INTERFACE

1.What is an interface in java

An interface in Java is a blueprint of a class. It has static constants and abstract methods.
The interface in Java is a mechanism to achieve abstraction. There can be only abstract methods in the Java interface, not method body. It is used to achieve abstraction and multiple inheritance in Java.
In other words, you can say that interfaces can have abstract methods and variables. It cannot have a method body.
Java Interface also represents the IS-A relationship.

2.Which modifiers are allowed methods in an interface?Explain with an example.

Only public and abstract modifiers are allowed for methods in an interfaces.

Example of Abstract class containing the abstract method

```
abstract class Vehicle
{
   abstract void bike();

}
class Honda extends Vehicle
{

   @Override
   void bike() {
      System.out.println("Bike is running");

   }

}

public class AbstractExample1 {

   public static void main(String[] args) {

   Honda obj=new Honda();
   obj.bike();
   }
}
```

3.What is the use of interfaces in java?

- It is used to achieve abstraction.
- By interface, we can support the functionality of multiple inheritance.
- It can be used to achieve loose coupling.

4.What is the difference between abstract class and interface class

Abstract class	Interface
1) Abstract class can have abstract and non-abstract methods.	Interface can have only abstract methods. Since Java 8, it can have default and static methods also.
2) Abstract class doesn't support multiple inheritance.	Interface supports multiple inheritance.
3) Abstract class can have final, non-final, static and non-static variables.	Interface has only static and final variables.
4) Abstract class can provide the implementation of interface.	Interface can't provide the implementation of abstract class.
5) The abstract keyword is used to declare abstract class.	The interface keyword is used to declare interface.
6) An abstract class can extend another Java class and implement multiple Java interfaces.	An interface can extend another Java interface only.
7) An abstract class can be extended using keyword "extends".	An interface can be implemented using keyword "implements".
8) A Java abstract class can have class members like private, protected, etc.	Members of a Java interface are public by default.

9)Example:
public abstract class Shape{
public abstract void draw();
}
	Example:
	public interface Drawable{
	void draw();
	}