

## Program 2

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

```
import java.util.Scanner;

class Student{

    String usn,name;

    int credits[]=new int[10];

    int marks[]=new int[10];

    void accept()
    {
        Scanner ss=new Scanner(System.in);

        System.out.println("Enter name:");

        name=ss.next();

        System.out.println("Enter usn:");

        usn=ss.next();

        System.out.println("Enter the credits of the course and the respective marks:");

        for(int i=0;i<10;i++)
        {
            credits[i]=ss.nextInt();

            marks[i]=ss.nextInt();

        }
    }

    void display()
    {

        System.out.println("Name:"+name+"\nUSN:"+usn);

        for(int i=0;i<10;i++)
        {

            System.out.println("\nCourse "+(i+1));
```

```

        System.out.println("Credits:"+credits[i]);
        System.out.println("Marks:"+marks[i]);
    }
}
double calculate()
{
    int num=0,den=0;
    double sgpa;
    for(int i=0;i<10;i++)
    {
        if(marks[i]<40)
            num+=0;
        else if(marks[i]/10<10)
            num+=credits[i]*(((int)marks[i]/10)+1);
        else if(marks[i]/10==10)
            num+=credits[i]*((int)marks[i]/10);
        den+=credits[i];
    }
    sgpa=(double)num/den;
    return sgpa;
}
}
class labprog2{
    public static void main(String args[]){
        Student s1=new Student();
        s1.accept();
        s1.display();
        System.out.println("\nSGPA of student:"+s1.calculate());
    }
}

```

}

## Output:

```
C:\Users\Admin\Desktop\1BM21CS225\Java Files>javac labprog2.java

C:\Users\Admin\Desktop\1BM21CS225\Java Files>java labprog2
Enter name:
Surya
Enter usn:
1bm21cs225
Enter the credits of the course and the respective marks:
2 100
2 88
2 77
2 66
2 55
2 99
2 81
2 70
2 62
2 18
Name:Surya
USN:1bm21cs225

Course 1
Credits:2
Marks:100

Course 2
Credits:2
Marks:88

Course 3
Credits:2
Marks:77

Course 4
Credits:2
Marks:66

Course 5
Credits:2
Marks:55

Course 6
Credits:2
Marks:99

Course 7
Credits:2
Marks:81

Course 8
Credits:2
Marks:70

Course 9
Credits:2
Marks:62

Course 10
Credits:2
Marks:18

SGPA of student:7.4
```