Lab Program 2:

Develop Java program to create class student with members usn, name, an array credits and an array marks. Include method to accept data display and calculate sgpa of a student.

```java
import java.util.* ;
class Student
{
    String usn, name ;
    static int credits [] ;
    static double marks [] ;
    void input (int n)
    {
        Scanner sc = new Scanner (System.in);
        System.out.println (" Enter usn and name");
        usn = sc.nextLine ();
        name = sc.nextLine ();
        System.out.println (" Enter marks along with
                             credits ");
        for (int i=0; i<n; i++)
        {
            marks [i] = sc.nextDouble ();
            credits [i] = sc.nextInt ();
            sopln ();
        }
    }
    double calculate (int n)
    {
        int c, cred = 0;
        double tot, total = 0.0;
```

```java
for (int i = 0; i < n; i++)
{
    tot = marks[i];
    if (tot >= 90)
        c = 10;
    else if (tot >= 80)
        c = 9;
    else if (tot >= 70)
        c = 8;
    else if (tot >= 60)
        c = 7;
    else if (tot >= 50)
        c = 6;
    else if (tot >= 40)
        c = 4;
    else
        c = 0;
    total = total + (c * credits[i]);
    cred = cred + credits[i];
}
total = total / cred;
return (total);
}
void display (int n, float total)
{
    System.out.println (" Name : " + name);
    System.out.println (" USN : " + usn);
    System.out.println (" Marks with credits : ");
    for (int i = 0; i < n; i++)
        System.out.println (marks[i] + " ? " + credits[i]
    
    System.out.println (" SGPA : " + total);
}
```

```java
public static void main( String args[])
{
    Scanner sc = new Scanner(system in );
    Student obj = new Student ();
    System.out.println (" enter no. of course.")
    int n = sc. nextInt();
    credits = new int [n];
    marks = new double[n];
    obj.input (n);
    double total = obj.calculate (n);
    float res = (float) total;
    obj.display (n, res);
}
}.
```