

## **LAB PROGRAM 2**

**Q.** Develop a Java program to create a class Student with members usn, name, an array credits and an array marks. Include methods to accept and display details and a method to calculate SGPA of a student.

### **PROGRAM:**

```
import java.util.Scanner;

class Student
{
    String name;
    String usn;
    int credits[] = new int[5];
    int gradepoints[] = new int[5];
    double marks[] = new double[5];
    int i;
    int total_credits=0;
    int sgpa=0;
    Scanner in = new Scanner(System.in);

    void getdetails()
    {
        System.out.println("Enter the Name of Student: ");
```

```

        name = in.nextLine();
        System.out.println("Enter the USN of Student: ");
        usn = in.nextLine();
        System.out.println("Enter the Credits in the subjects: ");
        for(i=0;i<5;i++)
        {
            credits[i] = in.nextInt();
            total_credits = total_credits + credits[i];
        }
        System.out.println("Enter the Marks in the subjects(0-
100): ");
        for(i=0;i<5;i++)
        {
            marks[i] = in.nextDouble();
        }
    }

    void displaydetails()
    {
        System.out.println("Student Name: "+name);
        System.out.println("Student USN: "+usn);
        for(i=0;i<5;i++)
        {

```

```
        System.out.println("Subject "+(i+1)+" --> Marks  
scored: "+marks[i]+" Credit: "+credits[i]);  
    }  
    System.out.println("SGPA: "+(double)sgpa/total_credits);  
}
```

```
void sgpa()  
{  
    for(i=0;i<5;i++)  
    {  
        if(marks[i]>=91 && marks[i]<=100)  
        {  
            gradepoints[i] = 10;  
        }  
        else if(marks[i]>=81)  
        {  
            gradepoints[i] = 9;  
        }  
        else if(marks[i]>=71)  
        {  
            gradepoints[i] = 8;  
        }  
        else if(marks[i]>=61)  
        {
```

```

        gradepoints[i] = 7;
    }
    else if(marks[i]>=51)
    {
        gradepoints[i] = 6;
    }
    else if(marks[i]>=41)
    {
        gradepoints[i] = 5;
    }
    else if(marks[i]>0 && marks[i]<40)
    {
        gradepoints[i] = 0;
    }
    sgpa = sgpa + (gradepoints[i]*credits[i]);
}
}

```


```

class Lab2
{
    public static void main(String args[])
    {
        Student std1 = new Student();
    }
}

```

```
        std1.getdetails();  
        std1.sgpa();  
        std1.displaydetails();  
    }  
}
```

## OUTPUT

 Command Prompt

```
D:\Workspace>java Lab2  
Enter the Name of Student:  
KIRAN  
Enter the USN of Student:  
1BM19CS299  
Enter the Credits in the subjects:  
5  
5  
5  
5  
4  
Enter the Marks in the subjects(0-100):  
78  
86  
87  
92  
93  
Student Name: KIRAN  
Student USN: 1BM19CS299  
Subject 1 --> Marks scored: 78.0 Credit: 5  
Subject 2 --> Marks scored: 86.0 Credit: 5  
Subject 3 --> Marks scored: 87.0 Credit: 5  
Subject 4 --> Marks scored: 92.0 Credit: 5  
Subject 5 --> Marks scored: 93.0 Credit: 4  
SGPA: 9.166666666666666
```