

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 your USN : ");
```

```
    usn = input . nextLine ();
```

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

```
        System . out . println ("Enter Subject : ");
```

```
        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);
```

4.

```
int int grade (int a) {  
    while (a/10 == 0) {  
        a = a/10;
```

5.

```
} if ((a+1) > 5) {  
    return (a+1);
```

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

6.

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

```
void calculate SGPA () {  
    int total_credits = 0;  
    int marks_credits = 0;  
    for (int i=0; i<n; i++) {  
        total_credits = credits[i];  
        marks_credits += grade(marks[i]) * credits[i];  
    }
```

7.

```
System.out.println ("SGPA is " + (double) marks_credits /  
    total_credits);
```

8.

```
class marks {
```

```
public static void main (String [] args) {  
    student s1 = new student ();  
    s1.read ();  
    s1.display ();
```

} St. Calculated SGPA(L);

}

OUTPUT:

Enter your name: Ranisha Giri

Enter your USN: 18M22CS218

Enter your number of subjects: 4

Enter subject: math

Enter credits: 4

Enter marks: 78

Enter subject: Java

Enter credits: 4

Enter marks: 90

Enter subject: LD

Enter credits: 2

Enter marks: 95

Enter subject: DSA

Enter credits: 3

Enter marks: 90

Name: Ranisha

USN: 18M22CS218

Subject	Credits	Marks	
Math	4	78	
Java	4	90	
LD	2	95	
DSA	3	90	SGPA is 9.00

5/12/25
✓

Lab 2:-

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Additional programs in Operators:-

class modulus {

public static void main (String args []) {

int x = 42;

double y = 42.25;

byte a = 64, b, b1;

int i;

System.out.println ("Ranisha Giri 1BM22CS218");

i = a << 2;

b = (byte) (a << 2);

i = a << 2;

System.out.println ("Original value of a: " + a);

System.out.println ("i and b: " + i + " " + b);

int a1 = -1;

a1 = a1 >> 24;

System.out.println ("value of a1: " + a1);

a1 = -1;

a1 = a1 >>> 24;

System.out.println ("value of a1: " + a1);

y

y

Output:-

Ranisha Giri 1BM22CS218

Original value of a: 64

i and b: 2560

value of a1 = -1

value of a1: 255