* **What is the difference between Compiler and Interpreter**

The [Compiler](https://www.geeksforgeeks.org/introduction-to-compilers/) is a translator which takes input i.e., High-Level Language, and produces an output of low-level language i.e. machine or assembly language. The work of a Compiler is to transform the codes written in the programming language into machine code (format of 0s and 1s) so that computers can understand.

An [Interpreter](https://www.geeksforgeeks.org/introduction-to-interpreters/) is a program that translates a programming language into a comprehensible language. The interpreter converts high-level language to an intermediate language. It contains pre-compiled code, source code, etc.

* **What is the difference between JDK, JRE, and JVM?**

JDK is for development purpose whereas JRE is for running the java programs. JDK and JRE both contains JVM so that we can run our java program. JVM is the heart of java programming language and provides platform independence

* **How many types of memory areas are allocated by JVM?**

Class(Method) Area

Heap

Stack

Program Counter Register

Native Method Stack

* **What is JIT compiler?**

A just-in-time (JIT) compiler is a program that turns bytecode into instructions that can be sent directly to a computer's processor (CPU). Typically, compilers are key in deciding the speed of an application for developers and end users.

* **What are the various access specifiers in Java?**

The four access modifiers in Java are public, protected, default, and private.

* **What is a compiler in Java?**

A Java compiler is a program that takes the text file work of a developer and [compiles](https://www.techtarget.com/whatis/definition/compiler) it into a platform-independent [Java](https://www.theserverside.com/definition/Java) file. Java compilers include the Java Programming Language Compiler (javac), the GNU Compiler for Java (GCJ), the [Eclipse](https://www.techtarget.com/searchapparchitecture/definition/Eclipse-Eclipse-Foundation) Compiler for Java (ECJ) and  [Jikes](https://www.theserverside.com/definition/Jikes).

* **Explain the types of variables in Java?**

local, instance and static.

* **What are the Datatypes in Java?**
* Primitive data types - includes byte , short , int , long , float , double , boolean and char.
* Non-primitive data types - such as String , Arrays and Classes (you will learn more about these in a later chapter)
* **What are the identifiers in java?**

Identifiers in Java are names that distinguish between different Java entities, such as classes, methods, variables, and packages. Identifiers include the names of classes, methods, variables, packages, constants, etc. These identifiers are each specified using a specific syntax and naming scheme.

* **Explain the architecture of JVM**

JVM(Java Virtual Machine) acts as a run-time engine to run Java applications. JVM is the one that actually calls the main method present in a java code. JVM is a part of JRE(Java Runtime Environment).

Java applications are called WORA (Write Once Run Anywhere). This means a programmer can develop Java code on one system and can expect it to run on any other Java-enabled system without any adjustment. This is all possible because of JVM.

When we compile a .java file, .class files(contains byte-code) with the same class names present in .java file are generated by the Java compiler. This .class file goes into various steps when we run it. These steps together describe the whole JVM.