

## **Assignment Questions**

### **Q.1) What is an interface in Java ?**

Ans:- If a class that contains only abstract methods and no concrete methods . such a class becomes an interface. It is only a specification of method prototype.

### **Q.2) Which modifiers are allowed for methods in an Interface? Explain with an example ?**

Ans:- Only public and abstract are allowed for methods in an interface. All the methods of interface is implemented in the implemented class , so the body of a method is undefined of an interface , that's why all the method of an interface is abstract by default.

### **Q.3) What is the use of interface in Java? Or, why do we use an interface in Java ?**

Ans:- There are many reasons of using interface in java :---

- a) An interface is used to achieve full abstraction.
- b) Using interfaces is the best way to expose our project's API to some other project.
- c) Programmers use interfaces to customize features of software differently for different objects.
- d) By using interface, we can achieve the functionality of multiple inheritance.

### **Q.4) What is the difference between abstract class and interface in Java?**

Ans:-- Abstraction → 1) An abstraction class is written when there are some common features shared by all the objects.

2) An abstract class can contain instance variables also.

3) All the abstract methods of the abstract class should be implemented in its sub classes.

4) An abstract class can hold abstract methods as well as concrete methods.

Interface → 1) An interface is written when all the features are implemented differently in different objects .

2) An interface contains only constants, not instance variable.

3) All the methods of the interface should be implemented in its implemented class.

4) An interface contains only abstract methods.