COMPUTER SOFTWARE

1.WHAT ARE THE MAIN COMPONENTS OF COMPUTER SOFTWARE?

- Operating systems: An operating system is the principal component Of system software in any computing system.
- Device drivers: Device drivers help the computer control peripheral devices.
- **Utility programs:** Utility programs are generally used to support, enhance, or expand existing programs in a computer system.

2.WHAT'S THE OPERATING SYSTEM ?

- An operating system, or "OS," is <u>software</u> that communicates with the <u>hardware</u> and allows other <u>programs</u> to run. It is comprised of <u>system software</u>, or the fundamental files your computer needs to <u>boot up</u> and function.
- is a set of programs designed to manage the resources of a computer.

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REFERENCE: https://techterms.com/definition/operating_system













3.EXPLAIN THE PRIMARY REASON WHY A COMPUTER NEEDS AN OPERATING SYSTEM ?

- An operating system is the most essential program that allows a computer to run and execute programs. Without an operating system, a computer cannot be of any important use since the computer's hardware won't be able to communicate with the software
- is to coordinate the interactions of its hardware components with each other as well as to coordinate their interaction with application software.

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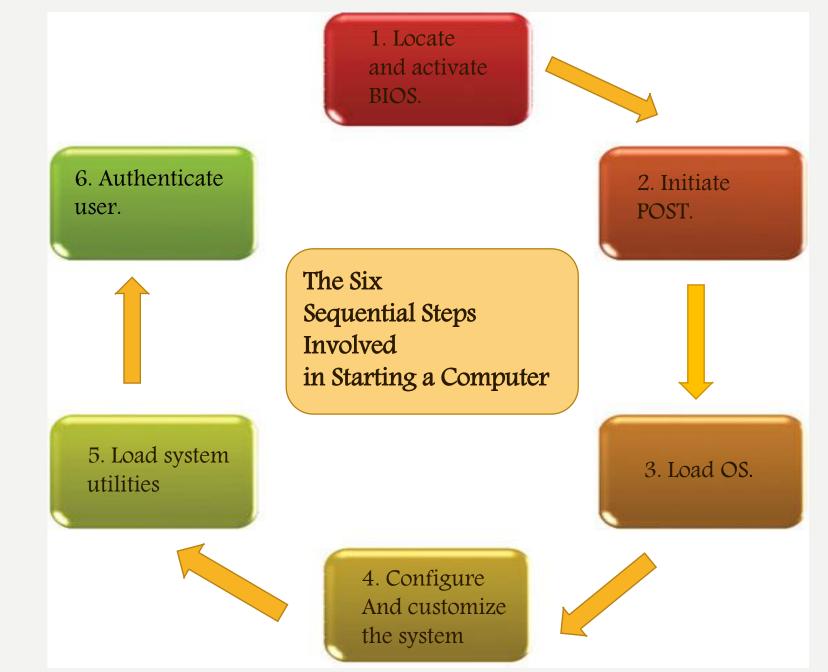
4.LIST THE BASIC FUNCTIONS OF OPERATING SYSTEM?

- Starting the computer and transferring files from the storage device to RAM memory
- Managing programs that are active and on the desktop and taskbar or running in the background
- Managing memory (RAM) to optimize its use
- Coordinating tasks including the communication between input and output devices and programs
- Providing a user interface to allow for easy and seamless communication with the user

REFERENCE: COMPUTERS

5.WHAT HAPPENS WHEN YOU TURN ON THE COMPUTER ?

• A computer without a program running is just an inert hunk of electronics. The first thing a computer has to do when it is turned on is start up a special program called an operating system. The operating system's job is to help other computer programs to work by handling the messy details of controlling the computer's hardware.



6.DEFINE THE UTILITIES SOFTWARE ?

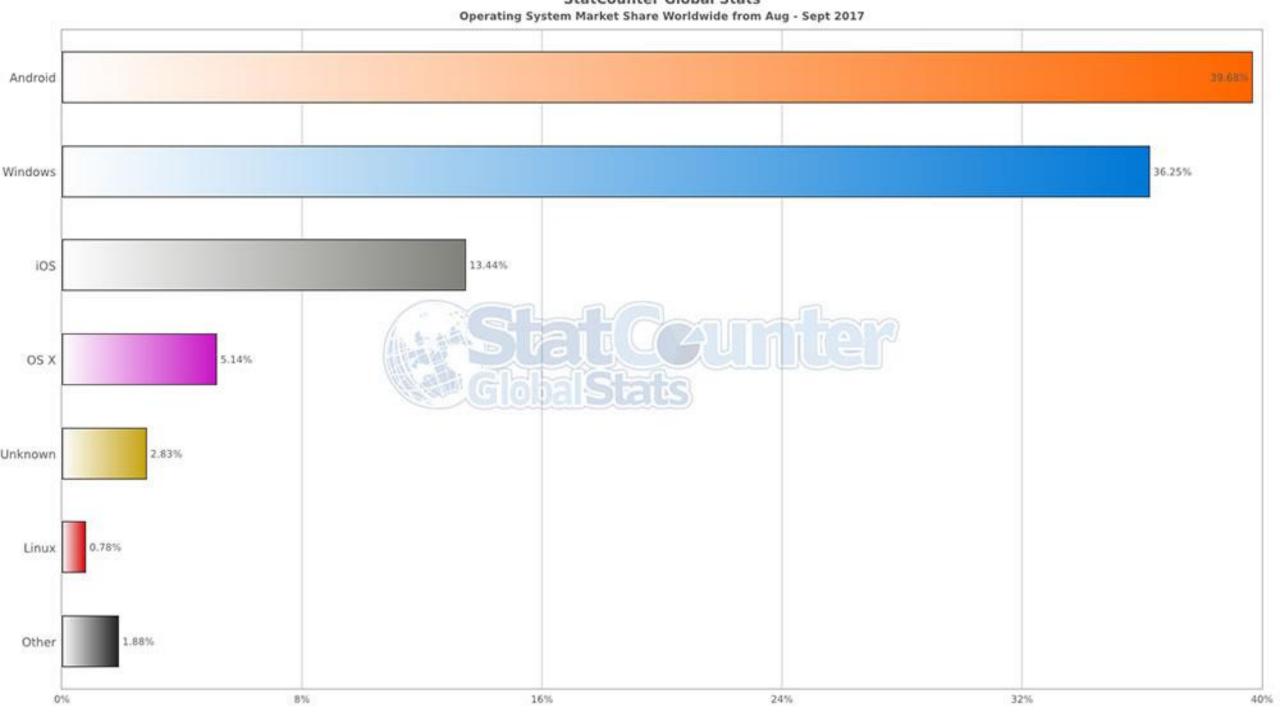
• system utilities (also called utility programs) are programs that work in tandem with the operating system and perform services that keep the computer system running smoothly.

7.LIST THE ESSENTIAL PROGRAMS OF THE OPERATING SYSTEM ?

- Device drivers are specialized software programs that allow input and output devices to communicate with the rest of the computer system.
- Utility programs, also known as service programs, perform tasks related to the control and allocation of computer resources.

8.WHAT ARE THE MOST POPULAR OPERATING SYSTEM?

- Windows 7 is the most popular operating system for <u>desktop</u> and <u>laptop</u> computers.
- Android is the most popular <u>smartphone</u> operating system.
- iOS is the most popular <u>tablet</u> operating system.
- Variants of <u>Linux</u> are most widely used in the <u>Internet of things</u> and smart devices.
- Other variants of Linux are the most popular operating system on other web servers and supercomputers.



9.LIST THE STRENGTH & WEAKNESSES OF OPERATING SYSTEM?

		strength	weaknesses		
WINDOWS	Easy of use	has more support regarding hardware	it's expensive	closed source	
LINUX	open source	is usually a free operating system	As operating system is most Windows programs will not run with it	Hardware support is not readily available	
DOS	it uses little memory	makes it much easier to write programs	can't do more than one thing at a time	File names are limited	

https://candicebrien.wordpress.com/2015/05/24/strengths-and-weaknesses-of-different-operating-systems/

STRENGTH & WEAKNESSES OF OPERATING SYSTEM

	EASY TO USE	OPEN SOURCE	Use little memory	expensive	MULTITASKING	Hardware support	Securit y
WINDOWS	<u> </u>						
LINUX							
UNIX	\times						
MAC OS							

10.WHAT ARE THE 3 MAJOR TYPES OF USER INTERFACES ?

- <u>Command line interface (CLI)</u> This type of user interfaces allows the user to interact directly with the computer by typing commands.
- <u>Graphic user interface</u> A graphical user interface (GUI) is the most common type of user interface in use today. It is a very 'friendly' way for people to interact with the computer because it makes use of pictures, graphics and icons hence why it is called 'graphical'.
- Menu-Driven Interface This type of interface lets you interact with a computer or device by working your way through a series of screens or menus.

11. DISTINGUISH BETWEEN 2 CATEGORIES OF THE SOFTWARE ?

- Application software is software that has been developed to solve a particular problem for users—to perform useful work on specific tasks or to provide entertainment.
- System software enables the application software to interact with the computer and helps the computer manage its internal and external resources.

LIST THE CATEGORIES OF (OS) ?

- STAND-ALONE OPERATING SYSTEM: A stand-alone operating system works on a desktop computer, notebook, or any portable computing device. The name *stand-alone* comes from the fact that it does not need to be connected to any other system or computer in order to run.
- Server Operating Systems: Server operating systems are designed for network use. Normally they are complete operating systems with a file and task manager. Additional features like a Web server, directory services, and a messaging system may also be included.
- Embedded Operating Systems: Embedded operating systems are specialized operating systems designed for specific applications. They are usually very compact and efficient. They also eliminate many features that nonembedded computer operating systems provide because the specialized application has no need for them.

MENTION THE ESSINTIAL SYSTEM UTILITY ?

- Backing up system and application files
- Providing antivirus protection
- Searching for and managing files
- Scanning and defragmenting disks and files
- Compressing files so that they take up less space on storage media
- Providing additional accessibility utilities to meet the needs of individuals with special needs