

2. Java program to create a class Student with members usn, name, an array credits and an array marks

```
import java.util.*;
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 in = new Scanner(System.in);

    void accept()
    {
        System.out.println("Enter FULL NAME of the student");
        name = in.nextLine();
        System.out.println("Enter USN of the student");
        USN=in.nextLine();
        System.out.println("Enter no of subjects");
        n = in.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 for subject"+(i+1));
            credits[i]=in.nextInt();
            System.out.println("Enter marks for subject"+(i+1));
            marks[i] = in.nextInt();
            Calculate(credits[i],marks[i],i);
        }
    }

    void Calculate(int credit,double marks,int j)
    {
        totalCredits = totalCredits + credit;
        if(marks>=90&&marks<=100)
            SGPA = SGPA + (10*credit);
        else if(marks>=80 && marks<=89)
            SGPA = SGPA + (9*credit);
        else if(marks>=70&&marks<=79)
            SGPA= SGPA + (8*credit);
        else if(marks>=60&&marks<=69)
            SGPA = SGPA + (7*credit);
    }
}
```

```

        else if(marks>=50 && marks<=59)
            SGPA = SGPA + (6*credit);
        else if(marks>=40&&marks<=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.accept();
        s1.display();
    }
}

```

Output:

```
Enter FULL NAME of the student
RAM
Enter USN of the student
1BM20CS120
Enter no of subjects
3
Enter details of the subjects:
Enter credits for subject1
5
Enter marks for subject1
95
Enter credits for subject2
4
Enter marks for subject2
90
Enter credits for subject3
3
Enter marks for subject3
89
Details of the Student
USN:1BM20CS120
Name:RAM
SGPA of Student 9.75
```