SILICON CHIP.

The microchip or silicon chip has completely changed the color of the electronic world by providing a new direction to it. It has led to the invention of

- Electronic calculators
- Personal computers
- Digital calculators
- Digital watches
- Microwave ovens etc.,



The silicon chips are tiny particles or crystals of silicones, which contain large number of electronic components. Silicon is the most abundant element on earth as the crust of the earth is largely made up of silicon. But silicon is not found in a free state as it is always combined with one or more additional elements. In one sq. cm. chip, about one million electronic components can be squeezed. The size of a chip is smaller than out fingertips. They can be made to carry very small electrical circuits, called microcircuits. There are used in.

- Transistors
- Radios
- Calculators
- Computers

They can be used in small electronic devices, as the chips are very small.

But how are silicon chip made?

Silicon chips are made from a single crystal of silicon. These wafers of about 0.5mm thick are sliced from a single crystal. One side of each wafer is first polished and then endured in a furnace. The disc is covered with a layer of photoresist material and then exposed to UV light through the clear sections of a mark. A light sensitive coating is developed and the exposed areas are disclosed away by the solvent. Unexposed areas are not affected so a pattern remains identical to the mask. The exposed areas are etched in hydrofluoric acid. Another solvent removes the resist. In a furnace, the wafer is exposed to chemicals, which penetrate the silicon through the oxide gap to make transistors. The process is repeated several times. The wafer is coated with aluminium and a final layer of metals connects the components together. After careful inspection, chips are selected and released for use.

Now a days, microchips are being used in,

- Electronic serving machines
- Washing machos
- Word processors and so on.

- S. Anusha, I-B.Sc., (CS) - 'A'. \mathbf{i} \mathbf{T} unlimited

'C'HALLENGES

1) Write a program to input a string & output it (without using semicolon).

```
main()
    {
      while (putchar (getchar()))
      {
        }
    }
}
```



2) Write a program to divide a number by 256 without using division operators.

```
main()
{
  int a;
  printf ("enter a number:");
  scanf ("%d", &a);
  printf ("%d/256 = %d", *((char) & a+1));
}
```

By, L. Manjula, I – B.C.A.

SOME COMMON ABBREVIATIONS

YAHOO	Yet Another Hierarchically Officious Oracle
UPS	Uninterrupted Power Supply System.
SLOT	Scanned Laser Output Terminal.
CORBA	Common Object Request Broker Architecture.
MPEG	Moving Picture Experts Group.
PJPEG	Progressive JPEG.
DR-DOS	Digital Research Disk Operating System.
EMBARC	Electronic Mail Broadcast to A Roaming Computer
OOB	Out Of Band.
OOOS	Object Oriented Operating System.

By, R. Poongodi, III - B.Sc., (CS) - 'A'.

There are only two tragedies in life: One is not getting what one wants, and the other is getting it

THE SMART CARD

A smart card is a standard credit card-sized plastic token within which a microchip has been embedded. This chip is the engine room of the smart card, and indeed is what makes it 'smart'. Smart card chips come in two broad varieties: **memory only chips**, with storage space for data, and within a reasonable level of built-in security; and **microprocessor chips** which, in addition to memory, embody a processor controlled by a card operating system, with the ability to process data onboard, as well as carrying small programs capable of local execution. The main storage area in such cards is normally EEPROM (Electrically Erasable Programmable read-only Memory), which – subject to defined security constrains – can have its content updated, and which retains current contents when external power is removed. Newer smart card chips may also have math co-processors integrated into the microprocessor chip, able to perform quite complex encryption routines relatively quick.

A smart card is therefore characterized uniquely by its chip, which its ability to store much more data (currently up to about 32,000 bytes) than is held on a magnetic stripe, all within a extremely secure environment. These security features built into smart card chips are amongst the most sophisticated of their type available in the commercial world. Data residing in the chip can be protected against external inspection or alteration, so effectively that the vital secret keys of the cryptographic systems used to protect the integrity and privacy of card-related communications can be held safely against all but the most sophisticated forms of attack. The ingenuity of the cryptographers further supplements the physical security of the chip, ensuring that penetrating one card's security does not compromise an entire card scheme.

It is because of these security and data storage features that smart cards are rapidly being embraced as the consumer token of choice in many areas of the public sector and commercial worlds. The internet, in particular, is focussing the need for online identification and authentication between parties who cannot otherwise know or trust each other, and smart cards – coupled with effective cardholder verification techniques – are believed to be the most efficient and portable way of enabling the new world of etrade. Interoperability is the key requirement to facilitate universal consumer acceptability: the ability of a card function developed by one organization to be used without difficulty in schemes owned and operated by many organizations. So it is that the current world population of smart cards of some 1.7 billion is set to increase to 4 billion or more cards within the next 3-4 years.

By, S. Naga Vikram Prasad, III - B.Sc., (CS) - 'C'.

SOAP (Simple Object Access Protocol)

INTRODUCTION:

SOAP is a lightweight and simple XML-based protocol, designed to exchange structured information on the web, SOAP can be used in combination with a variety of existing Internet Protocols such HTTP, SMTP etc.

WHY SOAP?

The Internet is fundamentally changing computing and consequently, it is fundamentally changing the way business is done. So, developers must be able to integrate more than one service. They must be able to assemble solutions from any software components, applications and devices. A new application model is needed, which provides services for distributed components to connect distributed services and components in a quick and reliable manner.

The solution for creating this kind of rich application-to-application communication has to employ an object model such as Microsoft's DCOM or the Object Management Group's Internet Inter-ORB Protocol (IIOP) or Common Object Request Broker Architecture (CORBA). But these technologies have some limitations when it comes to creating Web Services. In other words, to build a distributed application using these protocols, there must be the same distributed object model running at both ends of the connection. This is impractical in the Internet World.

Answer to this challenge is to use existing Internet standards: HTTP, XML.

The problem with HTTP alone is that it is mainly a mechanism for passing files from server to client. To create Web services we need to extend HTTP. SOAP does exactly that. It adds a set of HTTP headers and XML to enable complex application-to-application communications over the Internet.

SOAP is a distributed object protocol that allows Remote Procedure Calls (RPC) between servers. Unlike existing protocols SOAP is explicitly intended to be usable with firewalls in place. Equally important, SOAP is explicitly intended to be used with only one component technology.

EVOLUTION OF SOAP:

UserLand, Ariba, Compaq, IBM, IONA, Lotus, Microsoft and SAP proposed the SOAP Internet protocol to W3C, in May 2000 with the hope that it will revolutionize application development by connecting graphic user interface desktop application to Internet Servers using the standards of the Internet: HTTP and XML.

WHAT IS SOAP?

SOAP is a lightweight and simple XML-based protocol, designed to exchange structured information on the web. SOAP allows software components and applications communicate using standards of Internet, they are HTTP and XML. SOAP does not care what Operating System, programming language or object model is being used on either the server side or the client side. SOAP has no object model, but rather binds applications running under any object model.

SOAP is simple and easy to implement, which makes SOAP attractive. It defines HTTP clients and parameters between HTTP clients and servers. The client sends a request to a server to invoke an object, and the server sends back the results. The messages themselves are formatted in XML, and encapsulated in HTTP protocol messages. It works with existing Internet infrastructure. That is, it is not necessary to make any special accommodations on any of the firewalls or proxy servers for SOAP to work.

SOAP is a protocol specification for invoking methods on servers, services, components and objects. It is simply a well-documented wire protocol. Components make use of the platform independent XML to communicate with other components anywhere in the web.

SOAP consists of three parts:

- The SOAP envelope that defines a framework for describing what is in a message and how to process it.
- The SOAP encoding rules for expressing instances of applications-defined data types.
- The SOAP RPC representation, which defines a convention that, can be used to represent procedure calls and responses.

SOAP DESIGN GOALS:

- A major design goal for SOAP is simplicity and extensibility.
- Main goal of SOAP is to facilitate inter-operability.
- Provide a standard object model invocation protocol built on Internet standards, using the HTTP as the transport and XML for data encoding.
- Create an extensible protocol and payload format that can evolve over time.

By, M. Rajarajan, III –B.Sc., (CS) –"A".

திருக்குறளின் 134வது அதிகாரம் (TT அதிகாரம்) சமீபத்தில் கண்டறியப் பட்டுள்ளது அந்த அதிகாரம் பின்வருமாறு :

Bug கண்டுபிடித்தாரே ஒருத்தர் அவர்நாண Debug செய்து விடல்

Copy-paste செய்து வாழ்வாரே வாழ்வார் மற்றெல்லாம் codingகெழுதியே சாவர்.

எம்மொழி மறந்தார்க்கும் job உண்டாம் jobஇல்லை `C"யை மறந்தார்க்கு.

Logic, syntax இவ்விரண்டும் கண்ணென்பர் Program செய் பவர்.

Netai தேடி copy அடிப்பதின் மூலையிலிருந்து logic யோசி

பிறன் Code நோக்கான் எவனோ அவனே Tech Fundu.

எதுசெய்யார் ஆயினும் compileசெய்க செய்யாக்கால் பின்வரும் syntax error.

எது தள்ளினும் projectல் requirement தள்ளாமை மிகச் சிறப்பு

Chatெனில் yahoo-Chat செய்க இல்லையேல் Chatடலின் Chatடாமை நன்று

Bench, Project, e-mail இம்மூன்றும் Programmer வாழ்வில் தலை.

> By, S. Vivekanandan, III – B.Sc., (CS) – 'C'.

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WINDOWS Vs LINUX

WINDOWS APPLICATIONS	LINUX EQUIVALENT
Outlook Express	Evolution
MSN Messenger	Gaim
Yahoo Messenger	Gaim
ICQ	Gaim
AOL Messenger	Gaim
Win Jab or other JabberClient	Gaim
Microsoft Words	Open Office Writer
Microsoft Excel	Open Office Calc
Microsoft PowerPoint	Open Office Impress
Adobe Acrobat	Adobe Acrobat
Windows Explorer / File Manager	Konqueror File Manager
Internet Explorer / Mozilla / Netscape	Mozilla / Netscape
Adobe PhotoShop	Gimp
Java	Java
Adobe Distiller (PDF Writer)	In built inopen office

T. Suresh, I - B.C.A.

COMPETITIVENESS OF INDIAN IT INDUSTRIES

We believe that government, industry and the academia can take up this issue of increasing the domestic IT segment through strong and sustainable use of IT for education and healthcare by bringing out a road map. Let us take a look at our IT industry employing 500,000 people and earning US\$10 billion, which is less than 1% of the world market, from another perspective. A typical international software company with 50,000 employees earns? US\$ 20 billion through its worldwide operations.

Based on the current trend, if we have to reach US\$ 80 billion, we will have to multiply our workforce 8 times, which may not make out operations competitive. So our software industry has to move up the value chain and come up with innovative products that will sweep the world. We are confident that Indian Industry will soon come up with such mega innovative. A country which has seen what is networking of talents to make more than 20,000 man-year projects in satellites, fighter aircraft, launch vehicles, atomic energy and missiles, can certainly think of networking of talents in our industry, research laboratories and the academia. This will ensure emerge of many Indian multi-nationals that would bring per capita revenues to almost 10 times higher than what these are today. Today, our IT industry is proud that 260 out of the Fortune 500 companies are its clientswhen we march towards a developed India. We would like the IT industry to lead the march by proclaiming that "260 of the Fortune 500 companies are Indian MNCs". This is our dream.

- S. Arunprasad, III- B.Sc., (CS)-'A'.

Every one things of changing the world, but no one things of changing himself

 ${f iT}$ unlimited

COMPUTER PUZZLE

Е	S	P	U	U	M	О	U	S	Е	N
С	E	L	L	В	A	Е	V	Ι	N	Н
Н	I	В	M	G	N	D	A	N	D	A
A	T	Н	S	G	I	Ι	G	Е	Е	В
R	A	I	Н	S	P	T	I	G	A	V
L	N	I	T	A	U	O	Н	A	M	A
Е	N	T	Е	R	L	R	L	U	T	N
S	В	A	В	В	A	G	E	J	E	Е
A	X	S	O	F	T	W	A	R	E	N
Y	S	Z	W	M	О	N	I	T	О	R
D	I	S	P	L	R	A	Y	R	A	M

NOTE: (The answers are hidden in any order within the cells)

QUESTIONS:

- 1. The father of the computer.
- 2. Which company develops EBCDIC code?
- 3. A robot arm is also called _____.
- 4. The instruction and data we give to a computer for doing different jobs are together called as _____.
- 5. Screen is a part of it.
- 6. It is also called as rat.
- 7. Another word for stop.
- 8. Mention
- 9. A word-processor is basically a little more smart.
- 10. The intersection of rows and columns.

if succeeded
Page no.++;
else
Page no. = 38;
end if



He who believes in nobody knows that he himself is not to be trusted.

NETWORK-GROUND UP (PART – I)

Network, in computer science means techniques, physical connections, and computer programs used to link two or more computers. Network users are able to share files, printers, and other resources; send electronic messages and run program on other computers.

A network has three layers of components: application software, networks software, and network hardware. **Application software** consists of computer programs that interface with network users and permit the sharing of information, such as files, graphics, and video, and resources, such as printers and disks. One type of application software is called client-server. Client computers send request for information or requests to use resources to other computers, called servers that control data and applications. Another type of application software is called peer-to-peer. In a peer-to-peer network, computers send messages and request directly to one another without a server intermediatry.

Network software consists of computer programs that establish protocols, or rules, for computers to talk to one another. These protocols are carried out by sending and receiving formatted instructions of data called packets. Protocols make logical connections between network applications, direct the movement of packets through the physical network, and minimize the possibility of collisions between packets sent at the same time.

Network hardware is made up of the physical components that connect computers. Two important components are the transmission media that carry the computer's signals, typically on wires or fiber-optic cables, and the network adapter, which accesses the physical media that link computers, receives packets from network software, and transmits instructions and requests to other computers. Transmitted information is in the form of binary digits, or bits (1s and 0s), which the computer's electronic circuitry can process.

NETWORK:

A network has two types of connections: physical connections that let computers to directly transmit and receive signals and logical, or virtual connections that allow computer applications, such as word processors, to exchange information.

MEDIA:

The medium used to transmit information limits the speed of the network, the effective distance: between computers, and the network topology. Copper wires and coaxial cable provide transmission speeds of a few thousand bits per second (MBPS) for short distances. Optical fibers carry 100 million to 1 billion bits of information per second over long distances.

TOPOLOGY:

Common topologies used to arrange the computers in a network are point-to-point, bus, star, and ring. Point-to-point topology is the simplest, consisting of two connected computers. The bus topology is composed of a single link connected to many computers. All computers on this common connection receive all signals transmitted by any attached computer. The star topology connects many computers to a common hub computer. This hub can be passive, repeating any input to all computers similar to the bus topology, or it can be active, selectively switching inputs to specific destination computers. The ring topology uses multiple links to form a circle of computers. Each link carries information in one direction. Information moves around the ring in sequence from its source to its destination.

NETWORK OPERATION AND MANAGEMENT:

Network management and system administration are critical for a complex system of interconnected computers and resources to remain operating. A network manager is the person or team of people responsible for configuring the network so that it runs efficiently. For example, the network manager might need to connect computers that communicate frequently to reduce interference with other computers. The system administrator is the person or team of people responsible for configuring the computer and its software to use the network.

FUTURE TECHNOLOGIES AND TRENDS:

The wide use of notebook and other portable computers drives advances in wireless networks. Wireless networks use either infrared or radio frequency transmissions to link these mobile computers to networks. Infrared wireless LANs work only within a room, while wireless LANs based on radio-frequency transmissions can penetrate most walls. Wireless LANs have capacities from less than 1 MBPS to 8 MBPS and operate at distances up to a few hundred meters. Wireless communication for WAN use cellular telephone networks, satellite transmissions or dedicated equipment to provide regional or global coverage, but they have transmission rates of only 2000 to 19,000 bits per second.

In February 1996 Fujitsu Ltd., Nippon Telephone and Telegraph Corporation, and a team of researchers from AT&T succeeded in transmitting information through an optical fiber at a rate of 1 trillion bits per second – the equivalent of transmitting 300 years of newspapers in a single second. This was accomplished by simultaneously sending different wavelengths of light, each carrying separate information, through the optical fiber. If it can be integrated into a network, this new technology will make it easy, inexpensive, and incredibly fast to send information, as video and memory-sensitive three-dimensional images.

By, M. Rajarajan, III - B.Sc., (CS) - A.

CEOs

QUESTIONS:

- 1) Who is the co-founder of Sun Microsystems?
- 2) Who is the president of AT&T Bell labs?
- 3) Who is the founder of Hotmail?
- 4) Who is the General Manager of Hewlett Packard?
- 5) Who is the new MTD (Microsoft Testing Director) of Windows 2000?

6) Who is the CEO of Wipro industry?

Answers: Page No.: 36 - Cimi Paul, III-B.Sc. [Cs]-'A'.

HEY -DOMAINS INTRODUCE U'R SELF

Domain	Description
.com	A commercial institution or organization or
	business
.edu	Educational institutions
.gov	Government entity
.mil	Military Organization
.net	A network administration
.org	Other private Organizations

HISTORY OF COMPUTERS

3000 BC	Chinese Abacus
1617 AD	Logs and Bones by John Napier
1620	Slide Rule by William Oughtred
1642	Adding Machine by Blaise Pascal
1673	Mechanical Calc. By Gottfried Von Leibniz
1801	Punched card control looms by Joseph Jacquard
1833	Difference Engine by Charles Babbage
1869	Electro-Mechanical card tabulators by Herman Hollerith
1937	ABC Computer by Dr. Atanasoff and Berry
1944	Mark I-calculating machine by Howard Aiken
1947	ENIAC – Operational by Eckart and John Mauchly

By, G. Mohana Sundaram, I - B.Sc., (CS) - 'A',

The only way to have a friend is to be one.

CAPABILITIES OF A COMPUTER

Today the micro-mini computer, whether a desktop, personal computer, laptop, notebook, hand-held, or whatever, has changed our lives.

Home use:

- Write a letter or other document.
- Maintain a household budget.
- Setup and maintain a financial plan
- Track Investments
- Shop by modem
- Manage a checking account
- Pay bills
- Maintain a security system
- Check airfare and book passage
- Prepare a tax return
- Keep a household inventory
- Keep an appointment calendar
- Access information from remote resources
- Learn a language or other skill
- Play games
- Compose music
- Draw and paint

Office use:

- Keep accounting records
- Maintain inventory records
- Record client & personnel data
- Prepare personalized mailings
- Prepare audio-video presentation
- Publish a newsletter or advertising material
- Setup a business plan
- Track projects
- Make labels
- Design buildings, products etc
- Project budgets for sales, empenser etc

This is only a small sampling of the jobs that can be done with the computer today and doesn't even touch on the things we can expect in the future.

By, E. Punarvitha, I – B.C.A.



PROGRAMMING LANGUAGES ARE LIKE CARS

ASSEMBLER: A formula-I racecar. Very fast but difficult to drive and maintain.

FORTRAN II: A Model T-Ford. Once it was the king of the road.

FORTRAN IV: A Model A-Ford.

FORTRAN 77: A six-cylinder Ford Farina with standard transmission and no seat belts.

COBOL: A delivery van. It's bulky and ugly but it does the work.

B: A second-hand Rambler with a rebuilt engine and patched upholstery. Your dad bought it for you to learn to drive. You'll ditch it as soon as you can afford a new one.

C++: A black Firebird, the all macho car. Comes with optional seatbelt (lint) and optional fuzz buster (escape to assembler).

B: An Austin Mini. Boy that's a small car.

ALGOL 68: An Aston Martin. An impressive car but not just anyone can drive it.

PASCAL: A Volkswagen Beetle. It's small but sturdy. Was once popular with intellectual types.

LISP: An electric car. It's simple but slow. Seat belts are not available.

PROLOG/LUCID: Prototype concept cars.

LOGO: A kiddies replica of a Rolls Royce. Comes with a real engine and a working horn.

APL: A double-decker bus. It takes rows and columns of passengers to the same place all at the same time but it drives only in reverse and is instrumented in Greek.

ADAM: An army-green Mercedes-Benz staff car. Power steering, power brakes, and automatic transmission are standard. No other colors or options are available. If it's good enough for generals, it's good enough for you.

JAVA: All-terrain very slow vehicle.

By, S. Arunprasad, III - B.Sc., (CS)-'A'.

HISTORY OF INTERNET

INTERNET:

"Internet" refers to the global information system that:

- (i) Internet is logically linked together by a globally unique address space based on the Internet Protocol (IP)
- (ii) Internet is able to support communications using the Transmission Control Protocol (TCP)

THE SPUTNIK: 1957

The Internet was conceived when the first artificial earth satellite, the sputnik, was launched into the orbit on October 4 1957, and as a response the US Department of Defense created the Advanced Research Projects Agency (ARPA)

PACKET SWITCHING: 1961

The earliest models of networking used circuit switching. This required an unbroken connection between the communicating host. Leonard Klein at MIT came up with packet switching, which was dependent on a single unbroken line of communication.

GALACTIC NETWORKS: 1962

In August 1962 JCR. Licklider of MIT wrote a series of memos discussing his concepts of a galactic network.

The same year, first commercial communications satellite was placed in the orbit.

FIRST WIDE AREA NETWORK (WAN)

Thomas Merril and Laurence G. Roberts connected the TX-2 computers over a telephone line to create first wide area network.

ARPANET – 1969

In September 1969 BBN installed the first IMP at the Network Measurement center, University of California, Los Angles (UCLA), and first host node was established at the Standard Research Institute (SRI) and the first host-to-host message was sent from UCLA to SRI.

NCP – The First Protocol

The NWG presented NCP (Network Communication Protocol)

IT'S FUN TIME!

- "Have you heard about the object-oriented way to become wealthy?"
- "No..."
- "Inheritance."

E-mail: 1972

In March 1972, Rat Tomlinson at BBN wrote the Basic e-mail send and receive program or the ARPANET. It easily coordinates with four nodes. In July, Laurence Roberts ARPA expanded its utility by writing a program to list selectively read, forward, and responds to messages.

In October 1972, the ARPANET was demonstrated publicly at international computer communication conference (ICCC) for the first time.

WWW -The Graphical Browser: 1991

Till date, National Science Foundation (NSFNET), which served as the backbone of the Internet, had commercial use of the Internet. This ban was lifted, clearing the way for electronic commerce.

Paul Linder and Mark P McCahill at the University of Minnesota released "gopher", the first pointer –ad click way of finding in the Internet.

Time Berners-lee working at CERN in Switzerland posted the code of the www. The ability to combine words, pictures, and sounds on web pages excited many computer programmers, who see the potential for easy publishing of information on the net.

WORLD WIDE WEB CONSORTIUM: 1994

The www consortium (w3e) is formed by Tim Berners-Lee and Alvezza, and meets for the first time on December 14 in Cambridge.

1998:

There were 18 million Internet Web Host and, 100 million Internet users.

2000:

Internet Expert predicts that there will be 300 million Internet users by the year 2001.

2001 onwards:

"World Wide Web is the universe of network-accessible information, an embodiment of human knowledge""

> Bv, G. Mohana Sundaram, I-B.Sc., (CS) - 'A',

IT'S FUN TIME!

Once a programmer drowned in the sea. Many Mariners where at that time on the beach, but the programmer was shouting "F1 F1" and nobody understood it.

Do a kindness once and it will be seen as a favour; do it twice and it become a duty.

Ten Ways To Realize Your Internet Connection Is A Little Slow

- 1. Text on Web pages display as Morse Code
- 2. Graphics arrive via FedEx.
- 3. You believe a heavier string might improve your throughput
- 4. You post a message to your favorite Newsgroup and it displays a week later.
- 5. Your credit card expires while ordering on-line.
- 6. Playboy web site exhibits "Playmate of the year"...for 1989.
- 7. You're still in the middle of downloading that popular new game, "Ping Pong".
- 8. Everyone you talk to on the 'net phone' sounds like Forest Gump.
- 9. You receive e-mails with stamps on them.
- 10. You click the "Send" button, a little door opens on the side of your monitor and a pigeon flies out.

By, S. Bhuvaneswari, III -B.Sc., (CS)-'A'.

SYSTEM REQUIREMENT SPECIFICATION

System Name: Software Professional.

Overview: This document provides quite essential functionality of desired system. The system should have high responsive skills and endurance.

Functionalities:

- 1) An irreputable genius graced to conquer the pinnacle of success.
- 2) An enduring professional pursuing an energetic and demanding work-enthusiasm.
- 3) A voracious reader gifted with an irrepressible appetite for languages and coffee.
- 4) An eminent typist chasing an irresistible zeal for music.
- 5) A budding entrepreneur seeking a challenging managerial expertise.
- 6) A dedicated academician capable of delivering the punching logic.
- 7) An endless loop with an unquenchable thirst to fill the voids of the brain.
- 8) An efficient product capable of delivering the instantaneous best at the most-warranted moment.
- 9) An impeccable system possessing the inherent immunity to bugs and inimitable debugging skill.

By, L. Manjula, I - B.C.A.

The best and the most beautiful things in the world cannot be seen or even touched, they must be felt with the heart.

A REVOLUTION IN CYBERSPACE

1. Cyberspace transcends all boundaries

Cyberspace is a dimension of ideas -- It goes beyond the boundaries of time and space. The Internet is a free medium, and so it has the potential to link the entire world together and provide the message of unity that is the basis of the Peace on Earth Movement. Although the Internet is not accessible to EVERYONE, it provides an enormous wealth of ideas and information that can be printed out and shared in more conventional means of distribution to those without access.

2. Spreading the message in cyberspace

Action without Borders (www.idealist.org) is one of a growing number of networks in cyberspace that are dedicated to share a message of action for peace and compassion. It and many other networks, like The People4Peace Network (www.People4Peace.net), Better World Links (www.BetterWorldLinks.org) and Network For Good (www.NetworkForGood.org), were created as forums to help establish a common ground for all people who care about our world and our future.

3. Peace is spreading through cyberspace

Slowly people, groups and organizations all around the world, are linking together with their own individual WebPages that promote peace and compassion. Ordinary people are displaying peace symbols on their personal pages, and are linking to peace networks, to show that peace is important in their lives. As peace continues to flourish and spread on the Internet, we are creating, together, the beginning of a vast network that will reach around the world in unity for peace on earth.

4. The Peace on Earth Movement welcomes all compassionate people

There are no membership fees to be part of The Peace on Earth Movement. There are no ideologies to which you must subscribe. You don't have to join Action without Borders or any other network to be a member of the Peace on Earth Movement. But networks like Action without Borders and People4Peace.net welcome those who care about our world to share their visions or resources or ideas with the members of this global community of caring people. By linking to this community in cyberspace, we can all grow, and we can find the strength and encouragement to share the message that **WE WANT PEACE ON EARTH!**

- A.S. Akyilesh Aswin & M. Senthil Sakthivel, II – B.C.A.

MARKET MASTI

MARKET MASTI - I (Camera Phones)

It's funny that, just a year or two ago, the thought of camera phones seemed like something that would still be a long time in coming onto the market. Suddenly they're here, and we're faced with ads left and right. It is worth upgrading your cell calling plans and products to get this new feature.

Cell phones that act as cameras with which you can snap pictures and send them immediately are definitely as funny as they sound and, getting your hands on them actually isn't as expensive as you might think!

T-Mobile is the wireless provider at the forefront of camera phones technology. Their 't-zones' service gives you everything you need to get the most out of your camera phone, for just a few extra dollars per month.

By, A. Haji Ali, I – B.Sc., (CS) – 'B'.

MARKET MASTI - II (Progress version '9')

JK technosoft, independent software vendor of progress software, announced the availability of progress version 9, a suite of integrated development tools, application servers and relational database products. This version enables the development of advanced multi-tier – applications with maximum deployment facility.

The suite of products includes progress open server, an application server, an application server for developing shared application components, provision plus, an integrated application environment for multi-tier, client-server and web-based enterprise applications; and RDBMS for scalable storage of SQL and 4GL application data. Progress v9 is applicable on windows 95/98, NT, As/400 and UNIX platforms.

By, J. Mohamed Wasim, I – B.Sc., (CS) – 'A'.

IT'S FUN TIME

A system programmer came home from work almost at dawn and told his wife enthusiastically: "Tonight I have installed a new release of MVS/ESA together with VM/CMS and CICS/VS".

"G.O.O.D" answered his wife.

BIOENABLE TECHNOLOGIES

BIO ACCESS:

BIOENABLE TECHNOLOGIES has launched Bioaccess BE2000, a compact, standalone, low-cost, fingerprint based access control terminal. BE2000 simply register users with one or more fingerprints and activate relays on successful verification. The offering is available in different sizes and casings and has been developed for low-end access control application like electronic door locks, car locks, sages, industrial automations and security systems. This latest offering from BioEnable can activate or deactivate any device after fingerprint verification. Bio Access can store upto 14-fingerprints makes it suitable for homes, offices and other access control applications. The access device uses less number of components compared to other access control systems and does not allow PC or network connectivity. The product can be used for access control insensitive areas like airports, defense, data centers, server rooms, etc.

FEATURES:

- Fool proof security with advanced fingerprint minute matching.
- Fast verification speed of less than one second.
- Supports both verification and identification modes.
- Low cost
- Easy to install and use
- Battery backup available
- The fingerprint data is secured
- Comes with assured warranty support and service

By, T. Suresh, I-B.C.A.



MARRIAGE INVITATION

LOTUS 1-2-3 Cordially invites...

DBASE weds LOTUS 1-2-3 6^{TH} , OCT 2003.

Dear Data,

Make my programs without syntax error in ROM memory with esteemed entry on the period of my marriage with

Mr. Bill Gates, M.C.A., M.Phil.

On Monday, Oct 6th 2003 (MM/DD/YYYY) at Spread Sheet Hall.

Best Compliments from: Best Compliments from:

Bridge groom's Relation:
Father - READ
Mother - REM
Sister - DISPLAY
Brother - PRINT
Brother - PRINT
Brother - JAVA

Bridge's Relation:
Father - WordStar
Mother - PASCAL
Sister - FORTRAN
Brother - COBOL
Cousin - JAVA

Bridge groom's Uncles: Bride's Uncles:

INPUT - Engineer GOTO - Motor Servicer

FOR - Doctor STOP - Teacher

WHILE - WEND (Business) LOCATE - Computer Programmer

END - WorkShop C++ - Cashier FORTRAN - Merchant BASIC - Clerk

PLACE:

SPREAD SHEET MARRIAGE HALL, RAM Zone, 16, Printer Buffer, Floppy Disk – 5.

BUS ROUTE:

No.1 ADDRESS Bus – Control Unit, CPU (Stop).
(Or)
No.5 DATA Bus – Control Unit, CPU (Stop).

E. Punarvitha, I- B.C.A.

AOP (Agent Oriented Programming) (Part I)

ABSTRACT:

Computer programming environments for learning should make it easy to create worlds of responsive and autonomous objects, such as video games or simulations of animal behavior. But building such worlds remains difficult, partly because the models and metaphors underlying traditional programming languages are not particularly suited to the task. This dissertation investigates new metaphors, environments, and languages that make possible new ways to create programs -- and, more broadly, new ways to think about programs.

In particular, it introduces the idea of programming with "agents" as a means to help people create worlds involving responsive, interacting objects. In this context, an agent is a simple mechanism intended to be understood through anthropomorphic metaphors and endowed with certain lifelike properties such as autonomy, purposefulness, and emotional state. Complex behavior is achieved by combining simple agents into more complex structures.

While the agent metaphor enables new ways of thinking about programming, it also raises new problems such as inter-agent conflict and new tasks such as making the activity of a complex society of agents understandable to the user. To explore these ideas, a visual programming environment called LiveWorld has been developed that supports the creation of agent-based models, along with a series of agent languages that operate in this world.

Definition:

A <u>mobile agent</u> is an encapsulation of *code*, *data*, and *execution context* that is able to *migrate autonomously* and *purposefully* within computer networks *during execution*.

The *agent system* provides an algorithmically complete programming language. Therefore, an agent is able to react sophistically on external events. An agent may be persistent in the sense that it can suspend execution and keep local data in stable storage. After resuming activity, an agent's execution is continued, not necessarily at the same location.

IT'S FUN TIME!

The programmer to his son: "Here, I brought you a new basketball." "Thank you, daddy, but where is the user's guide?"

AOP Models

AOP models have various aspects: the *programming model* provides the conceptual basis, but in the context of open distributed applications also agent *migration* and *cooperation* aspects are of interest.

AOP programming models are frequently Smalltalk-like in combination with an abstract machine. Such mechanisms provide the required homogeneity for allowing seamless transfer of evaluation contexts between heterogeneous hardware and operating system platforms. Compared with communication mechanisms like RPC, agents carry their own process state around. This fosters failure recoverability if the Agent State can be preserved by a persistency service. If an agent thus encapsulates client Application State, the accessing application may remain stateless - and therefore easy to recover. However, even such client/agent cooperation requires a specific protocol in order to access the results, i.e., to relate the returning agent or response to the original request. The client application must therefore at least preserve an application protocol state. This restriction applies in any situation where service-specific semantics is obeyed by client implementations - thus leading back to the world of closed applications again.

AOP in an Open World

This paper argues that an electronic service market emerges most dynamically if an infrastructure that fosters proliferation of open applications is provided. However, our examples have shown that AOP can be interpreted as programming local to the client site. This view is based on a "closed application" paradigm, since, in this view, service providers and agent programmers constitute a joint domain of conformance.

AOP is thus best applicable if the domain of conformance is restricted to the service providing organization. The only possible way to decouple client and server in such a scenario is to install a server-created agent at the client's site. The respective process may be executed either by the server as a "remote installation" or by the client by "agent acquisition". In either case, such installation is only possible with the client's benevolence. The agent encapsulates all information and code required to allow the human user to interaction reasonably with either the agent itself or the remote service. This principle shall be called the *reverse agent principle*.

- G. Anandha Lakshmi, III - B.Sc., (CS) - 'C'.

IT'S FUN TIME!

The boy is smoking and leaving smoke rings into the air.

The girl gets irritated with the smoke and says to her lover: "Can't you see the warning written on the cigarettes packet, smoking is injurious to health!"

The boy replies back: "Darling, I am a programmer. We don't worry about warnings, we only worry about errors."

SOFTWARE DEVELOPMENT LIFE CYCLE

- 1. Programmer produces code he believes is bug-free.
- 2. Product is tested. 20 bugs are found.
- 3. Programmer fixes 10 of the bugs and explains to the testing department that the other 10 aren't really bugs.
- 4. Testing department finds that five of the fixes didn't work and discovers 15 new bugs.
- 5. Repeat three times steps 3 and 4.
- 6. Due to marketing pressure and an extremely premature product announcement based on overly optimistic programming schedule, the product is released.
- 7. Users find 137 new bugs.
- 8. Original programmer, having cashed his royalty check, is nowhere to be found.
- 9. Newly assembled programming team fixes almost all of the 137 bugs, but introduce 456 new ones.
- 10. Original programmer sends underpaid testing department a postcard from Fiji. Entire testing department quits.
- 11. Company is bought in a hostile takeover by competitor using profits from their latest release, which had 783 bugs.
- 12. New CEO is brought in by board of directors. He hires a programmer to redo program from scratch.
- 13. Programmer produces code he believes is bug-free...

By, G. Anandha Lakshmi, III -B.Sc., (CS)-'C'.

IT'S FUN TIME!

A software verifier read in the Bible that God protects all fools, and decided to test it empirically. He jumped out of the window and broke a leg. There he lies, writhing in pain, and happily thinks: "I never really considered myself a fool, but I never knew I was THAT clever!"

LIFE BEFORE THE COMPUTER

Profanity
A keyboard was a piano!

Memory was something that you lost with age A CD was a bank account An application was for employment A program was a TV show A cursor used And if you had a 3 ½ inch floppy You hoped nobody found out!

Compress was something you did to garbage not something you did to a file and if you unzipped anything in public you'd be in jail for awhile!

Log on was adding wood to a fire hard drive was a long trip on the road A mouse pad was where a mouse lived and a backup happened to your commode!

Cut - you did with a pocketknife Paste you did with glue A web was a spider's home And a virus was the flu!

I guess I'll stick to my pad and paper And the memory in my head I hear nobody's been killed in a computer crash But when it happens they wish they were dead!



By, S. Ambika, III B.C.A., -'A'.

IT'S FUN TIME!

What is an example of a never halting program? Friedrichs and Magnus in front of an open elevator, each saying, "you go first".

OUR ROMANCE WITH COMPUTERS

The good news is that most of the things you expect from a computer is achievable.

Fore runners of the computer in one form or another have been with us for a long time. The Abacus, a hand held counting device that is still in use throughout the orient, dates back to about 500 Bc. The French scientist, Blaise Pascal developed a mechanical calculator in the middle of the 17th century that formed the basis for calculators manufactured well in to the 20th century.

"Fore runners of the modern computer"

Credit for the modern computer goes to the British mathematician Charles Babbage who in 1830s designed a steam powered 'analytical engine' that worked with punch cards.

Although, Babbage worked for decades at perfecting his design, he never built the machine.

In the 1880s American inventor Herman Hollerith developed a 'tabulator' to manipulate data on punch cards. The device was used to compile data from the 1890 census in less than two months is compared to more than seven years which took to compile data from the previous census by hand!

In 1848 George Boole, another British mathematician developed a system of binary logic in which all questions could be answered as "true" or "false". It was almost a hundred years, however, before a computer was developed based on binary numbers using Boolean logic or Boolean algebra.

Until the late 1930s, calculator or computers were based on the decimal system, mechanical devices that required hundreds of moving parts. The transition to binary logic allowed, the use of electrical circuitry, that is, switches that were turned ON or OFF, to perform complex calculation.

By, K. Prakash, I - B.C.A.

IT'S FUN TIME!

Why all Pascal programmers ask to live in Atlantis? Because it is below C level.

PROUD TO BE AN INDIAN

We, Indians are the wealthiest among all ethnic groups in America, even faring better than the whites and the natives. There are 3.22 millions of Indians in USA (1.5% of population), yet

- 1. 38% of Doctors in USA are Indians.
- 2. 12% of Scientists in USA are Indians.
- 3. 36% of NASA scientists in USA are Indians.
- 4 34% of Microsoft employees in USA are Indians.
- 5. 28% of IBM employees in USA are Indians.
- 6. 17% of INTEL scientists in USA are Indians.
- 7. 13% of Xerox employees in USA are Indians.



By, T. Janany, III-B.Sc., (CS)-'A'.

FUNNY EXPANSIONS

- ISDN It Still Does Nothing
- DOS Defective Operating System
- BASIC Bill's Attempt to Seize Industry Control
- IBM I Blame Microsoft
- CD-ROM Consumer Device, Rendered Obsolete in Months
- WWW World Wide Wait
- PENTIUM Produces Erroneous Numbers Through Incorrect Understanding of Mathematics
- WINDOWS Will Install Needless Data On Whole System
- MICROSOFT Most Intelligent Customers Realize Our Software Only Fools Teenagers

By, M. Senthil Sakthivel, II – B.C.A.

IT'S FUN TIME!

The most important thing in the programming language is the name. A language will not succeed without a good name. I have recently invented a very good name and now I am looking for a suitable language.

Nothing dies faster than a new idea in a closed mind.

COMPUTERS ABOARD

Introduction to system:

The modern world is based on computers. Without computer, we cannot do any work. There are different types of systems. The Supercomputers are used in Aerospace research and scientific centers. We can see the achievement of the computer system in the spacecraft.

Space shuttle: takeoff and landing

The space shuttle is carried into space on the back of a powerful liquid-fuel rocket, with a second pair of solid rocket boosters strapped onto the sides. The shuttle lands like a conventional aircraft, though it depends heavily on sophisticated computers and software, as well as skilled pilots. There is little room for error and no second chances; at 10,000 feet (3,048 meters) high and 25 miles (40 km) from touchdown, it must already be in the glide slope and centered precisely on the runway to make a proper landing.

Aerospace products: Flight Vehicles

The product line of the aerospace industry is necessarily a broad one, because each of the primary products—that is, the flight vehicles—requires hundreds, thousands, or in a few cases millions of systems, subsystems, components and individual parts.

Aircraft

Among the primary products, manufacture of aircraft has continued throughout the years as the major workload of the world's aerospace industry. A majority of those nations with such industries build only aircraft engines. In the United Kingdom and France, missile-space efforts are relatively small in comparison to aircraft-output. Even in the United States, which is heavily engaged in missile and spacecraft development and production, aircraft manufacture holds first position by any measure of productivity.

The heavy-aircraft category includes nearly all military planes, commercial airliners, and large corporate aircraft adapted from airline designs. Among the more technologically demanding craft in this category are the supersonic military planes, huge military and commercial transports weighing up to 800,000 pounds (360,000 kilograms), and supersonic jetliners.

By, S. Vivekanandan & S. Senthil Kumar, III – B.Sc., (CS) – 'C'.

JUMBLED JUNGLE

Group A (Inventions)

- 1.Super Computer
- 2.Punched Tape
- 3.Difference engine
- 4. First Electro-mechanical computer
- 5.Logrithms
- 6.Binary Number System
- 7.Slide rule
- 8. Mechanical Calculating Machine
- 9.Stepped Reckoner
- 10.Arithometer

Group B (Inventors)

- a. eslcrah abebagb
- b. adwhor enkai
- c. eys umro yrga
- d. hsepjo emiar adqurajc
- e. lmilwai rheguotd
- f. lhwilem ckaichsrd
- g. esharcl ahmost ed cnralo
- h. yadl daa eacolevl
- i. Ohnj ripnea
- j. tfotrgeid izbneil

How to find this?

Re-arrange the jumbled inventors in Group-B and try to match them with the inventions in Group-A.

(Hint: - eslcrah abebagb --> Charles Babbage.)

Answers: Page No.: 36.



By, S. Sangeetha, I-B.C.A.

IT'S FUN TIME!

The programmer's cheer:

Shift to the left, shift to the right!

Pop up, push down, byte, byte, byte!!

Education is when you read the fine print. Experience is what you get if you don't.

BRAIN WASH

(1) Cotton or Gold:

Which would you say is heavier, a pound of cotton or a pound of gold?

(2) The Sixteen Fours:

How can you make a total of 1000 by using sixteen 4's?

(3) Squares and Right Angles:

Can you make 2 squares and 4 right-angled triangles using only 8 straight lines?

- (4) Five people are sitting in a row in front of a camera,
 - (i) Mr. X is on right of Mr. Y
 - (ii) Mr. P is next to Mr. Z on his right
 - (iii) Mr. R and Mr. P are adjacent to each other
 - (iv) Mr. R is 2nd person from person sitting in center

Which of them cannot be found sitting at extreme end?

- (5) Can you place 10 coins in such a way that they lie in 5 straight lines and on each line there are 4 coins?
- (6) Supposing a clock takes 7 seconds to strike 7, how long will the same clock take to strike 10?

Answers: Page No.: 37.

By, M. Karpagam, C. Sudha. M. Madhumathi, III – B.C.A., - 'B'.



CAREER ++

Group Discussion

What is GD?

A Group Discussion (GD) is a simulated exercise, where you cannot suddenly put up a show, since the evaluators will see through you easily.

Eight Tips to Manage a GD:

Many people become uneasy at the thought of leading a meeting or a GD. What if nobody talks? What if someone talks too much? Here are some eight tips to lead a fruitful discussion:

- 1. Whom to watch? When someone else is talking, look at the other people in the room instead of at the speaker. This creates a feeling of greater inclusiveness.
- 2. *Don't respond to every statement.* Wait for others in the group to comments. If no one does, ask, "Are there any reactions to that?"
- 3. *Keep control*. If somebody talks too long, cut him or her off with: "I think I'm losing track of the point you're making. Can you state it in 20 words or less?"
- 4. *Step off center*. If you're running the meeting from a stage or podium, you can encourage interaction by identifying a topic, asking a question and then moving away from the center of the stage.
- 5. Let others answer questions. When someone directs a question to you, redirect it back to the group: "Before I answer that, let's see what someone else might say."
- 6. *Think "I," not "we"*. Encourage people to take ownership of their thoughts and opinions. If someone says, "We all think that...." ask if literally everyone in the room believes that or if it's just the speaker's personal opinion.
- 7. *Use a flipchart to track progress*. When you record ideas generated or topics covered, people in the meeting will have sense of accomplishing something.
- 8. *Finally, summarize*. Every so often, pause to ask the group, "where are we at this point? Where do we need to go from here?"

IT'S FUN TIME!

Q: How do you keep a programmer in the shower all day?

A: Give him a bottle of shampoo, which says "lather, rinse, repeat".

GROUP DISCUSSION (GD – Do's And Don'ts)

Some GD Tips To Give You The Edge:

- Be as natural as possible. Do not try and be someone you are not. Be yourself.
- A group discussion is your chance to be more vocal. The evaluator wants to hear you speak.
- Take time to organize your thoughts. Think of what you are going to say.
- Seek clarification if you have any doubts regarding the subject.
- Don't start speaking until you have clearly understood and analyzed the subject.
- Work out various strategies to help you make an entry: initiate the discussion or agree with someone else's point and then move onto express your views.
- Opening the discussion is not the only way of gaining attention and recognition. If you do not give valuable insights during the discussion, all your efforts of initiating the discussion will be in vain.
- Your body language says a lot about you your gestures and mannerisms are more likely to reflect your attitude than what you say.
- Language skills are important only to the effect as to how you get your points across dearly and fluently.
- Be assertive not dominating try to maintain a balanced tone in your discussion and analysis.
- Don't lose your cool if anyone say anything you object to. The key is to stay objective: Don't take the discussion personally.
- Always be polite. Try to avoid using extreme phrases like "I strongly object" or "I disagree". Instead try phrases like: "I would like to share my views on..." or "One difference between your point and mine..." or "I beg to differ with you"
- Brush up on your leadership skills, motivate the other members of the team to speak, and listen to their views. Be receptive to others' opinions and do not be abrasive or aggressive.
- If you have a group of like-minded friends, you can have a mock group discussion where you can learn from each other through giving and receiving feedback.

Apart from the above points, the panel will also judge team members for their alertness and presence of mind, problem-solving abilities, ability to work as a team without alienating certain members, and creativity.

- EDITORIAL.

NEWS BITS

Gateway to cut 850 more jobs

Gateway will cut at least 1,300 jobs as it tries to streamline its manufacturing, delivery and service operations, an effort first announced last week.

On Tuesday, the Poway, Calif., company notified about 850 customer service and technical support employees that it would be eliminating their positions in a reorganization of its manufacturing system.

The 850 job cuts are in addition to 450 layoffs announced last week, when Gateway made public a plan to close its PC manufacturing plant in Hampton, Va., and to outsource some PC manufacturing.

The additional layoffs involve 200 customer service employees in Kansas City, Mo., and North Sioux City, S.D. They will also affect 650-customer support and warranty service workers in its Sioux Falls, S.D., location, and Gateway spokesman Bob Sherbin said.

But there may be more layoffs ahead from the PC maker, as it is not finished getting its new manufacturing and distribution model in place yet, according to Sherbin.

"We'd expect any decisions that need to be made will be made ahead of the holiday season--by mid-November," he said.

Gateway has said it will launch 50 new products to support that strategy.

Microsoft opens up new Office site

Microsoft has revamped the online resource site for its Office software line, bringing together help resources, software add-ons and other content.

The new Office Online site, launched Monday, is tied to the release next month of Office System, a wide-ranging revamp of the company's productivity software.

Many of the changes in the new Office focus on using Extensible Markup Language (XML) to integrate Office with corporate databases and Web services. The Office Online site reflects the Web services push by offering help resources that can be viewed directly within Office 2003 applications, meaning that people don't have to launch a Web browser to see them.

"A new benefit is the ability to access the most up-to-date content directly through task panes in the Office system programs, so they won't have to leave the document, spreadsheet or PowerPoint deck they are working in to get the information they need," Chris Linnett, group manager for Office Online, said in a statement.

- A. Panneerselvam & N. Manikandan, II – B.C.A.

LAUGH A WHILE

** This customer comes into the computer store. "I'm looking for a mystery Adventure Game with lots of graphics. You know, something really challenging."
"Well," replied the clerk, "Have you tried Windows 98?"

** What do computers eat when they get hungry? Chips.

Beware Of The Following New Computer Viruses!!

ADAM AND EVE VIRUS

It takes a couple of bytes out of your Apple computer.

ARNOLD SCHWARZENEGGER VIRUS

It terminates and stays resident. It'll be back!

CHILD VIRUS

It constantly does annoying things, but is too cute to get rid of.

DIET VIRUS

Allows your hard drive to lose weight by eliminating the FAT table.

DISNEY VIRUS

Everything in the computer goes Goofy.

HEALTHCARE VIRUS

Tests your system for a day, finds nothing wrong, and sends you a bill for \$4500.

HURRICANE VIRUS

It blows away all your files, then tells you the government will help you to rebuild them.

MICROSOFT VIRUS

Virus '98 is promised for initial Beta release by the second quarter of this year, but recent court actions by the federal government have cast doubt about Microsoft's ability to incorporate this virus into the main OS in a seamless manner. Windows 98.

TITANIC VIRUS

You get a sinking feeling when your system crashes.

- A.S. Akyilesh Aswin, II – B.C.A.



CROSSWORD PUZZLE

1								2
3		4						
5		6	7				8	
	9							
10			11			12		
		13						
14	15			16	17			
18			19					
20				21			22	23

Hints:

Left to right:

- 1. We access the World Wide Web through this. (8).
- 5. Program that helps to convert source program to the machine language code. (8).
- 11. Method to arrange. (4).
- 13. Information transferred between programs. (6).
- 14. Corporations, Banks and Research facilities use this s/w to keep hackers out. (8).
- 18. It is a tiny piece of silicon, which contains millions of small electronic components. (4).
- 20. These are special characters featuring stars, hands, arrows & geometric shapes. The popular font, Wingdings has a collection of this. (8).



Top to Bottom:

- 2. Black plane. (11).
- 3. Application program to do something. (7).
- 6. It is a program that is used to execute a series of commands when they are repeated. (5).
- 7. The route to reach a particular file. (4).
- 8. It is a button by which a computer can be restarted. (5).
- 15. It is a small picture that helps to open an application or program easily from the desktop. (4).
- 16. It is a method by which a computer saves your work every few minutes all by itself. (8).
- 17. It is someone who stands without doing anything fruitful on-line discussion. (6).

Bottom to Top:

- 9. Origin of a files & directories. (4).
- 12. It is a collection of tools. (7).
- 19. It is a connector or socket at the back of computer. (4).
- 21. Mosaic and Netscape are two popular _____. (7).
- 22. It is a name given to the regular postal service by the people who use e-mail. (9).
- 23. These are the backbone of Internet. (6).

Across:

Left to right (Downward):

4. It is a fixed reference line for measurement on which numbers are plotted. (4).

Left to right (Upward):

10. It is the pictorial representation of a set of values (or numbers). Also called as chart. (5).

Right to Left (Downwards).

16. It is a warning sound or signal from the computer to tell that a work is done. (5).

Answers: Page No. : 38.

By, I. Angayarkanni, III - B.Sc., (CS)-'C'.

IT'S FUN TIME!

The problem with physicists is that they tend to cheat in order to get results.

The problem with program verifiers is that they tend to cheat at toy problems in order to get results.



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ANSWERS

Answers for Computer Puzzle:

- 1) Charles Babbage.
- 2) *IBM*.
- 3) Manipulator.
- 4) Software.
- 5) Monitor.
- 6) Mouse.
- 7) End.
- 8) Enter.
- 9) Editor.
- 10) Cell.

Answers for CEOs:

- 1) Vinod Khosla.
- 2) Arun Netra Valli.
- 3) Sabeer Bhatia.
- 4) Rajiv Gupta.
- 5) Sanjay Tejwrika.
- 6) Azim Premji.

Answers for Jumbled Jungle:

Correct Group: Group A

-

- 1.Super Computer
- 2.Punched Tape
- 3.Difference engine
- 4. First Electro-mechanical computer
- 5.Logrithms
- 6.Binary Number System
- 7.Slide rule
- 8. Mechanical Calculating Machine
- 9.Stepped Reckoner
- 10.Arithometer

Group B

- a. Charles Babbage
- b. Howard Aiken
- c. Sey Mour Gray
- d. Joseph Marie Jacquard
- e. William Oughtred
- f. Wilhelm Schickard
- g. Charles Thomas de Colnar
- h. Lady Ada Lovelace
- i. John Napier
- j. Gottfried Leibniz

Match the Answers:

1-c, 2-d, 3-a, 4-b, 5-i, 6-h, 7-e, 8-f, 9-j, 10-g



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Answers for Brain Wash:

(1) A pound of cotton is heavier than a pound of gold because cotton is weighed by the avoirdupois pound, which consists of 16 ounces, whereas gold, being a precious metal, is weighted by the troy pound, which contains 12 ounces (5760 grams).

(2) 444+444+44+4+4+4+4+4+4

(3)



(4)

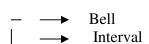
- (i) Y X
- (ii) ZP
- (iii) PR
- (iv) $Y X \underline{Z} P \underline{R}2^{nd}$

'Z' (He is in center)

(5)



(6)



 $7/6 \times 9 = 21/2 = 10 \frac{1}{2}$ seconds

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Answers for Crossword Puzzle:

iT unlimited

I N T E R N E T M P A T X H T	1								2
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IT'S FUN TIME!

Why do programmers always get Christmas and Halloween mixed up? Because DEC 25 = OCT 31