

## Lab-2 SGPA Calculator

// Program to read marks and calculate SGPA  
import java.util.Scanner;

class Student {

String usn, name;

int n;

Student () {

String subject[] = new String[10];

int credits[] = new int[10];

int marks[] = new int[10];

}

void read() {

Scanner input = new Scanner(System.in);

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

name = input.nextLine();

System.out.println("Enter ~~number~~ your usn:");

usn = input.nextLine();

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

System.out.println("Enter subject:");

~~System.out.println("Enter marks:");~~

~~subject[i] = input.nextLine();~~

System.out.println("Enter marks:");

marks[i] = input.nextInt();

```
system.out.println("Enter credits:");  
credits[i] = input.nextInt();
```

```
void display() {
```

```
    system.out.println("Name: " + name);  
    system.out.println("USN: " + usn);
```

```
    system.out.println("Subject \t Credits \t Marks");
```

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

```
        system.out.println(subject[i] + credits[i] + marks[i]);
```

```
    }
```

```
}
```

```
int grade (int a) {
```

```
    while (a/10 != 0) {
```

```
        a = a/10;
```

```
    }
```

```
    if ((a+1) > 5) {
```

```
        return (a+1);
```

```
    }
```

```
    else if ((a+1) == 5) {
```

```
        return a;
```

```
    }
```

```
    else {return 0;}
```

```
}
```

```

void calculateSGPA() {
    int total_credits = 0;
    int marks_credits = 0;

    for (int i = 0; i < n; i++) {
        total_credits += credits[i];
        marks_credits += grad(marks[i]) * credits[i];
    }

    System.out.println("SG-PA is +" + ((double) marks_credits / total_credits)
);
}

```

```

class marks {
    public static void main (String[] args) {
        student s1 = new student();
        s1.read();
        s1.display();
        s1.calculateSGPA();
    }
}

```

## Output

Enter your name: Abhinav

Enter your USN: 18M22CS211

Enter number of subjects: 4

---

Enter subject: Math

Enter credits: 4

Enter marks: 96

Enter subject: Java

Enter credits: 4

Enter marks: 88

Enter subject: Web

Enter credits: 3

Enter marks: 89

Enter subject: English

Enter credits: 1

Enter marks: 98

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Abhinav

Name: Abhinav  
USN: 1BM22CS211

Subject	Credits	Marks
Maths	4	96
Java	4	88
Web	3	89
English	1	98

SGPA is 9.41666666



19.12.24