

1. Why is Java a platform independent language?

Java language was developed in such a way that it does not depend on any hardware or software due to the fact that the compiler compiles the code and then converts it to platform independent byte code which can be run on multiple systems. The only condition to run that byte code is for the machine to have a runtime environment installed in it.

2. What do you understand by an instance variable and local variable?

Instance variables are those variables that are accessible by all the methods in the class. They are declared outside the methods and inside the class. These variables describe the properties of an object and remain bound to it at any cost.

All objects of the class will have their copy of the variables for utilization. If any modification is done on these variables then only that instance will be impacted by it and all other class instances continue to remain unaffected.

3. Can we overload main method in java?

Yes we can have multiple methods with name "main" in a single class. However if we run the class java runtime environment will look for main method with syntax.

4. What are the access modifiers available in java.

Java provides access control through public, private and protected access modifier keywords. When none of these are used its called default access modifier. A java class can only have public or default access modifier.

5. How will you call a non static method from main method in java

Non static method are called by creating an Object for the class.

6. Why String is immutable in java?

Immutable means unmodifiable or unchangeable. Once string object is created its data or state can't be changed but a new String object is created.

If we explicitly assign it to the reference variable it will refer to 'Test Leaf' object.

Suppose there are 5 reference variables all referene to one object "Test" If one reference variable changes the value of the object. it will be affected to all the reference variables. That is why string objects are immutable in java.

7. What is the difference between `concat()` and concatenation operator `+`?

<code>concat()</code>	Concatenation operator <code>+</code>
<code>concat</code> method if called on null string reference variable will throw null pointer Exception.	Concatenating string with <code>+</code> operator a null reference variable changes to "null"
<code>Concat</code> takes only one argument	<code>+</code> can take any number of argument
Signature of <code>concat()</code> is: <code>public String concat (String str)</code>	In concatenation non string type argument is converted to string by using its <code>toString()</code> method.
<code>concat()</code> returns New string object only if when The length of argument string is > 0	<code>+</code> creates new string everytime it concatenates something.
<code>concat()</code> is better than <code>+</code> operator.	<code>+</code> is less better than <code>concat()</code>