**Ques**: what is an operating system.

**Ans:** An **operating system** (**OS**) is [system software](https://en.m.wikipedia.org/wiki/System_software) that manages [computer hardware](https://en.m.wikipedia.org/wiki/Computer_hardware) and [software](https://en.m.wikipedia.org/wiki/Computer_software) resources and provides common [services](https://en.m.wikipedia.org/wiki/Operating_system_services) for [computer programs](https://en.m.wikipedia.org/wiki/Computer_program). All [computer programs](https://en.m.wikipedia.org/wiki/Computer_program), excluding [firmware](https://en.m.wikipedia.org/wiki/Firmware), require an operating system to function.

**Ques:** Name any 5 operating system.

**Ans:**1. Ubuntu

2.Linux

3.IOS

4.window 8

5.window 8..1

**Ques:** Describe basic components of operating system.

**Ans:**component of operating system are:

**Process management**

Process is a system abstraction, it illustrates that system has only one job to do. Every program running on a computer, be it background services or applications, is a process. As long as a von Neumann architecture is used to build computers, only one process per CPU can be run at a time. Older microcomputer OSes such as MS-DOS did not attempt to bypass this limit, with the exception of interrupt processing, and only one process could be run under them. Mainframe operating systems have had multitasking capabilities since the early 1960s. Modern operating systems enable concurrent execution of many processes at once via multitasking even with one CPU. Process management is an operating system's way of dealing with running multiple processes. Since most computers contain one processor with one core, multitasking is done by simply switching processes quickly.

**Memory management**

Current computer architectures arrange the computer's memory in a hierarchical manner, starting from the fastest registers, CPU cache, random access memory and disk storage. An operating system's memory manager coordinates the use of these various types of memory by tracking which one is available, which is to be allocated or deallocated and how to move data between them. This activity, usually referred to as virtual memory management, increases the amount of memory available for each process by making the disk storage seem like main memory. There is a speed penalty associated with using disks or other slower storage as memory – if running processes require significantly more RAM than is available, the system may start thrashing. This can happen either because one process requires a large amount of RAM or because two or more processes compete for a larger amount of memory than is available. This then leads to constant transfer of each process's data to slower storage.

**Security**

Many operating systems include some level of security. Security is based on the two ideas that:

The operating system provides access to a number of resources, directly or indirectly, such as files on a local disk, privileged system calls, personal information about users, and the services offered by the programs running on the system;

1.The operating system is capable of distinguishing between some requesters of these resources who are authorized (allowed) to access the resource, and others who are not authorized (forbidden). While some systems may simply distinguish between "privileged" and "non-privileged", systems commonly have a form of requester identity, such as a user name. Requesters, in turn, divide into two categories:

2.Internal security: an already running program. On some systems, a program once it is running has no limitations, but commonly the program has an identity which it keeps and is used to check all of its requests for resources.

3.External security: a new request from outside the computer, such as a login at a connected console or some kind of network connection. To establish identity there may be a process of authentication. Often a username must be quoted, and each username may have a password. Other methods of authentication, such as magnetic cards or biometric data, might be used instead. In some cases, especially connections from the network, resources may be accessed with no authentication at all.

**Ques:** overview of MS-DOS operating system.

**Ans: MS**-**DOS** (**Microsoft** Disk Operating System) is a single-user, single-tasking computer operating system that uses a command line interface. In spite of its very small size and relative simplicity, it is one of the most successful operating systems that has been developed to date.

### **Ques:**what are types of applications?

**Ans:** A computer application is defined as a set of procedures, instructions and programs designed to change and improve the state of a computer's hardware. Applications are made in a machine-understandable language to accomplish a variety of individual or organizational jobs. They are made with user-friendly interfaces for easy use. Applications are either sold, licensed, run online or require installation on the computer. Some systems can be downloaded as freeware, used and copied without restraint. Those that are shareware are downloadable, but a user often needs to pay a certain amount to be able to use them.

**Ques:** What types of software is used for creating letters papers and other documents?

**Ans:**Word processing Word-processing is the process of **creating document** such as **letters**, reports, thesis, books and so on. But still the more advanced and sophisticated form of wordprocessing is desktop publishing which further deals with publishing tasks such as pagination, **paper**layout and many more.

**Ques:** what is pixel?

**Ans:** In digital imaging, a pixel, pel, dots, or picture element is a physical point in a raster image, or the smallest addressable element in an all points addressable display device; so it is the smallest controllable element of a picture represented on the screen.

**Ques:** what are advantages using ms-excel?

**Ans:**With Excel, users can manage payroll records, employee schedules or personal bookkeeping and paperwork virtually, so data can be easily changed, updated or moved around without having to deal with paper and pen copies. Excel files can also be sent as attachments or shared within a group of users via various cloud storage systems so everyone has access to the same files.

**Ques:** what technology is used in compact discs?

**Ans:** The compact disc is an evolution of **LaserDisc** technology, where a focused **laser** beam is used that enables the high information density required for high-quality digital audio signals

**Ques:** what is file extension of Ms- word document?

**Ans:**Office Open XML (OOXML) format was introduced with Microsoft Office 2007 and became the default format of Microsoft Word ever since. Pertaining file extensions include: .**docx** – Word document. .**docm** – Word macro-enabled document; same as **docx**, but may contain macros and scripts.

**Ques:** what is primary memory?

**Ans:**Primary memory is a computer system's volatile storage mechanism. It may be random access memory (RAM), cache memory and data buses but is primarily associated with RAM.

As soon as a computer starts, primary memory stores all running applications, including the base operating system (OS), user interface and any user installed and running software utility. A program/application that is opened in primary memory interacts with the system processor to perform all application specific tasks.

**Ques:** what is logical memory?

**Ans:**Logical memory is the address space, assigned to a logical partition, that the operating system perceives as its main storage. For a logical partition that uses shared memory (hereafter referred to as a shared memory partition), a subset of the logical memory is backed up by physical main storage and the remaining logical memory is kept in auxiliary storage.

**Ques:**what is virtual memory?

**Ans:**In computing, virtual memory is a memory management technique that is implemented using both hardware and software. It maps memory addresses used by a program, called virtual addresses, into physical addresses in computer memory.