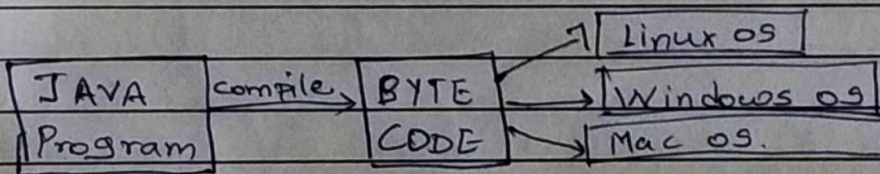




Assignment - 1.

Q.1 Explain platform Independent.

- Other programming languages such as C, C++ etc which are compiled into platform specific machines. Java is guaranteed to be write-once, run anywhere [WORA] language.
- Java program is compiled into bytecode.
- This bytecode is platform independent and can be run on any machine, plus this byte code format also provide security.
- Any machine with Java Runtime Environment can run Java programs.





Q.2. Explain portable in JAVA.

- Java is portable because it use bytecode.
- It doesn't require any type of implementation specification.
- Java programs can execute in JVM.
- Java programs can be run on any platform [Linux, Window, Mac].

Q.3 Explain Architecture-neutral in JAVA.

- Compiler generates bytecodes, which have nothing to do with a particular Computer architecture, hence a Java program is easy to interpret on any machine.
- Example :- It doesn't matter if your operating system is 32-bit or 64-bit, the Java byte code is exactly the same. ~~You do~~ User don't have to recompile your Java source code for 32-bit or 64-bit.
- No implementation of dependent features.
- Examples: the size of an int doesnot vary based on platform.





Q.4 Explain Interpreted.

- Java is both compiled and interpreted lang. The source code in Java program is compiled to byte code.
- At run time, JVM interprets the byte code and executes them.
- As Java use Java Compiler, it's compilation speed increases in the application. But the problem was found in interpretation. As compared to java compiler interpreter's speed becomes slow down the application.
- JIT (Just In Time) Compiler used to interpret the byte code to increase speed. It makes the execution faster.