

```

import java.util.Scanner;
class Student {
    String usn,name;
    int[] credits,marks;
    void acceptDetails(){
        Scanner sc = new Scanner (System.in);
        System.out.print(s:"Enter the USN:");
        usn=sc.next();
        System.out.print(s:"Enter the name:");
        name=sc.next();
        credits=new int[4];
        marks=new int[4];
        System.out.println(x:"Enter details of credits and marks in order for 4 subjects:");
        for(int i=0;i<4;i++){
            System.out.print("Enter the credits for subject"+(i+1)+":");
            credits[i]=sc.nextInt();
            System.out.print("Enter marks for subject"+(i+1)+":");
            marks[i]=sc.nextInt();
        }
    }
    void display(){
        System.out.println(x:"Student details:");
        System.out.println("USN:"+usn);
        System.out.println("Name:"+name);
        for(int i=0;i<4;i++){
            System.out.println("Subject"+(i+1)+"--Credits:"+credits[i]+",Marks"+marks[i]);
        }
    }
    double calc(){
        int totalCredits=0;
        double totalGradePoints=0;
        for(int i=0;i<4;i++){
            totalCredits+=credits[i];

```

```

class Student {
    double calc(){
        for(int i=0;i<4;i++){
            totalCredits+=credits[i];
            totalGradePoints += gradePoints(marks[i])*credits[i];
        }
        return totalGradePoints/totalCredits;
    }
    int gradePoints(int marks){
        if (marks>=90) return 10;
        else if (marks>=80) return 9;
        else if (marks>=70) return 8;
        else if (marks>=60) return 7;
        else if (marks>=50) return 6;
        else if (marks>=40) return 5;
        else return 0;
    }
}

public class SGPA{
    Run main | Debug main | Run | Debug
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
        System.out.print(s:"Enter the number of students:");
        int numStudents = sc.nextInt();
        Student student[] = new Student[numStudents];
        for(int i=0;i<numStudents;i++) {
            student[i] = new Student();
            student[i].acceptDetails();
            student[i].display();
            System.out.println("\nSGPA:"+student[i].calc());
        }
    }
}

```

```
Enter marks for subject2:90
Enter the credits for subject3:4
Enter marks for subject3:90
Enter the credits for subject4:2
Enter marks for subject4:89
Student details:
USN:1BM24CS317
Name:Varshitha.B
Subject1--Credits:4,Marks88
Subject2--Credits:3,Marks90
Subject3--Credits:4,Marks90
Subject4--Credits:2,Marks89

SGPA:9.538461538461538
Enter the USN:█
```