Interview Questions

# Q-1 What do you mean by Exceptional handling?

Ans – Exception handling is a process of handling exceptions occurs during the execution of a program. Due to the occurrence of exception, execution of programs get halted, so it is very important to handle these exceptions so that program can be executed smoothly. We can handle the exceptions by using 5 keywords:

* Try
* Catch
* Throw
* Throws
* And finally

# Q-2 Difference between class and objects ?

Ans -> The class and objects both are OOPs features.

* The class is a logical entity whereas object is a physical quantity.
* Class does not occupy memory at the time of creation whereas object occupied space in memory when it is created.
* For declaring a class, we use a ‘class’ keyword followed by a class name whereas we can create a object using the ‘new’ keyword in java.
* A class is like a factory which generates objects and objects are the instance of the class.

# Q-3 Explain the features of OOPs?

Ans – **Object** : an object is a physical entity which has a state and behavior. It occupies space in memory. It is a sample of a class. Onject helps to access the methods and variables in the program

**Class :** a class is a “collection of objects”. A class is a logical entity, which does not take any space. A class includes all the data and methods which shows the behavior of an object.

**Inheritance** : Inheritance is a process by which one class can have all properties of other class. Inheritance increase the role of reusability.

# Q-4 What is OOPs concepts?

Ans -> OOP stands for object oriented programming. Object-oriented programming is a coding practice which works with objects and class. Java is one of the programming language which is based on these concepts. The basic OOP features are

* Object
* Class
* Inheritance
* Polymorphism
* Encapsulation

# Q-5 What do you mean by Constructor?

Ans -> When a new object is created in a program a constructor gets invoked corresponding to the class.

The constructor is a method which has the same name as the class name.

If a user doesn’t create a constructor implicitly a default constructor will be created.

The constructor can be overloaded.

If the user created a constructor with a parameter then he should create another constructor explicitly without a parameter.

# Q-6 Difference between Abstract class and Interface.?

Ans -> **Abstract Class:**

* Abstract classes have a default constructor and it is called whenever the concrete subclass is instantiated.
* It contains Abstract methods as well as Non-Abstract methods.
* The class which extends the Abstract class shouldn’t require the implementation of all the methods, only Abstract methods need to be implemented in the concrete sub-class.
* Abstract class contains instance variables.

**Interface:**

* It doesn’t have any constructor and couldn’t be instantiated.
* The abstract method alone should be declared.
* Classes that implement the interface should provide the implementation for all the methods.
* The interface contains only constants.

# Q-7 What is the meaning of Collections in Java?

Ans -> Collection is a framework that is designed to store the objects and manipulate the design to store the objects.

Collections are used to perform following operations

* Searching
* Sorting
* Manipulation
* Insertion
* Deletion

A group of objects is known as collections. All the classes and interfaces for collecting are available in Java util package.

# Q-8 ****Explain public static void main(String args[]) in Java.?****

Ans **-> public :** Public is an access modifier, which is used to specify who can access this method. Public means that this Method will be accessible by any Class.

**Static** : It is a keyword in java which identifies it is class-based. main() is made static in Java so that it can be accessed without creating the instance of a Class. In case, main is not made static then the compiler will throw an error as main() is called by the JVM before any objects are made and only static methods can be directly invoked via the class.

**Void :** It is the return type of the method. Void defines the method which will not return any value.

**Main** : It is the name of the method which is searched by JVM as a starting point for an application with a particular signature only. It is the method where the main execution occurs.

**String args[] :** It is the parameter passed to the main method.

# Q-9 ****Why Java is not 100% Object-oriented?****

Ans -> Java is not 100% Object-oriented because it makes use of eight primitive data types such as boolean, byte, char, int, float, double, long, short which are not objects.

# Q-10 Contiguous memory locations are usually used for storing actual values in an array but not in ArrayList. Explain**.?**

Ans -> An array generally contains elements of the primitive data types such as int, float, etc. In such cases, the array directly stores these elements at contiguous memory locations. While an ArrayList does not contain primitive data types. An arrayList contains the reference of the objects at different memory locations instead of the object itself. That is why the objects are not stored at contiguous memory locations.