### PLATFORM INDEPENDENCE

 platform independent is that, the java source code can run on all operating systems. A program is written in a language which is a human readable language. Therefore, a compiler is a program that translates the source code for another program from a programming language into executable code

**WHAT IS OS?**

An operating system (OS), in its most general sense, is software that allows a user to run other applications on a computing device. While it is possible for a software application to interface directly with hardware.

The operating system manages a computer's hardware resources, including:

* Input devices such as a keyboard and mouse.
* Output devices such as display monitors, printers and scanners.
* Network devices such as modems, routers and network connections.
* Storage devices such as internal and external drives.

The OS also provides services to facilitate the efficient execution and management of, and memory allocations for, any additional installed software application programs.

**COMPONENTS OF OS**

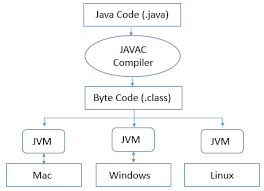
* ****Kernel:**** A Kernel is the central part of an operating system. It manages the operations of the computer and the hardware - most notably memory and CPU time
* ****User Interface:**** This component allows interaction with the user, which may occur through graphical icons and a desktop or through a command line.
* ****Application Programming Interfaces:**** This component allows application developers to write modular code

**OS VS KERNEL**

The operating system is the software package that communicates directly to the hardware and our application. The kernel is the lowest level of the operating system. The kernel is the main part of the operating system and is responsible for translating the command into

something that can be understood by the computer.

**PLATFORM INDEPENDENCE STRUCTURE**

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**JVM(JAVA VIRTUAL MACHINE)**

It converts Java byte code into machines language. In JVM, Java code is compiled to byte code. ... JIT or Just-in-time compiler is the part of the Java Virtual Machine (JVM). It is used to speed up the execution time