***Java 8.***

1). What is functional interface?

2). What is lambda expression?

3). What is method reference?

4). What you mean by default method in interfaces:-

5). What is stream API?

6). What is Date and Time API?

7). What is optional Class?

8). What is parallel sorting in java?

***Ans.***

1). What is functional interface?

The functional interfaces are the usual interfaces which consist only one abstract method. That means which is for doing any specific tasks. Usually the lambda expressions are use to define the behavior of functional interfaces.

2). What is lambda expression?

The lambda expression is a block of code that can be pass as an argument to a method. Which is used for define the anonymous functions .

(The syntax is similar to the arrow function using in java script)

Eg: Function<String, Integer> lambda = str -> Integer.parseInt(str); (This is the example for using lambda expression for invoking and define a method.

3). What is method reference?

The method reference is short hand method of lambda function to invoke existing method or constructors. The method reference are in four types such as:-

🡪. Reference to a static method : ***‘containing class :: static method name’***

🡪. Reference to an instance method of a particular object ***: ‘containing object :: instance method name’***

🡪. Reference to an instance method of an arbitrary object of a particular type ***: ‘containing type :: method name’***

🡪.Reference to a constructure ***: ‘Class name :: new ‘***

4). What you mean by default method in interfaces:-

The default method in interface is introduced in java 8 . The default methods are the methods with in an interfaces that have a default implementation also. To declare a default method using the keyword ‘default’. We can create a number of default methods in an interface.

The default methods are automatically invoke at the time of when we implements the interface to a class.

5). What is stream API?

The stream API is a collection of interfaces or classes that allows to process data collections using functional programing techniques. It is the part of the collections API .It support operations like filter, sort , map, collect.

6). What is Date and Time API?

This is the classes that include In the packages that provide a modern approach to working with the dates and times. It contain in the ***package ‘java.time’.***

7). What is optional Class?

Optional is a class in java which is use to contain a value that might or might not be present.

**Eg: Optional<String> name = Optional.of("John Doe");**

8). What is parallel sorting in java?

The parallel sorting is a sorting technique that uses multiple threads to sort an array in parallel.

Eg: Arrays.parallelSort(array);