

2. 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.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();
    }
}

```

output:

PROBLEMS



CodeLens (Launch) - 1



```
bash-5.0$ /Library/Java/JavaVirtualMachines/jdk-15.jdk/Contents/Home/bin/java -agentlib:jdwp=transport=dt_socket,server=n,suspend=y,address=localhost:56291 --enable-preview -XX:+ShowCodeDetails InExceptionMessages -Dfile.encoding=UTF-8 -cp "/Users/adityaprakasha/Library/Application Support/Code/User/workspaceStorage/cfbc9c7f24e20b2c0e1ac38bf24bd34d/redhat.java/jdt_ws/java_895310d3/bin"
Main
Enter USN of the student
1BM17CS088
Enter Name of the student
james bond
Enter no of subjects
3
*Enter details of the subjects:*
Enter credits allotted to the subject 1
3
Enter marks in the subject 1
86
Enter credits allotted to the subject 2
4
Enter marks in the subject 2
88
Enter credits allotted to the subject 3
3
Enter marks in the subject 3
90
Details of the Student
USN: 1BM17CS088
Name :james bond
SGPA of Student 9.3
bash-5.0$
```