**Assignment 4**

1.What is difference b/w constructor and function in the class?

Constructor is used to initialize objects and has the same name as the class whereas method is used to define a functionality of an object and do not have the same name as the class.

2. Who gives default constructor?

Every time an object is called using the new() keyword, as constructor is called. This constructor is called default constructor.

3. What are other responsibilities of JVM?

The main functions of JVM is to allow Java program run on any device and to manage and optimize program memory.

4. Is java call by reference or call by value?

Java uses only call by value while passing reference variables as well. It creates a copy of references and passes them as valuable to the methods.

5. Who is providing the extra functions in java?

With each iteration, extra features are introduced by Oracle Corporation.

6. What happens if a final keyword is applied on class and function?

If we declare a method as final, then it cannot be overridden by any subclasses. And, if we declare a class as final, we restrict the other classes to inherit or extend it.

7. What happens if final keyword is applied on variable, class and method?

If we initialize a variable with the final keyword, then we cannot modify its value. If we declare a method as final, then it cannot be overridden by any subclasses. And, if we declare a class as final, we restrict the other classes to inherit or extend it.

8. Why string is passed in main method?

Because by passing String arrays, we can pass all the necessary parameters like options/arguments related to the program in the form of String easily.

9. Why only JVM gives default constructor?

The Java compiler provides a default constructor if you don't have any constructor in a class.

10. Who provides extra functions in main method?

By crating extra functions outside main, we can call those functions inside main to give main more functionalities.

11. Difference between Java 7 and Java 8?

Java 7 brings JVM support for dynamically typed languages plus Type Interference for Generic Instance creation. Java 8 brings the most anticipated feature for the programming language called Lambda Expressions, a new language feature which allows users to code local functions as method arguments.

12. When and why collections were added?

Collections was first introduced in JDK 1.2. Java Collection Framework enables the user to perform various data manipulation operations like storing data, searching, sorting, insertion, deletion, and updating of data on the group of elements.

13. Difference between Collection and Collections?

The Collection is an interface that contains a static method since java8. The Interface can also contain abstract and default methods.

Collections contains only static methods.