

ASSIGNMENT

NAME - PRIYA THAKUR

COURSE NAME - CCA

CENTER NAME - CSC Academy

ASSIGNMENT NAME - 15 FUNDAMENTAL OF IT
AND PROGRAMING

SUBMITTED TO - MR. RAHUL KUMAR

SUBMITTED BY - PRIYA THAKUR

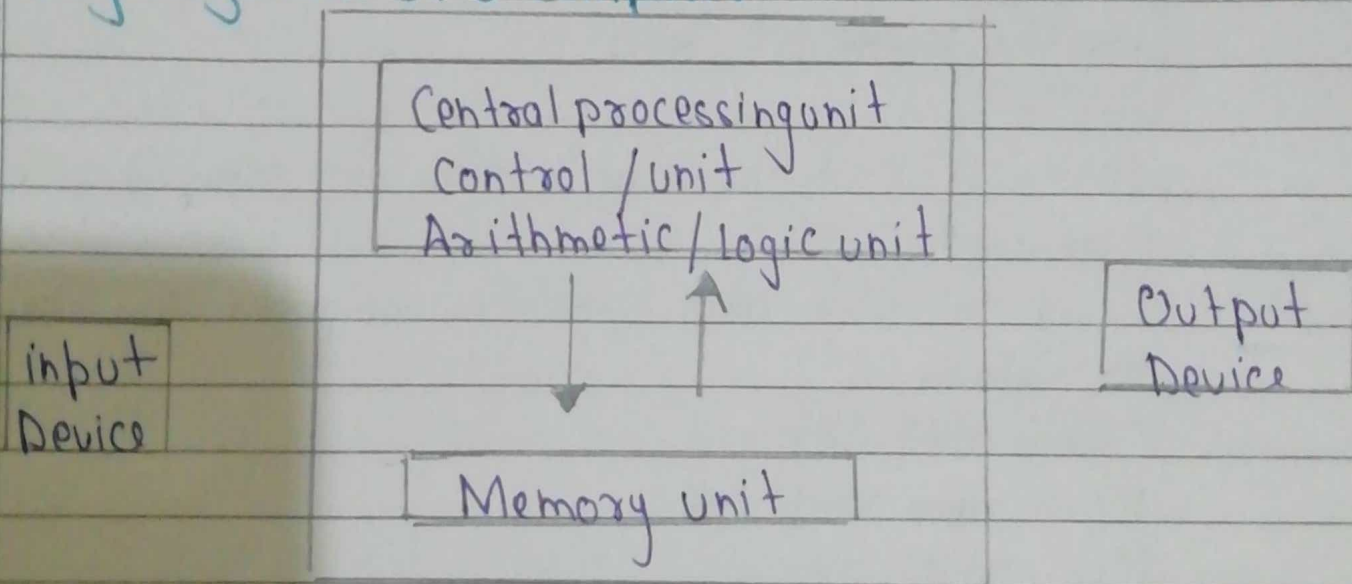
DATE - 16-08-2021

Assignment - 01

Q.1 What are the four fundamental parts of computer? Explain in the help of diagram.

Ans A computer is a fast system that is organized to accept store and process data output result under the direction of a stored program of instruction. The diagram explain how a computer system is organized. Basic Organization of computer system includes input processing unit memory unit and output device.

Organization of a computer



Input Device - Computer systems use many devices for input purpose. Input devices include the mouse, input pen, touch screen and microphone. Regardless of the type of device, all are components interpretation and communication between people & computer systems.

Central processing unit (C.P.U) - It is the brain of the computer, without this computer is unable to process.

Output device - Output device is used to show the result of the instructions. Example: Monitor, Printer, Headphone etc.

Memory unit - A memory unit is the collection of storage units or devices to gather. The memory unit stores the binary information in the form of bits.

Discuss about the classification of computer based on size and capacity.

Based on size and capacity, computers are classified as follows.

Super computer

Mainframe computer

Mini computer

Micro computer

Super computer - Supercomputers are the most powerful and physically the largest by size.

These are systems designed to process huge amounts of data. The fastest supercomputers can perform over one trillion calculations in a second. Supercomputers have

thousands of processors. Because of their extraordinary speed, accuracy and processing power, supercomputers are well suited for solving highly complex problems & huge amounts of calculation.

Example - JAGUAR, ROADRUNNER etc.

Mainframe Computer - Mainframe computers are very large often filling an entire room and can process thousands of millions of instructions per second. In a mainframe environment, users connect to the mainframe through the many terminals wired to the mainframe. Mainframes are capable of supporting hundreds to thousands of users simultaneously. Some of the functions performed by a mainframe include, Flight scheduling, reservations and connect to the Server through network by using desktop computers.

Example - IBM mainframes Z13

Micro computer - Microcomputers are the most frequently used type of computer. It is also known as personal computer (PC). A microcomputer is a small computer system designed to be used by one person at a time.

Example - Desktop computers, laptops.

Mini Computer - Mini Computers are much smaller than Mainframes. These computers are also less expensive. Sometimes referred to as Midrange Server.

or Midrange computer. They are typically larger, more powerful and more expensive than desktop computers. Midrange computers are usually used by small and medium-sized businesses as their Servers. Users connect to the server through a network by using desktop computers.

Example - Apple iPad, CDC 160A

Q3 What is the meaning of computer generation? How many computer generation are defined? What technologies were used?

Ans The evolution of digital computing is often divided into generations. Each generation is characterized by dramatic improvement over the previous generation in the internal organization of computer and programming language.

Five Generation of computers

1. First Generation
2. Second Generation
3. Third Generation
4. Fourth Generation
5. Fifth Generation.

First Generation - Vacuum Tubes (1940-1956) The first computer systems used vacuum tubes for circuitry and magnetic drums for memory. These computers were very expensive to operate.

Computer of this generation consumed a lot of electricity. First generation computer relied on machine language, the lowest-level programming language understood by computer to perform operation. They could only solve one problem at a time, it would take operators days or even weeks to set-up a new problem. Input was based on punched cards and paper tape, and output was displayed on printouts. First computer generated a lot of heat which was often the cause of malfunctions. UNIVAC (Universal Automatic computer) Computer are example of first generation computing. The UNIVAC was the commercial computer delivered to a business client the U.S. Census Bureau in 1951.

Second Generation - Transistors (1956-1963)

The world saw Transistors replaced vacuum tubes in the second generation computer. The transistor was invented at Bell Labs in 1947, but did not see widespread use on computers until the late 1950s but did not see widespread use in computers until the late 1950s. Transistors were superior to the vacuum tubes, allowing computers to become smaller, faster, cheaper, more energy-efficient and more reliable than their first-generation predecessors. Second-generation computers still relied on punched cards for input and printouts for output. Second generation computer moved from binary machine

language to symbolic or assembly language.

Third Generation computer - Integrated circuits (1964-1971)

The development of the integrated circuit was the hallmark of the third generation of computers. Transistors were replaced by integrated circuits which drastically increased the speed and efficiency of computers. Instead of punched cards and printouts, users interacted with third generation computers through keyboards and monitors. Computers for the first time became accessible to a mass audience because they were smaller and cheaper than their predecessors. ~~fourth g~~

Fourth Generation Computer - Microprocessors (1971-Present)

The microprocessors brought the fourth generation of computers as thousands of integrated circuits were built onto a single silicon chip. What in the first generation filled an entire room could now fit in the palm of the hand. In 1981, IBM introduced its first computer for the home user. In 1984, Apple introduced the Macintosh. Microprocessors also moved out to the desktop computer. Fourth generation computers also covered the development of Graphical User Interface (GUIs), mouse and handheld devices.

Fifth Generation Computer - Artificial Intelligence (Present and Beyond) Fifth generation

Computing devices, based on artificial intelligence, are still in development. There are some applications, such as voice recognition that are being used today. The use of parallel processing and superconductors in helping to make artificial intelligence a reality. Quantum computation and nanotechnology will radically change the face of computers in years to come. The goal of fifth generation computing is to develop devices that respond to natural language input and are capable of learning and self-organization.

Q.4 Differentiate between volatile & non-volatile memories?

Ans	Volatile	Non-Volatile
1.	Temporary storage	Permanent storage
2.	store data in MB	Store data in GB
3.	used in normal operation.	use for start up process at computer.
4.	writing data's faster	writing data's in slower.

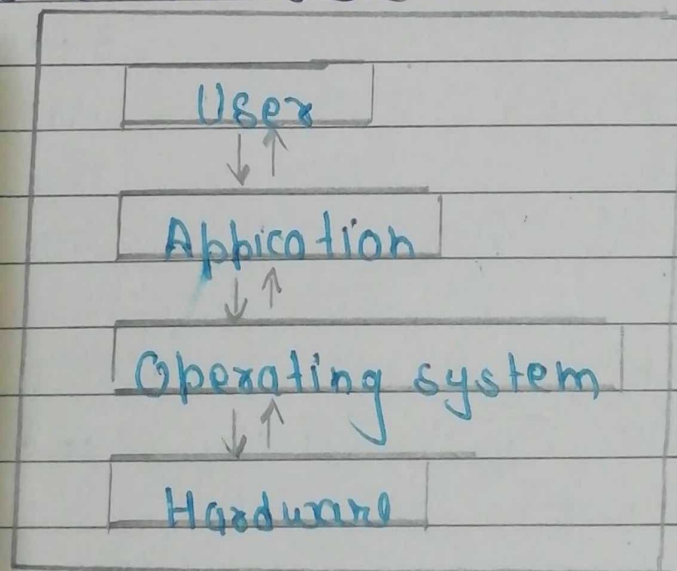
Q.5 Distinguish among system software, application software and driver software and the basic of their features?

Ans Software is a set of instructions used to operate computer and execute specific tasks.

Type of software - The software is used extensively for different purposes in several domains, it can be categorized into different types.

System Software - It is a type of software that is designed to run a computer's hardware and application programs. Software like operating systems, compilers, editors and drivers etc. come under this category. A computer cannot function without the presence of system software. If we think of the computer system as a layered model, the system software is the interface between the hardware and user applications.

Operating system (OS) - Operating system acts as manager of all the resources of computer i.e., resource manager. It is system software that manages computer hardware and software resources and provides services. Thus, operating system becomes an interface between user and machine.



Operating system Representation

Utility Programs - These programs analyze and maintain a computer. These programs

are focused on how OS works to perform the task to enable the smooth functioning of computer. This program may come along with OS like windows defender, windows disk cleanup tool, Antivirus, backup software, files manager, disk compression tool all are utility software.

Application Software - It is software created for a specific purpose, used by end users. It can be called an application or simply an app.

Examples - word processor, accounting application, a web browser, an email client, media player etc

Proprietary software - It is software that is owned by an individual or a company (generally the one that developed it). There are almost always major restrictions on its use, and its source code is almost always kept secret. The proprietary software is a non-free computer software for which the software's publisher or another person retains intellectual property rights usually copyright of the source code. It is also known as 'closed-source software'.

Overview of open source technology - open source technology is defined as the development of software for allowing end users and developers to not only see the source code

of software, but modify it as well.

Open source software (OSS) - It is a type of computer software in which source code is released under a license in which the copyright holder grants users rights to study, change and distribute the software to anyone and for any purpose. The Linux operating system (OS) is the best-known examples of open source software technology.

- Q.6 Create a file in MS-word to insert a paragraph about "yourself" Describe the steps.
1. Click on short button.
 2. Click on Microsoft Office.
 3. Select Microsoft Office Word.
 4. Click the Microsoft Office button.
 5. Select new the new document dialog box appears.
 6. Create a file.
 7. Click the Microsoft Office button.
 8. Select Save As → word document the save as dialog box appears.
 9. Select the location where you want to save the document using the drop-down menu.
 10. Enter a file name "yourself" for the document.
 11. Click the Save button.

Q.7 Write steps regarding following :-

- > To change the font style
- > To change the font size
- > To The font color
- > To highlight (In yellow) the line that reads need to get Lms's address".

Ans: Select the text you want to modify

2. Left click the drop-down arrow next to the font style. On the home tab the font style drop-down menu appears.
3. Move your cursor over the various font style. A live preview of the font will appear in the document.
4. Left click the font style you want to use the font style will change in the document.
3. change the font colour -

1. Select the text you want to modify.

2. Left click the drop-down arrow next to the font color. On the home tab the font color menu appears.
3. Move your cursor over the various font color. A live preview of the color will appear in the document.
4. Left click the font color you want to use the font color will change in the document.

4. To highlight (in yellow the line that) need to get.

1. Select the text you want to modify.
- (ii) Left click the drop down arrow next to the highlight.

- colour on the home tab. the font color menu appears.
- (iii) Move your cursor over the various Text Highlighting colors (yellow) A live preview of the color will appear in the document.
- (iv) Left click on yellow color want to use the text color will change.
7. Create a file in Ms-word for the following document and save it with file name ms-word describe are steps involved
1. Click on start button.
 2. Click on microsoft Office.
 2. Select microsoft office word.
 4. click on microsoft office of fice button.
 5. Select new the new document dialog box appears.
 - Type Ms-word on work sheet and Ms-word.
 - Click Bold on home tab Press Enter.
 - Type M.S-word is a widely used unmerical word processor developed by Microsoft.
 - Move your cursor over the red color.
 - Left click the used font color. the font color change document.
 - Select the "word processor" click under line on Home tab Press Enter.
 - Select the text to format as a list.
 - click the bullets or numbering commands on the Home tab
 - Left click the bullet style to use it will appear in the

document.

14. Position your cursor at the end of a list item and press the enter key to add an item to list.
15. Select "Creating" Left click the drop-down arrow next to the font color.
16. Move your cursor over the blue color click the blue font color the blue font colour will change in the document.
17. Select saving and left click the font the drop down arrow next to the font colour box on the Home tab the font color means appear.
18. Move the cursor over the used for Left click the red font color the red font colour will change in the document.
19. Click the microsoft office button.
20. select save as - word document you want to save the document using the drop-down menu.
21. Enter a file name "Ms word" for the document.
22. click the save button.

Q.8 Create a file in Ms-word for the following document
Save it with file name equations are steps involved in

Equations

$$X + Y = 30$$

$$2, 3 + 5 = 50$$

$$A_2 + B^8 = Y_2 + Y_8$$

- Ans 1 click on microsoft office Button.
- (i) Select new the new document dialog box appears.
 - (ii) Type equations on work sheet and select "equations"
 - (iv) click Bold and underline on Home tab and press Enter

- (v) Enter the text $y_2 + y_5 = 30$ + Insert
- (vi) Place Caret in the document where you want to create a subscript or superscript.
- (vii) Go To the Home tab on the Ribbon and click "Subscript and superscript (x_2) (x^2)" in the font group.