

Lab programme 2

```
import java.util.Scanner;

class Student {
    String usn;
    String name;
    int[] credits;
    int[] marks;
    Scanner sc=new Scanner(System.in);
    Student()
    {
        inputData();
    }
    public void inputData(){
        System.out.println("enter your usn and name ");
        usn=sc.next();
        name=sc.nextLine();
        int totalSub=0;
        System.out.println("enter number of subjects");
        totalSub=sc.nextInt();
        System.out.println("enter number of credits and marks you got in each subject");
        credits=new int[totalSub];
        marks=new int[totalSub];
        for(int i=0;i<totalSub;i++)
        {
            System.out.print("enter credits and marks for subject"+i+": ");
            credits[i]=sc.nextInt();
            marks[i]=sc.nextInt();

        }
        sgpacalc();

    }
    public void sgpacalc()
    {
        int totalCreditsEarned=0;
        int totalCredits=0;
```

```

        for(int i=0;i<marks.length;i++)
        {

            totalCreditsEarned+=sgpascale(marks[i])*credits[i];
            totalCredits+=credits[i];

        }
        System.out.println("name: "+name+"\nusrn:"+usrn+ " \nscored "+(totalCredits));

    }

    public int sgpascale(int marks)
    {
        if(marks>=90)
        {
            return 10;
        }
        else if (marks>=80 && marks<90) {
            return 9;
        }
        else if (marks>=70 && marks<80) {
            return 8;
        }
        else if (marks>=60 && marks<70) {
            return 7;
        }
        else if (marks>=50 && marks<60) {
            return 6;
        }
        else if (marks>=40 && marks<50) {
            return 5;
        }
        else {
            return 0;
        }
    }
}

```

```
}  
class cgpacalc{  
  
    public static void main(String[] args) {  
        Student st=new Student();  
    }  
  
}
```

OUTPUT

```
enter your usn and name  
1BM23CS334 SOHAM  
enter number of subjects  
4  
enter number of credits and marks you got in each subject respectively  
enter credits and marks for subject0: 4 98  
enter credits and marks for subject1: 3 90  
enter credits and marks for subject2: 4 95  
enter credits and marks for subject3: 2 100  
name: SOHAM  
usn:1BM23CS334  
scored 10SGPA
```

~~import java.util~~ LAB PROGRAMME 2

Q. Develop a Java programme to create a class student with members usn, name, an array and an array marks include methods to calculate G.P.A.

```
import java.util.Scanner;
```

```
class Student {
```

```
String usn;
```

```
String name;
```

```
int [] credits;
```

```
float  
int [] marks;
```

```
Scanner sc = new Scanner(System.in);
```

```
Student () {
```

```
inputData();
```

```
}
```

```
public void inputData () {
```

```
System.out.println("Enter your usn and name:");
```

```
usn = sc.next();
```

```
name = sc.nextLine();
```

```
int totalSub = 0;
```

```
System.out.print("Enter total subjects:");
```

```
totalSub = sc.nextInt();
```

```
System.out.println();
```



```
credits = new int [totalSub];  
marks = new float [totalSub];
```

```
for (int i = 0; i < totalSub; i++)
```

```
{  
    System.out.print("Enter credits and marks for subject
```

```
credits [i] = scanner.nextInt();
```

```
marks [i] = scanner.nextFloat();
```

```
}
```

```
sgpa calc();
```

```
}
```

```
public void sgpa calc()
```

```
{  
    int
```

```
float totalCreditsEarned = 0f;
```

```
int totalCredits = 0;
```

```
for (int i = 0; i < marks.length; i++)
```

```
{
```

```
    totalCreditsEarned += scaled (marks[i]) * credits[i];
```

```
    totalCredits += credits[i];
```

```
}
```

```
System.out.println ("Name: " + name + "\n usn: " + usn +  
"\n scored " + (totalCreditsEarned / totalCredits) + " SGPA");
```

```
}
```

```
public int sgpascoled(int marks)
```

```
{ if (marks >= 90)
```

```
{ return 10;
```

```
}
```

```
else if (marks >= 80 && marks < 90)
```

```
{ return 9;
```

```
}
```

```
else if (marks >= 70 && marks < 80)
```

```
{ return 8;
```

```
}
```

```
else if (marks >= 60 && marks < 70)
```

```
{ return 7;
```

```
}
```

```
else if (marks >= 50 && marks < 60)
```

```
{ return 6;
```

```
}
```

```
else if (marks >= 40 && marks < 50)
```

```
{ return 5;
```

```
else {
```

```
return 0;
```

```
}
```

```
}
```



```
class sgpaCalc {  
    public static void main (String [] args) {  
        stu student st = new Student ();  
    }  
}
```

Output

Enter your usn and name: 1 BM23CS334

SOHAM ARORA

Enter number of subjects 4

Enter number of credits and marks scored in each subject

Enter credits and marks for subject 1: 4 93

Enter credits and marks for subject 2: 4 88

Enter credits and marks for subject 3: 3 78

Enter credits and marks for subject 4: 1 90

Name: SOHAM ARORA

USN: BM23CS334

scored 9 CGPA

Rs

24/10/24