Date: 15-03-2022
Name: Bhargav Sai V
ID: CAPG48LSRB328

1. What is the difference between constructor and method?

Ans: Constructor:

A Constructor is used to initialize an object.
Constructors are invoked implicitly.
Constructors won't return any value.
If a constructor is not present then Java compiler provides a default constructor.
Class name and Constructor name has to be the same.

Method:

Method is used to exhibit functionality of an object.
Methods are invoked explicitly.
A method may/may not return a value.
A method has to be declared, no default method will be provided.
A method name should not be of the same name as that of class.

2. Who gives the default constructor?

Ans: Java compiler gives the default constructor. The java compiler is a part of JVM.

3. What are the other roles of JVM?

Ans: JVM is used to convert bytecode to machine-specific code. JVM loads, verifies and executes Java bytecode. It is also known as Interpreter or the core of Java Programming language. JVM is necessary in both JDK & JRE. It can run programs in other languages also. JVM is platform dependent and performs many functions, including memory management and security.

JVM is the foundation, heart of java programming language, and ensures the program's java source code will be platform-agnostic.

4. What is the difference between c and java access specifiers?

Ans: There are no access specifiers in C language as it is not an Object Oriented Programming whereas there are 4 access modifiers in Java, they are public,private,default, & protected.

5. Why only JVM gives default constructor?

Ans: Because the default constructor is used to provide the default values and this is done by the java compiler. The java compiler is part of JVM.

6. Who provides extra functions in the main method?

Ans: Because of the packages and libraries present in JVM.

7. Why do we only have string arguments?

Ans: Because the command line only accepts the string. Everything we pass as an argument to your

program on the command line can be represented as a string. Not as doubles or integers.

8. What happens if the final keyword is applied on a variable,class and method?
Ans : If we declare a method as final, then it can't be overridden by any subclasses. If we declare a class as final then other classes can't be inherited or extended from it.

9. Is java call by reference or call by value?
Ans: 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.

10. What is the difference between constructor and function in the class?
Ans: Constructor is a block of code that initializes a newly created object.
Function is a group of statements that can be called at any point in the program using its name to perform a specific task.
Constructor has the same name as the class name.

11.What is the difference between java 8 and java7?
Ans : Java 7 brings JVM support for dynamically-typed languages plus Type Inference 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?
Ans: The Collections Framework provides high-performance, high-quality implementations of useful data structures and algorithms. The various implementations of each interface are interchangeable, so programs can be easily tuned by switching collection implementations.Collections are used to store, retrieve, manipulate, and communicate aggregate data .

13.What is the difference b/w collection and collections?
Ans: The Set, List, and Queue are some of the subinterfaces of Collection interface, a Map interface is also part of the Collections Framework, but it doesn't inherit Collection interface. The important methods of Collection interface are add(), remove(), size(), clear() etc and the Collections class contains only static methods like sort(), min(), max(), fill(), copy(), reverse() etc.
Collection:

- It is an interface .
- It is used to represent a group of individual objects as a single unit.
- The Collection is an interface that contains a static method since java8. The Interface can also contain abstract and default methods.

Collections:

- It is a utility class.
- It defines several utility methods that are used to operate on collection.
- It contains only static methods.

14. What are functions in java?

Ans :

- Function without parameter and without return type
- Function without parameter and with return type
- Function with parameter and without return type
- Function without parameter and with return type