Java 8 Features

1.Lambda Expression

Lambda expression helps us to write our code in functional style.

Syntax : - (argument-list/Parameter list) -> {body}

Java lambda expression is consisted of three components.2.

**1) Argument-list:** It can be empty or non-empty as well.

**2) Arrow-token:** It is used to link arguments-list and body of expression.

**3) Body:** It contains expressions and statements for lambda expression.

2. Method Reference

Java 8 Method reference is used to refer method of functional interface . It is compact and easy form of lambda expression.

There are following types of method references in java:

1. Reference to a static method.
2. Reference to an instance method.
3. Reference to a constructor.

3.Stream API

Java provides a new additional package in Java 8 called java.util.stream. This package consists of classes, interfaces and enum to allows functional-style operations on the elements.

4.Functional Interface

An Interface that contains only one abstract method is known as functional interface. It can have any number of default and static methods.

5.Optional

Java introduced a new class Optional in Java 8. It is a public final class which is used to deal with NullPointerException in Java application.

6.forEach()

Java provides a new method forEach() to iterate the elements. It is defined in Iterable and Stream interfaces.It is a default method defined in the Iterable interface. Collection classes which extends Iterable interface can use forEach() method to iterate elements.

7. Default method

Java provides a facility to create default methods inside the interface. Methods which are defined inside the interface and tagged with default keyword are known as default methods. These methods are non-abstract methods and can have method body.

8.Collectres

Collectors is a final class that extends Object class. It provides reduction operations, such as accumulating elements into collections, summarizing elements according to various criteria etc.