Constructor

What is Constructor

A constructor is used to create an object. Every class must be at least one constructor otherwise, no object can be created of the class.

If you don't explicitly define a constructor, the compiler automatically adds a default constructor inside the class. A constructor can be divided into two types, such as default constructor and user-defined constructor.

- Default Constructor.
- No-Arg Constructor.
- Parameterized Constructor.
- Copy Constructor.
- Compact Constructor (Record).
- Chaining Constructor.

Default Constructor

The default constructor in Java initializes the data members of the class to their default values such as 0 for int, 0.0 for double etc. This constructor is implemented by default by the Java compiler if there is no explicit constructor implemented by the user for the class.

No-Arg Constructor

No-Arg Constructor - a constructor that does not accept any arguments. Parameterized constructor - a constructor that accepts arguments. Default Constructor - a constructor that is automatically created by the Java compiler if it is not explicitly defined.

Parameterized Constructor

A parameterized constructor accepts parameters with which you can initialize the instance variables. Using parameterized constructor, you can initialize the class variables dynamically at the time of instantiating the class with distinct values.

Copy Constructor

A copy constructor in a Java class is a constructor that creates an object using another object of the same Java class. That's helpful when we want to copy a complex object that has several fields, or when we want to make a deep copy of an existing object.

Chaining Constructor

Constructor chaining refers to the ability to call a constructor inside another constructor. You can use a constructor chain either within the same class or even with another one. For the latter, the constructor should be through inheritance from the super class.

Compact Constructor

If you want your record's constructor to do more than initialize its private fields, you can define a custom constructor for the record. However, unlike a class constructor, a record constructor doesn't have a formal parameter list; this is called a compact constructor.

Interview Questions