JAVA

Platform Independent - WORA (Write Once Run Anywhere).

Java source code – compile – java byte code (wora) – Jvm (diff for every OS) – machine language- execute**.**

Java is Platform Independent, JVM is platform dependent.

OOPS- Object Oriented Programming

* Polymorphism- one name different behavior/forms.
* Inheritance- subclass inherits prop from Superclass(**extends**). Saves space and repeatability, easy readable.
* Encapsulation- bind/cover program in a layer to reduce complexity for users as well as limits accessibility & helps privacy/transparency such as modifying sensitive data.

Abstraction -

Memory Management -

Multi-Threaded -

Applets & Servlets -

**Better Way to Write a Java Program**

* Have an Abstract Class to include all the common must have methods (can declare methods values/ declaration) (use extends).
* Have an Interface which has all the behavioral methods (can’t declare method function) (use implements) (a class can implement multiple Interfaces).
* Create your own Exception class.
* And every other class members with their unique methods.
* Have a Base Class, which has Main method to call all the methods.
* In every class we should create an Class Object, to call their Class methods in the Same Class (because Main method is Static and won’t accept Non-Static Methods) or in Other Class.

A class can’t extend more than one abstract class, then what’s point in using abstract class instead of having a super/base class, even its same with it.

MyStuff m1 = new MyStuff("guitar");

MyStuff m2 = new MyStuff("tv"); **what is happening here?**

System.out.println(m2.equals(m1));

If abstract class has a non-instantiated method, what will be the case?

Static keyword is memory efficient, it will allocate memory once and uses it everywhere throughout the class. We cannot refer to a Non-Static information in Static methods directly, because we are trying to make that non-static info into a static info. To do that we have to use object reference of that class.

1. Java doesn’t support multiple inheritance.
2. Interface is not an inheritance. We can have multiple interfaces to a class.

Passing parameter by value.

Passing parameter by reference.

Stack(lifo), Queue(fifo).

Int vs Integer.

Immutable object(String,Integer)- once written cannot be changed, but creates a duplicate

Exception- try catch block.

Collection Framework- List- , ArrayList-, Tree-, Maps(one key to a value),

Q/A

1. If my code requires String [] args and takes arguments, if it is to be passed by user, how the user knows he need to pass arguments (basically at command line)?