter modulates the radio wave to carry the electronic signal and then sends the modified radio signal out through space, where a receiver picks it up. The receiver decodes, or demodulates the radio wave and plays the decoded message over a speaker. Wireless communications provide more flexibility than wire-based means of communication. However, there are some drawbacks. Wireless communications are limited by the range of the transmitter (how far a signal can be sent), and since radio waves travel through the atmosphere, they can be disturbed by electrical interferences (such as lightning) that cause static.

Fax Is Stranger Than Fiction

Wireless communications systems involve either one-way transmissions, in which a person merely receives notice of a message, or two-way transmissions, such as a telephone conversation between two people. An example of a device that sends one-way transmission is a pager, which is a radio receiver. When a person dials a pager number, the pager company sends a radio signal to the desired pager. The encoded signal triggers the pager circuitry and notifies the customer carrying the pager of the incoming call with a tone or a vibration, and often the telephone number of the caller. Advanced pagers can display short messages from the caller, or provide news updates or sports scores.

Two-way transmissions require both a transmitter and a receiver for sending and receiving signals. A device that functions as both a transmitter and a receiver is called a transceiver. Cellular radiotelephones and two-way radios use transceivers, so that back-and-forth communication between two people can be maintained. Early transceivers were very large, but they have decreased in size due to advances in technology. Fixed-base transceivers, such as those used at police stations, can fit on a desktop, and hand-held transceivers have shrunk in size as well. Several current models of hand-held transceivers weigh less than 0.2 kg (0.5 lb.).



*BY,
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FUNNY CUSTOMER

Customer : “ Can you copy the internet for me on this diskette ?”

Vendor : “Oops....!”

What Boots Up Must Come Down

WONDERFUL DEFINITIONS

Cigarette: A pinch of tobacco rolled in paper with fire at one end & a fool on the other.

Divorce: Future tense of marriage.

Lecture: An art of transferring information from the notes of the Lecturer to the notes of the students without passing through “the minds of either”

Conference: The confusion of one man multiplied by the number present.

Compromise: the art of dividing a cake in such a way that everybody believes he got the biggest piece.

Tears: The hydraulic force by which masculine will power is defeated by feminine waterpower.

Dictionary: A place where divorce comes before marriage.

Classic: A book which people praise, but do not read.

Smile: A curve that can set a lot of things straight.

Yawn: The only time some married men ever get to open their mouth.

Office: A place where you can relax after your strenuous home life.

Etc: A sign to make others believe that you know more than you actually do.

Committee: Individuals who can do nothing individually and sit to decide that nothing can be done together.

Experience: The name men give to their mistakes.

Atom Bomb: An invention to end all inventions.

Windows Will Never Cease

Philosopher: A fool who torments himself during life, to be spoken of when dead.

Diplomat: A person who tells you to go to hell in such a way that you actually look forward to the trip.

Optimist: A person who while falling from Eiffel tower says in midway “See I am not injured yet”

Opportunist: A person who starts taking bath if he accidentally falls into a river.

Pessimist: A person who says that O is the last letter in RO, instead of the first letter in word OPPORTUNITY.

Miser: A person who lives poor so that he can die rich.

Father: A banker provided by nature.

Criminal: A guy no different from the rest... except that he got caught.

Boss: Someone who is early when you are late and late when you are early.

Politician: One who shakes your hand before elections and your confidence after.

Doctor: A person who kills your ills by pills, and kills you with his bills.



*BY,
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N. DHARMENDRA SHAH,
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In Gates We Trust

COMPUTER QUIZ

(This Quiz will test your general knowledge and memory of our reviews!)

- (1) The other name for C drive?
- (2) How many megabytes is a gigabyte?
- (3) A device used for copying CDs is known as CD?
- (4) A compact computer which folds shut is called a___
- (5) Which cameras can transfer pictures onto a computer?
- (6) What type of weapon does Legolas the elf use?
- (7) Which computer sounds like a fruit?
- (8) What is the standard size of a floppy disk?
- (9) What kind of file is a JPEG?
- (10) Which cameras can transfer pictures onto a computer?



TOP 7 WAYS THE INTERNET COULD GET WORSE

- "MAKE MONEY FAST" posts protected by 1st amendment.
- Sun internet servers replaced with Pentiums.
- Dan Quayle appointed head of "bandwidth expansion tiger team".
- Free netcom account with purchase of big Mac.
- Gameboy web browsers.
- Two words: "Microsoft Network"
- Rigorous user screening process abolished by America On-Line.

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

Give a man a fish and you feed him for a day; teach him to use the Net and he won't bother you for weeks.

AGENT ORIENTED PROGRAMMING

AOP DESIGN (PART-II)

GENERAL GOALS:

LiveWorld was designed to support certain basic qualities of interaction: all parts of the system should be concretely represented and accessible, the system should feel reactive, it should permit exploratory or improvisatory programming, and there should be a clear learning path that leads a user from simple to more complex modes of use.

A WORLD OF LIVELY OBJECTS:

Creating animate systems requires the creation and organization of many different kinds of parts, including worlds, actors (graphic objects, also called creatures), agents (behavior generators). Each of these parts in turn can have parts of its own or aspects affecting its appearance and function. The number of objects can be quite overwhelming unless deliberate steps are taken to present the complexity in a form that a novice can comprehend.

The approach used by LiveWorld is in the tradition of Smalltalk and Boxer, in that it tries to make computational objects *real* for the user. Objects should be *concrete*--that is, they should appear to have a solid existence, metaphorically rooted in the properties of physical objects, and *tangible*--they should be accessible to the senses and actions of the user.

The techniques used to achieve these goals include a simple yet powerful object-oriented programming system with prototype-based inheritance (arguably more concrete in its operation than class-based inheritance); and the integration of the object system with an equally simple-yet-powerful direct manipulation interface. Together object-oriented programming (OOP) and direct manipulation serve to make computational objects appear as concrete and tangible. These properties allow users to make use of their visual and motor abilities to interact with computational objects. LiveWorld is designed to support agent-based programming, or programming with an animate flavor. It is not itself constructed from agents, but is intended to support the creation of agents, both computationally and from a design standpoint.

Virtual Reality Is Its Own Reward

SPATIAL METAPHOR AND DIRECT MANIPULATION:

LiveWorld presents itself as a collection of recursively nested graphic objects, arrayed in space and manipulable by the user. This idea is largely borrowed from Boxer, following the design principle referred to as *naive realism*. LiveWorld retains Boxer's basic metaphor of recursively nested boxes, but differs from Boxer in the way it treats its basic object. In Boxer, boxes are understood in reference to a textual metaphor. A Boxer box is like a character in a text string that can have internal structure, which will be other lines of text that also may include boxes. Boxes have no fixed spatial position, but are fixed in relationship to the text line that contains them. There are no classes of boxes (except a few built-in system types) and no inheritance. In contrast to Boxer, LiveWorld boxes are to be understood as graphic objects that may be moved with the mouse. While Boxer's interface is rooted in word processing (specifically in the Emacs text editor from which Boxer derives its command set), LiveWorld's is rooted in object-oriented drawing programs. Both systems extend their root metaphor by allowing for recursive containment.

PROTOTYPE-BASED OBJECT-ORIENTED PROGRAMMING:

Object-oriented programming (OOP) makes programs more concrete by giving them a feeling of locality. Under OOP, each piece of a program is closely associated with a particular object or class of objects. Rather than an abstract set of instructions, a routine is now a *method*, belonging to a particular object and intended to handle a specific class of communication events. It has a location, and in a sense its function is made more concrete by its association with a class of objects. Prototype-based languages are an alternative to the class-based object schemes used in more traditional OOP languages such as Smalltalk, CLOS, or C++. Prototype-based OOP arguably offers additional concreteness by dispensing with classes. In a class-based object system, every object is an instance of a class, and methods are associated with a class rather than with particular concrete objects. While classes are usually represented by objects, these objects are of a different order than normal objects and are sometimes called *meta-objects* to emphasize this distinction. In contrast, a prototype-based system has no distinction between classes and instances or between objects and meta-objects. Instead of defining objects by membership in a class, they are defined as variations on a prototype. Any object may serve as a prototype for other objects.

LiveWorld's graphic representation for the frames is the box, which is described below. From the user's perspective boxes and frames are identical, and for the most part I will use the terms interchangeably.

A User And His Leisure Time Are Soon Parted

IMPROVISATIONAL PROGRAMMING:

A programming system for novices ought to support experimentation and improvisation. The model of use should not assume that the user has a fully worked-out model of the task. Rather, the system should assume that the user is engaged in an activity that consists of incremental and interleaved design, construction, debugging, and modification. This means that each part of the user's cyclical path between idea, execution, and evaluation has to be short and relatively painless.

How LiveWorld supports improvisational programming?

Improvisational programming relies on the ability to build programs incrementally. This facility is an important part of dynamic programming environments for novices such as Boxer or Smalltalk, since novices need the short feedback cycle that incremental programming can provide. From the standpoint of interface design, incremental programming is akin to non-modal interface design: conventional programming requires constant switching between writing and testing, while incremental programming attempts to reduce or eliminate that modal switch.

PARSIMONY:

Also borrowed from Boxer is the idea that a single structure, the box, can be made to serve a multitude of purposes. In most languages, variables, data structures, sets, graphics, classes, buttons, and palettes are very different sorts of things with very different interfaces. In Boxer and LiveWorld all of these structures are replaced by the box, which is flexible enough that it can perform all of their functions. This technique is of great value in reducing the complexity of the interface, since only a single set of manipulation skills needs to be learned.

METACIRCULARITY:

As much as possible, the interface of LiveWorld is defined in the language itself, giving the user control over its appearance and operations. Framer's recursive structure makes it easy to use frames to represent information *about* frames, and LiveWorld makes frequent use of this capability. For instance, display information for frame boxes is stored in (normally invisible) frame annotations to each displayed frame (**%box-position**, for instance). If you display these frames, they get their own display annotations, recursively. Because LiveWorld represents its internal processes in the same way as its user-level information, it may be considered as capable of a degree of *computational reflection* in that it is possible for programs within LiveWorld to modify their underlying interpreter and related mechanisms.

GRAPHIC REALISM AND LIVENESS:

LiveWorld strives for a feeling of real objects interacting in real-time. The principle of naive realism is heightened in LiveWorld by displaying boxes and actors as solid objects that retain their solidity as they are moved around. This simple but important technique serves to heighten the realistic and concrete feel of the medium

LEARNING PATH:

A programming system for novices should be both easy to learn and powerful. It is too much to expect a powerful system to be learned all at once, so the system needs to provide a learning path consisting of techniques that allow a user to progressively learn and adopt features of the system. Each layer of the system should provide "conceptual scaffolding" that allows the learning of the next layer to be rooted in existing skills. Complexity needs to be hidden *until it is needed*, at which time it should reveal itself in understandable terms.

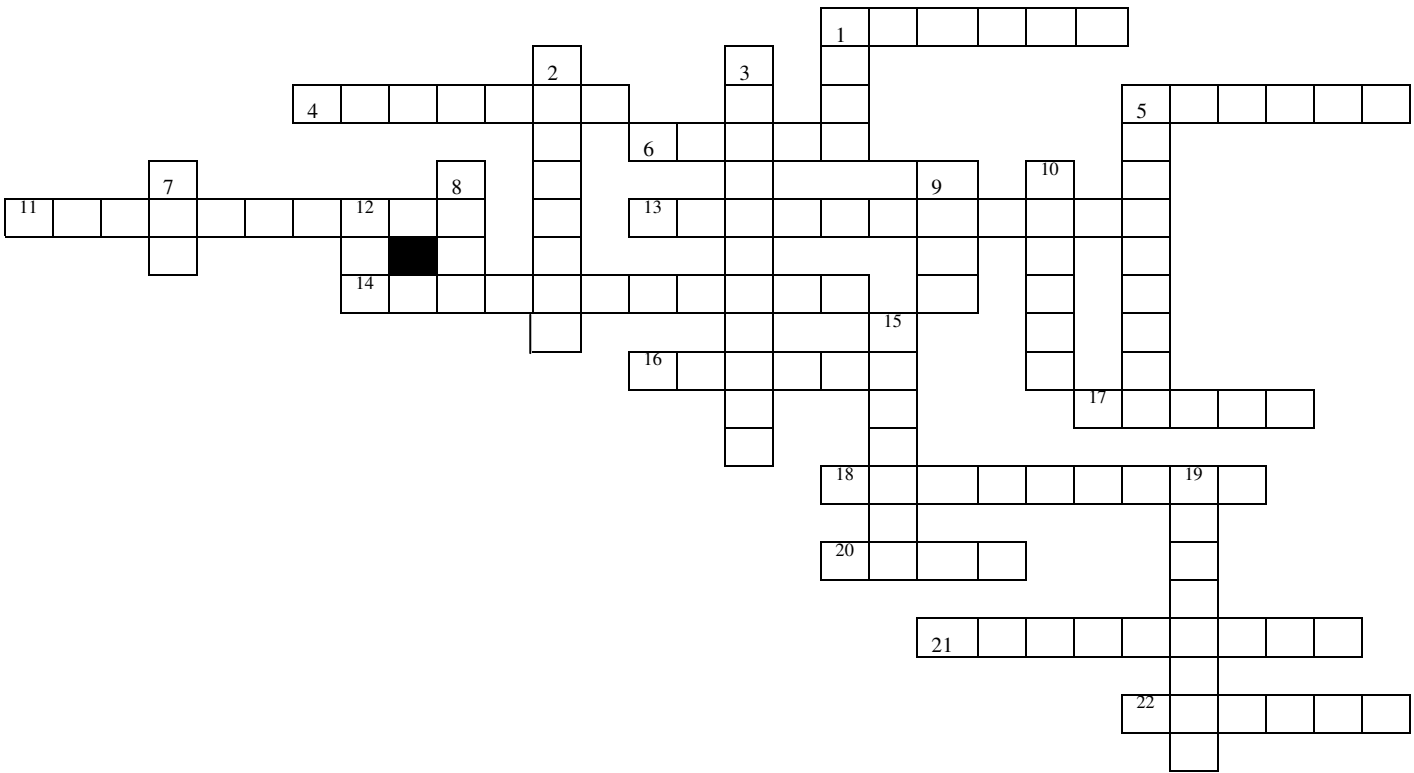
In LiveWorld, there are a number of distinct levels of usage that exist within an integrated framework. The intent is that simple modes of use should be easily learnable and also lead the user into the more complex modes. For example, a user whose only experience is in using direct-manipulation graphics programs can approach the use of LiveWorld as she would a drawing program. Unlike a drawing program, however, LiveWorld makes the properties of the object into manipulable objects in their own right, and can thus introduce this novice user to the idea of properties; slots; and values.

YOU KNOW YOU ARE AN INTERNET JUNKIE WHEN...

When asked for your address, your answer begins with http://
Instead of calling you to dinner, your spouse sends e-mail.
You chat with your fingers, not your mouth.
You use Netscape 4.72, and you check every week whether version 4.73 was released.
You know the difference between Java and JavaScript.
Most of your friends have an @ in their names.
In order to watch CNN you move to www.cnn.com
On your business card the e-mail appears before the phone number.
You find yourself typing "com" after every period when using a word processor.com
You check your mail. It says "no new messages." So you check it again.
You can perfectly imitate the sound pattern of your modem connecting to your ISP.
You can think of nineteen keystroke symbols that are far cleverer than :-).
You are told about a new program, and you are disappointed to find that it is a TV program.
Not only do you check your email more often than your paper mail, but also you remember your network address faster than your postal one.
You wake up at 3 a.m. to go to the bathroom and stop to check your e-mail on the way back to bed.

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

CROSS WORD PUZZLE



ACROSS:

- 1) 3.5 Inch diskette
- 4) Set of operations
- 5) Main holding place for data in a computer
- 7) Program that fulfills client request
- 11) Non-essential computer device
- 13) Tells computer what operation to perform
- 14) Main circuit board
- 16) Program that makes request
- 17) Data transferred one bit at a time
- 18) File structure component
- 20) 8 bits
- 21) Logical circuitry that responds to instructions
- 22) Program that controls a device

DOWN:

- 1) Collection of data that has a unique name
- 2) Data transferred multiple bits at the same time
- 3) Computer intended for individual use
- 5) Industry term for large computer
- 7) Single binary value
- 8) Expansion card slot
- 9) Parallel interface standard
- 10) Base two
- 12) Short-term computer memory
- 15) Small program that gives OS an extra capability
- 19) Stores Windows configuration information



Answers on Page No: 32

TTL CIRCUITS

INTRODUCTION:

Using advanced photographic techniques, a manufacturer can produce miniature circuits on the surface of a small piece of semiconductor material called a chip. The finished network is so small that you need a microscope to see the connections. Such a circuit is called as Integrated Circuits (IC). Transistors, Diodes and resistors are an integral part of the chip. This is different from a discrete circuit, in which the components are individually connected during assembly.

IC DIGITAL LOGIC FAMILIES:

- ❖ RTL → Resistor-Transistor Logic
- ❖ DTL → Diode-Transistor Logic
- ❖ IIL → Integrated-Injection Logic
- ❖ TTL → Transistor-Transistor Logic
- ❖ ECL → Emitter-Coupled Logic
- ❖ MOS → Metal-Oxide Semiconductor
- ❖ CMOS → Complementary MOS

Among the logic families, TTL is most commonly and widely used Digital Logic. It belongs to the Bipolar families. TTL is a modification of DTL. TTL uses almost transistors exclusively; it has become the most popular family of SSI and MSI chips.

There's No Place Like <http://www.home.com>

TTL:

In 1964 Texas instruments introduced Transistor-Transistor Logic(TTL), a widely used family of digital devices. TTL is a fast, inexpensive and easy to use. The different types of TTL circuits are standard TTL, High speed TTL, Low power TTL, Schottky and Low power are used to build *Busses* which is the backbone of modern computers and Digital systems. Since TTL uses active low as well as active high signals, negative logic may be used as well as positive logic. In turn, this leads to assertion-level logic, a way of drawing gates and labeling signals that enhances circuit analysis.

TYPES OF TTL:

STANDARD TTL:

The basic TTL design. It has the power of dissipation of 10mw per gate and a propagation delay time of icons.

HIGH SPEED TTL:

It has the power dissipation of 22mw and a propagation delay time of 6ns. Devices of this type are numbered as 74H00, 74H01, 74H02 and so on.

LOW POWER TTL:

It has the power dissipation of 1mw and a propagation delay time of about 35ns. Devices of this type are numbered as 74L00, 74L01, 74L02 and so on.

SCHOTTKY TTL:

It has the power dissipation of 20mw and a propagation delay time of about 3ns. Devices of this type are numbered as 74S00, 74S01, 74S02 and so on.

LOWPOWER SCHOTTKY SKILL TTL:

It has the power dissipation of 2mw and a propagation delay time of 10ns. Devices of this type are numbered as 74LS00, 74LS01, 74LS02 and so on.

Among the five TTL types, the low power schottky TTL is the best choice for the digital designers. It is used for almost everything.

BY,
A. KARTHIKEYAN,
I- B.C.A.

Know What To Expect Before You Connect

ANSWERS

RIDDLES:-

1. Chips.
2. Chair.
3. U (you).
4. Crane.
5. Donkey.
6. Age.
7. Today.
8. February-Only 28 days.
9. Fountain pen.
10. Calendar.

CROSS WORD PUZZLE:

ACROSS	DOWN
1.Floppy 4.Program 5.Memory 6.Server 11.Peripheral 14.Mother board 16.Client 17.Serial 18.Directory 20.Byte 21.Processor 22.Driver	1.File 2.Parallel 3.Workstation 5.Mainframe 7.Bit 8.Slot 9.SCSI 10.Binary 12.RAM 15.Utility 19.Registry

COMPUTER QUIZ:

- (1) Hard drive
- (2) 1000 Megabytes
- (3) CD Burner
- (4) Laptop
- (5) Compact Disc Read Only Memory
- (6) A bow and arrows
- (7) Apple
- (8) 3.5 inches
- (9) A picture
- (10) Digital Cameras