

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

$$\text{SGPA} = \frac{\sum (\text{Grade points})(\text{Course credits})}{\sum (\text{Course credits})}$$

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

```
class Subject {
```

```
    int SubjectMarks;
```

```
    int credits;
```

```
    int grade;
```

```
}
```

```
class Student {
```

```
    Subject subject[];
```

```
    String name; String user; double SGPA;
```

```
    Scanner s;
```

```
    Student() {
```

```
        int i;
```

```
        subject = new Subject[9];
```

```
        for (i=0; i<9; i++)
```

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

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

```
void getStudentDetails()
{
    System.out.print("Enter your name: ");
    name = s.next();

    System.out.print("Enter your USN: ");
    USN = s.next();
}
```

```
void getMarks()
```

```
int i;
for(i=0; i<9; i++)
{
    System.out.print("Enter the marks for subject " + (i+1) + ": ");
    Subject[i].SubjectMarks = s.nextInt();

    System.out.print("Enter credits for Subject " + (i+1) + ": ");
    Subject[i].credits = s.nextInt();

    if(Subject[i].grade == 11)
        Subject[i].grade = 10;

    if(Subject[i].grade <= 4)
        Subject[i].grade = 0;
}
```

```
void ComputeSGPA() {  
    int effectiveScore = 0;  
    int Total Credits = 0;  
    effectiveScore += (subject[i].grade * subject[i].  
    credits);  
    int Total Credits += subject[i].credits;  
}
```

$$SGPA = (\text{double}) \text{effectiveScore} / (\text{double}) \text{totalCredits};$$

{

class Main()

{

public static void main(String args[])

{

Student sl = new Student();

sl.getStudentDetails();

sl.getMarks();

sl.computeSGPA();

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

System.out.println("USN: " + sl.usn);

System.out.println("SGPA: " + sl.SGPA);

}

{

OUTPUT

Enter the name: Sanjana

Enter your usn: 238

Enter marks of subject 1:

84 credits

Enter marks of subject 1:

2

Enter marks of subject 2:

87

Enter credits of subject 2:

4

Enter marks of subject 3:

67

Enter credits of subject 3:

4

Enter marks of subject 4:

91

Enter credits of subject 4:

3

Enter the marks of subject 5:

95

Enter the credits

3

Enter the marks of subject 6:

98

Enter the credits:

1

Enter the marks of subject 7:

924

Enter the credits:

1

Enter the marks of subject 8:

88

Enter the credits:

1

Name: Sanjana

USN : 238

SGPA : 9.75

ANR

11/12th