LAB PRGM - 2
Student SGPA

Program :-

```java
import java.util.Scanner;
class Student
{
    String usn, name;
    int n;
    int marks[], credits[];

    void inputMarks()
    {
        Scanner input = new Scanner(System.in);
        System.out.println("Enter USN : ");
        usn = input.nextLine();
        System.out.println("Inte Name : ");
        name = input.nextLine();
        System.out.print("Inter no. of subjects : ");
        n = input.nextInt();
        credits = new int[n];
        marks = new int[n];
        for(int i=0; i<n; i++)
        {
            System.out.print("Marks subject "+(i+1)+" :");
            marks[i] = input.nextInt();
            System.out.print("Credits subject"+(i+1)+":");
            credits[i] = input.nextInt();
        }
    }
}
```

```java
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 return 0;
}

double sgpa ()
{
    double total credits = 0, sum = 0;
    for (int i = 0; i < n; i++)
    {
        total credits = total credits + credits[i];
        sum = sum + gradePoints (marks[i]) * credits[i];
    }
    return (sum / total credits);
}

void display ()
{
    System.out.println ("USN : " + usn);
    System.out.println ("Name : " + name);
}
}

class Main
{
    public static void main (String [] args)
    {
        Student student = new Student ();
```

```
        student. input Marks ();
        student. display ();
        System. out. println ("SGPA : " + student. sgpa())
    }
}
```

Enter USN : 1BM22CS078
Enter Name : Charan G
Enter number of subjects : 8
Marks subject 1 : 98
credits subject 1 : 4
Marks subject 2 : 97
credits subject 2 : 4
Marks subject 3 : 92
credits subject 3 : 3
Marks subject 4 : 93
credits subject 4 : 3
Marks subject 5 : 91
credits subject 5 : 3
Marks subject 6 : 85
credits subject 6 : 1
Marks subject 7 : 95
credits subject 7 : 1
Marks subject 8 : 92
credits subject 8 : 1

USN : 1BM22CS078
Name : Charan G
SGPA : 9.95

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```java
import java.util.Scanner;

class Student
{
String usn,name;

int n;

int marks[];

int credits[];


void inputMarks()
{
Scanner input=new Scanner(System.in);

System.out.print("Enter USN: ");

usn=input.nextLine();

System.out.print("Enter Name: ");

name=input.nextLine();

System.out.print("Enter number of subjects: ");

n=input.nextInt();

credits=new int[n];

marks=new int[n];


for(int i=0;i<n;i++)
{
System.out.print("\nEnter marks of subject "+(i+1)+" : ");

marks[i]=input.nextInt();

System.out.print("\nEnter credits of subject "+(i+1)+" : ");

credits[i]=input.nextInt();

}


}


int gradePoints(int marks)
```

```java
{
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
return 0;
}

double sgpa()
{
double totalcredits=0,sum=0;

for(int i=0;i<n;i++)
{
totalcredits=totalcredits+credits[i];
sum=sum+gradePoints(marks[i])*credits[i];
}

return (sum/totalcredits);
}

void display()
{
System.out.println("USN: "+usn);
```

```
System.out.println("Name: "+name);

}

}


class SGPA

{

public static void main(String[] args)

{

Student student=new Student();

student.inputMarks();

student.display();

System.out.println("SGPA: "+student.sgpa());

}

}
```

OUTPUT:

Enter USN: 1BM22CS078

Enter Name: Charan G

Enter number of subjects: 8

Enter marks of subject 1 : 99

Enter credits of subject 1 : 4

Enter marks of subject 2 : 98

Enter credits of subject 2 : 4

Enter marks of subject 3 : 94

Enter credits of subject 3 : 3

Enter marks of subject 4 : 91

Enter credits of subject 4 : 3

Enter marks of subject 5 : 87

Enter credits of subject 5 : 1

Enter marks of subject 6 : 94

Enter credits of subject 6 : 3

Enter marks of subject 7 : 92

Enter credits of subject 7 : 1

Enter marks of subject 8 : 98

Enter credits of subject 8 : 1
USN: 1BM22CS078
Name: Charan G
SGPA: 9.95