# What do you mean by operating system? Describe about Linux and windows operating system. Also write the different use case of this operating system. List Advantages and disadvantages of each.

# An **Operating system (OS)** is software which acts as an interface between the end user and computer hardware.

|  |  |  |
| --- | --- | --- |
| Topic | Linux | Windows |
| **Use Cases** | Linux is used by corporate, scientific, and academic organizations of every size. It's used to power the development machines and servers at Google, Facebook, Twitter, NASA, and the New York Stock Exchange, just to name a few. On the desktop, it's often used by technically proficient users who prioritize system security and reliability, and by enthusiasts wanting to learn more about computers and how they work. It's also used to give new life to older hardware, enable low-budget computing projects to succeed, and serve as the operating system on single-board computers, such as the Raspberry Pi. | Microsoft Windows is usually the operating system of choice for gamers, novice users, and business users who rely on Microsoft software. It doesn't run well on older hardware, however. Many Windows users are thrilled with changes Microsoft introduced with Windows 10, so if you've never used it, now is a great time to try it out. |

# Windows is a series of operating systems, computer operating system (OS) developed by Microsoft for personal desktops/devices or computer (PC). Each operating system comes with a graphical user interface (GUI) with a desktop that allows a user to view all files, videos, etc. It is designed to run on x86 hardware such as AMD, Intel processors.

# Linux is an open-source operating system based on UNIX, created in 1991. It is software which sites underneath of all other software on a computer. Users can modify the existing code and create distributions from it as it is an open-source operating system. Linux is mostly used as a server – as most of the web pages over the internet are generated from Linux servers

## The advantage of using Operating System

* Allows you to hide details of hardware by creating an abstraction
* Easy to use with a GUI
* Offers an environment in which a user may execute programs/applications
* The operating system must make sure that the computer system convenient to use
* Operating System acts as an intermediary among applications and the hardware components
* It provides the computer system resources with easy to use format
* Acts as an intermediator between all hardware's and software's of the system

## Disadvantages of using Operating System

* If any issue occurs in OS, you may lose all the contents which have been stored in your system
* Operating system's software is quite expensive for small size organization which adds burden on them. Example Windows
* It is never entirely secure as a threat can occur at any time