

```
/*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.
*/
```

```
import java.util.Scanner;
class Student
{
    private String USN;
    private String name;
    private int n;
    private double SGPA = 0;
    private int totalCredits = 0;
    private int credits[];
    private double marks[];
    Scanner ss = new Scanner(System.in);

    void Details()
    {
        System.out.println("Enter USN of the student");
        USN = ss.nextLine();
        System.out.println("Enter Name of the student");
        name = ss.nextLine();
        System.out.println("Enter no of subjects");
        n = ss.nextInt();
        credits = new int[n];
        marks = new double[n];
        System.out.println("****Enter details of the subjects:****");
        for(int i=0;i<n;i++)
        {
            System.out.println("Enter credits allotted to the subject "+(i+1));
            credits[i] = ss.nextInt();
            System.out.println("Enter marks in the subject "+(i+1));
            marks[i] = ss.nextDouble();
            Calculate(credits[i],marks[i],i);
        }
    }
    void Calculate(int credit,double mark,int j)
    {
        totalCredits = totalCredits + credit;
        if(marks>90&&mark<=100)
```

```
        System.out.println("Enter marks in the subject "+(i+1));
        marks[i] = ss.nextInt();
        Calculate(credits[i],marks[i],i);
    }
}

void Calculate(int credit,double mark,int j)
{
    totalCredits = totalCredits + credit;
    if(mark>=90&&mark<=100)
        SGPA = SGPA + (10*credit);
    else if(mark>=80 && mark<=89)
        SGPA = SGPA + (9*credit);
    else if(mark>=70&&mark<=79)
        SGPA = SGPA + (8*credit);
    else if(mark>=60&&mark<=69)
        SGPA = SGPA + (7*credit);
    else if(mark>=50 && mark<=59)
        SGPA = SGPA + (6*credit);
    else if(mark>=40&&mark<=49)
        SGPA = SGPA + (5*credit);
    else
        System.out.println("Failed in Subject "+(j+1));
}

void Display()
{
    System.out.println("Details of the Student");
    System.out.println("USN: "+USN);
    System.out.println("Name :"+name);
    System.out.println("SGPA of Student "+(SGPA/totalCredits));
}
}

class Main
{
    public static void main(String args[])
    {
        Student s1 = new Student();
        s1.Details();
        s1.Display();
    }
}
```

Microsoft Windows [Version 10.0.18363.1082]
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```
C:\Users\priya>cd desktop
C:\Users\priya\Desktop>cd java
C:\Users\priya\Desktop\java>javac 9.java
C:\Users\priya\Desktop\java>java Main
Enter USN of the student
345
Enter Name of the student
priyanshu
Enter no of subjects
4
****Enter details of the subjects:****
Enter credits allotted to the subject 1
2
Enter marks in the subject 1
1
Failed in Subject 1
Enter credits allotted to the subject 2
3
Enter marks in the subject 2
56
Enter credits allotted to the subject 3
4
Enter marks in the subject 3
75
Enter credits allotted to the subject 4
5
Enter marks in the subject 4
90
Details of the Student
USN: 345
Name :priyanshu
SGPA of Student 7.142857142857143
C:\Users\priya\Desktop\java>
```