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

→ Class student {

String usn;
String name;
int credit[] = new int[100];
int marks[] = new int[100];
Scanner s1 = new Scanner(System.in);
Student() {
};
System.out.println("Enter no. of subjects");
int n = s1.nextInt();
setter
void getter()
{
Scanner sc = new Scanner(System.in);
usn = sc.next();
name = sc.next();

System.out.println("Enter the number of subjects");
n = sc.nextInt();
System.out.println("Enter the credit of each
for(int i=0; i<n; i++)
{
System.out.println("Enter the credit of subject "+i);
credit[i] = sc.nextInt();
}

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

```
System.out.println("Enter the marks of subject "+i);
marks[i] = sc.nextInt();

void display()
{
System.out.println("USN");
System.out.println(name);
for(int i=0; i<n; i++);
    System.out.println(" "+credits[i]);
    System.out.println(" "+marks[i]);
    System.out.println();
    }

void calculate()
{
int gradepoint, total=0, total1=0
for(int i=0; i<n; i++);
  if(marks >=90)
    {
      gradepoint = 10;
    }
  else if(marks >= 80)
    {
      gradepoint = 9;
    }
  else if(marks >= 70)
    {
      gradepoint = 8;
    }
  else if(marks >= 60)
    {
      gradpoint += 7;
    }
```

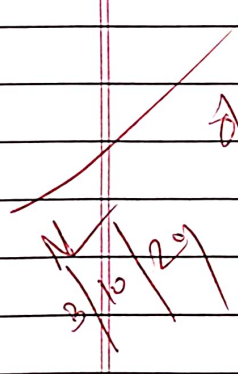
```
else if(marks ≥ 50)
  {
  Grade_point = 6 ;
  }

~~int~~ total += (Gradepoint * credits) ;
    total c += credits;
  }

~~int sgpa = total/~~
int sgpa = ~~total~~ total / total c ;

System.out.println(" The SGPA of student is " + sgpa );
  }

(Class main()
  {
  public static void main(~~System~~ String [] args );
    {
    Student S1 = new student ();
    S1.setter ()
    S1. display ();
    S1. calculate ();
    }
  }
```



2) Enter the number of subjects:

2

Enter USN : 4533

Enter Name : San

Enter the credit and marks of sub 1

4

90

Enter the credit and marks of sub 2

4

90

USN : 4533

Name: San

Subject 1 - credits : 4 ; marks : 90

Sub 2 - credits : 4 ; marks : 90

The SGPA is 10

```java
import java.util.Scanner;

class Student {
    String usn;
    String name;
    int credits[] = new int[100];
    int marks[] = new int[100];


    void set(int n) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter USN: ");
        usn = sc.next();
        System.out.print("Enter Name: ");
        name = sc.next();

        for (int i = 0; i < n; i++) {
            System.out.println("Enter the credit and marks of the subject " + (i + 1) + " one by one:");
            credits[i] = sc.nextInt();
            marks[i] = sc.nextInt();
        }

    }


    void display(int n) {
        System.out.println("USN: " + usn);
        System.out.println("Name: " + name);
        for (int i = 0; i < n; i++) {
            System.out.println("Subject " + (i + 1) + " Credits: " + credits[i] + ", Marks: " + marks[i]);
        }
    }


    void calculate(int n) {
        int grade = 0;
        int total = 0;
        int totalCredits = 0;

        for (int i = 0; i < n; i++) {
            if (marks[i] >= 90) {
                grade = 10;
            } else if (marks[i] >= 80) {
                grade = 9;
            } else if (marks[i] >= 70) {
```

```
        for (int i = 0; i < n; i++) {
            if (marks[i] >= 90) {
                grade = 10;
            } else if (marks[i] >= 80) {
                grade = 9;
            } else if (marks[i] >= 70) {
                grade = 8;
            } else if (marks[i] >= 60) {
                grade = 7;
            } else if (marks[i] >= 50) {
                grade = 6;
            } else {
                grade = 0;
            }

            total += (grade * credits[i]);
            totalCredits += credits[i];
        }


        double sgpa = (double) total / totalCredits;
        System.out.println("The SGPA is: " + sgpa);
    }
}

public class SGPA {
    public static void main(String[] args) {
        Student s1 = new Student();
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter the number of subjects: ");
        int n = sc.nextInt();

        s1.set(n);
        s1.display(n);
        s1.calculate(n);


    }
}
```

```
C:\Users\shett\OneDrive\Documents\javaclasslab>javac SGPA.java

C:\Users\shett\OneDrive\Documents\javaclasslab>java SGPA
Enter the number of subjects:
8
Enter USN: 234
Enter Name: xyz
Enter the credit and marks of the subject 1 one by one:
4
91
Enter the credit and marks of the subject 2 one by one:
4
85
Enter the credit and marks of the subject 3 one by one:
3
90
Enter the credit and marks of the subject 4 one by one:
3
85
Enter the credit and marks of the subject 5 one by one:
3
97
Enter the credit and marks of the subject 6 one by one:
1
90
Enter the credit and marks of the subject 7 one by one:
1
93
Enter the credit and marks of the subject 8 one by one:
1
96
USN: 234
Name: xyz
Subject 1 Credits: 4, Marks: 91
Subject 2 Credits: 4, Marks: 85
Subject 3 Credits: 3, Marks: 90
Subject 4 Credits: 3, Marks: 85
Subject 5 Credits: 3, Marks: 97
Subject 6 Credits: 1, Marks: 90
Subject 7 Credits: 1, Marks: 93
Subject 8 Credits: 1, Marks: 96
The SGPA is: 9.65
```