Difference Between Linux and Windows

The war between Linux and Windows to be the best is an age-old fight. It is also considered an important topic in the GATE CSE syllabus. Before discussing the functionalities of each one separately, let us see the difference between Linux and windows listed in the table below.

Key Differences Between Linux and Windows

Linux	Windows
It is available free of cost to use.	It is not available free of cost.
It is an open-source kernel.	It is not an open-source kernel.
It uses a monolithic kernel.	It uses a micro-lithic kernel.
It has a case-sensitive file system.	Its file system is not case-sensitive.
It works efficiently in the case of operations.	For operations, windows OS is way less efficient than Linux OS.
It uses slash as a path separator.	It uses a backslash as a path separator.
Linux is efficient for hacking purposes.	Windows is not a good option for hacking purposes.

What is Linux OS?

Linux OS is based on Unix OS, an open-source and free-to-use operating system. It was mainly developed for personal computers designed using Intel x86 architecture. It contains a large installed base for the general-purpose OS. It can run even on embedded systems.

The Linux kernel uses the monolithic kernel, which consumes a large running space; this surfaces the difference between Linux and windows, as window OS uses a micro-kernel that takes less space. However, a Linux kernel runs more efficiently than a windows kernel.

What is Windows OS?

Windows is a simple, easy-to-use, and licensed OS. The first windows OS was a GUI(Graphical User Interface) with an extension of the disk operating system. This OS is frequently used among commercial users for personal and business purposes. There is a striking difference between Linux and Windows regarding availability, which is also

important for the GATE exam. Windows OS is not free of cost, while Linux is freely available for use.

The Windows OS has many features that make it the users' choice. Almost around 90% of the users work on Windows OS. The features that window OS offers are:

- Portability
- Extensibility
- Virtual memory
- Multiprogramming environment
- Client-server computing