LAB 2:

Java Program to create class Student with members usn, name, credit, marks. Include methods to accept & display details & to calc SGPA

    Step 1: Create class student with members & methods

    step 2: Read usn, name, credits, marks from user.

    Step 3: Find grade point from marks

    Step 4: Calc SGPA by using $SGPA = \dfrac{\sum_{i=1}^{5} Credits[i] \times Grade\ point[i]}{total\ credits}$

    Step 5: Print USN, Name, SGPA.

Program:

```java
import java.util.*;
class student
{
    String usn, name;
    int credits [] = new int [5]
    float marks [] = new float [5];
    double sgpa;
    void input ()
    {
        ~~float for s datas=o;~~
        Scanner in = new Scanner (System.in)
        usn = in.nextLine();
        name = in.nextLine();
        System.out.println ("Enter credits in all subjects");
        for (int i=0; i<5; i++)
        credits [i] = nextInt();
```

```java
        System.out.println ("Enter Marks in all subjects in same order as
                            credits");
        for (int i=0; i<5; i++)
            marks[i] = ih.nextFloat();
    }

    void calc sgpa ()
    {
        int sum = 0, totcr = 0;
        for (int i = 0; i<5; i++)
        {
            totcr += credits[i];
            if (marks[i] >= 89.5 && marks[i] <= 100)
                sum += 10 * credits[i];
            else if (marks[i] >= 79.5 && marks[i] < 89.5)
                sum += 9* credits[i];
            else if (marks[i] >= 69.5 && marks[i] < 79.5)
                sum += 8 * credits[i];
            else if (marks[i] >= 59.5 && marks[i] < 69.5)
                sum += 7* credits[i];
            else if (marks[i] >= 49.5 && marks[i] < 59.5)
                sum += 6* credits[i];
            else if (marks[i] >= 39.5 && marks[i] < 49.5)
                sum += .4* credits[i];
            else
                sum += 0* credits[i];
        }
        sgpa = sum/(double) totcr;
    }

    void display
    {
        System.out.println ("\n USN : "+usn + "\n Name : "+name+
                            "\n SGPA : " + sgpa);
```

```java
class studet
{
        public static void main (string [] args)
        {
                student  s = new student ();
                s.input ();
                s.calcsgpa ();
                s.display ();
        }
}
```

output

Enter USN   Name

1BM19CS147

Shashank Sharma

Enter credits in all Subjects

5

4

4

4

3

Enter marks in all Subjects in same order as credits

70

80

79

89.5

98

USN : 1BM19CS147

Name : Shashank Sharma

SGPA : 8.9