Assignment 18

Ans 1. An interface in Java is a mechanism that is used to achieve complete abstraction. It is basically a kind of class that contains only constants and abstract methods.

Ans 2. Only abstract and public modifiers are allowed for methods in interfaces, from Java8 onwards interfaces allow default methods and static methods.

```
For example:
 Interface int1{
   public void demo();
   public static void display() {
     System.out.println("This is a static method");
   }
}
public class interfaceExp{
   public void demo() {
```

```
    System.out.println("This is the implementation of
the demo method");
  }
  public static void main(String args[]) {
    interfaceExp obj = new interfaceExp();
    obj.demo();
    int1.display();
  }
}
```
Output:
 This is the implementation of the demo method
This is a static method

Ans 3. Uses of interface:

- An interface is used to achieve full abstraction.
- Using interfaces is the best way to expose our project's API to some other project.
- Programmers use interfaces to customise features of software differently for different objects.

- By using interface, we can achieve the functionality of multiple inheritance.

Ans 4. Difference between abstract class and interface:

Abstract class	Interface
It can have abstract and non abstract methods.	It allows only abstract methods.
Abstract keyword is used to declare.	Interface keyword is used to declare
It can have private, protected and public class members.	Its members are public by default.
It can implement interface.	It does not allow implementation of abstract class.
It can have final, non-final, static or non- static variables.	It allows only static and final variables.
It does not allow multiple inheritance.	It allows multiple inheritance.
Syntax:public abstract class abs{ public abstract void xyz(); }	Syntax: public interface inter{ Void xyz(); }

| It can be extended using keyword "extends". | It can be implemented using keyword "implements". |