**CONSTRUCTOR ASSIGNMENT**

**1. What is a constructor?**

**Ans:** A constructor in Java is a special method that is called when an object of a class is created. It is responsible for initializing the instance variables of the object and preparing it for use.

**2. What is constructor chaining?**

**Ans:** A class can contain more than one constructor and all these constructors have the same name they differ only in the type of argument, hence these constructors are considered as “Overloaded Constructor”.

**3. Can we call a subclass constructor from a superclass constructor?**

**Ans:** Yes, it is possible to call a subclass constructor from a superclass constructor using the super() keyword.

**4. What happens if you keep a return type for a constructor?**

**Ans:** If you specify a return type for a constructor in Java, it will no longer be a constructor, but rather a regular method.

**5. What is No-arg constructor?**

**Ans:** A no-arg constructor is a constructor in Java that takes no arguments. It is a special type of constructor that is used to create objects of a class without initializing any instance variables.

**6. How is a No-argument constructor different from the default Constructor?**

**Ans:** A no-argument constructor and a default constructor are often used interchangeably in Java, but they are not exactly the same.

A no-argument constructor is a constructor that takes no arguments, but is explicitly defined in the class code. It can be used to initialize instance variables with default values, or to perform any other custom initialization tasks.

On the other hand, a default constructor is a constructor that is automatically provided by the Java compiler if no constructors are defined in the class code. This constructor also takes no arguments, but it simply initializes all instance variables with their default values.

**7. When do we need Constructor Overloading?**

**Ans:** We need constructor overloading in Java when we want to create objects of a class with different initial states or with different sets of input parameters. Constructor overloading allows us to define multiple constructors in a class with different parameter lists, so that objects can be initialized in different ways, depending on the arguments passed during object creation.

**8. What is Default constructor Explain with an Example.**

**Ans:** In Java, a default constructor is a no-argument constructor that is generated automatically by the compiler if no constructors are defined in a class. The default constructor initializes all instance variables to their default values, which are 0 for numeric types, false for boolean types, null for reference types, and the equivalent uninitialized value for char type.

Example:

public class Person {

private String name;

private int age;

public Person() {

// default constructor

}

// other methods and constructors

}s