

## LAB Program 2

Q. Develop a Java program to create a class Student with member variables, name, an array credits and an array marks. Include methods to accept and display details and a method to calculate SGPA of a student.

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

```
class Subject
```

```
{
```

```
    int subjectMarks;
```

```
    int credits;
```

```
    int grade;
```

```
}
```

```
class Student
```

```
{
```

```
    Subject subject[8];
```

```
    String name;
```

```
    String usn;
```

```
    double sgpa = 0;
```

```
    Scanner s;
```

```
    Student()
```

```
{
```

```
    int i;
```

```
    subject = new Subject[8];
```

```
    for (i = 0; i < 8; i++)
```

```
        subject[i] = new Subject();
```

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

```
}
```

```
void getStudentDetails()
```

```
{
```

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

```
    name = s.next();
```

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

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

```
}
```



```
void getMarks()
```

```
{
```

```
for (int i = 0; i < 8; i++)
```

```
{
```

```
System.out.println("Enter marks for subject " + (i+1) + ":");  
subject[i].subjectMarks = s.nextInt();
```

```
System.out.println("Enter credits for subject " + (i+1) + ":");  
subject[i].credits = s.nextInt();
```

```
subject[i].grade = (subject[i].subjectMarks/10)+1;
```

```
if (subject[i].grade > 11)
```

```
subject[i].grade = 10;
```

```
if (subject[i].grade <= 4)
```

```
subject[i].grade = 0;
```

```
}
```

```
}
```

```
void computeSGPA()
```

```
{
```

```
int totalCredits = 0;
```

```
for (int i = 0; i < 8; i++)
```

```
{
```

```
sgpa += (subject[i].credits * subject[i].grade);  
totalCredits += subject[i].credits;
```

```
}
```

```
sgpa = sgpa / totalCredits;
```

```
}
```

```
}
```

```
class main
```

```
{
```

```
public static void main (String args[])
```

```
{
```

```
Student s2 = new Student();
```

```
s2.getStudentDetails();
```

```
s2.getMarks();
```

```
s2.computeSGPA();
```



```
System.out.println c"Nome" + s2.nome);  
System.out.println c"Usu" + s2.usu);  
System.out.println c"SGPA" + s2.sgpa);
```

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3

Output

Enter your Nome:

Stringent

Enter your USU:

26mcs289

Enter marks for subject 1:

90 credits

Enter marks for subject 2:

9

Enter marks for subject 2:

95

Enter credits for subject 2:

9

Enter marks for Subject 3:

80

Enter credits for subject 3:

63

Enter marks for subject 4:

75

Enter credits for subject 4:

3

Enter marks for Subject 5:

78

Enter credit for Subject 5:

2

Enter credits for Subject 6:

74

Enter credit for subject 6:  
1

Enter marks for subject 7:  
60

Enter credit for subject 7:  
1

Enter marks for ~~subject 8~~:  
99

Enter ~~credit~~ for ~~subject 8~~:  
1

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*Hi* 19/12/23  
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