Why do we need packages in java?

Packages are used in Java in order to prevent naming conflicts, to control access, to make searching/locating and usage of classes, interfaces, enumerations and annotations easier, etc.

What is the default imported package?

Java compiler imports java. lang package internally by default. It provides the fundamental classes that are necessary to design a basic Java program.

What is Class? What is Object?

Class are a blueprint or a set of instructions to build a specific type of object. It is a basic concept of Object-Oriented Programming which revolve around the real-life entities. Class in Java determines how an object will behave and what the object will contain.

Object is an instance of a class. An object in OOPS is nothing but a self-contained component which consists of methods and properties to make a particular type of data useful.

Why we need constructor?

The purpose of a Java constructor is to initializes the newly created object before it is used

What is the default value of local variable? What is the default value of instance variable?

There is no default value for local variables, so local variables should be declared and an initial value should be assigned before the first use.

When we haven't initialized the instance variables, the compiler initializes them with default values. For boolean type, the default value is false, for float and double types default values are 0.0 and for remaining primitive types default value is 0.

What is garbage collection?

The task of garbage collection (GC) in the Java virtual machine (JVM) to automatically determine what memory is no longer being used by a Java application and to recycle this memory for other uses

The protected data can be accessed by subclasses or same package. True or false?

True

What is immutable class?

Immutable class in java means that once an object is created, we cannot change its content.

What's the difference between "==" and equals method?

The equals method compares the objects.

The == binary operator compares memory addresses.

What is wrapper class?

A Wrapper class is a class whose object wraps or contains primitive data types

What is autoboxing?

Autoboxing is the automatic conversion that the Java compiler makes between the primitive types and their corresponding object wrapper classes.

StringBuilder is threadsafe but slower than StringBuffer, true or false?

False

Constructor can be inherited, true or false?

False

How to call a super class's constructor?

the superclass constructor can be called from the first line of a subclass constructor by using the special keyword super() and passing appropriate parameters

Which class is the super class of all classes?

The Object class, which is stored in the java. lang package, is the ultimate superclass of all Java classes