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9) Develop a java program to create a class Student with members USn, name, an array credits and an array marks. Include methods to accept and display details and a method to calculate SGPA of a student.

$$SGPA = \frac{\sum [(\text{Credit(course)})(\text{Grade point})]}{\sum (\text{no. of credits})}$$

```
import java.util.*;
class Subject{
    int subjectMarks;
    int credits;
    int grade;
}
class student{
    String name;
    String USn;
    double sgpa;
    Scanner s;
    Subject subject[];
    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.println("enter the name:");
    name = s.nextLine();
    System.out.println("enter the USn:");
```

USN = S.nextLine();
}
void getMarks(){
int i;
for(i=0; i<9; i++)
{
System.out.println("enter the marks and credits "+i+" : ");
System.out.println("enter the marks : ");
int marks = S.nextInt();
System.out.println("enter the credits : ");
int credit = S.nextInt();
Subject[i].SubjectMarks = marks;
Subject[i].credits = credit;
Subject[i].grade = (Subject[i].SubjectMarks/10)+1;
if(Subject[i].SubjectMarks == 11)
{
Subject[i].SubjectMarks = 10;
}
if(Subject[i].SubjectMarks <= 4)
{
Subject[i].SubjectMarks = 0;
}
}
}
Void computeSGPA(){
int i;
int totalCredits = 0;
int evaluateMarks = 0;
for(i=0; i<9; i++)
{
totalCredits += subject[i].credits;

```
        evaluatemarks += subject[i].grade * subject[i].
                         credits;
    }
    sgpa = (float) evaluatemarks / total credits;
    System.out.println("sgpa = " + sgpa);
  }
}
class main {
    public static void main(String[] args) {
        Student s1 = new Student();
        s1.getStudentDetails();
        s1.getMarks();
        s1.computeSGPA();
    }
}
```

Output:

```
enter the name:
Shashank
enter the USN:
1BM22CS255
enter the marks and credits:
enter the marks
95
enter the credits:
4
enter the marks and credits:
enter the marks
92
enter the credits:
4
enter the marks and credits:
```

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enter the marks:
88
enter the Credits:
3
enter the marks and Credits 3:
enter the marks:
88
enter the credits:
3
enter the marks and credits 4:
enter the marks:
86
enter the Credits:
1
enter the marks and credits 5:
Enter the marks:
88
enter the credits:
3
enter the marks and credits 6:
Enter the marks:
78
enter the Credits:
3
enter the marks and Credits 7:
enter the marks:
99
enter the Credits:
1
enter the marks and Credits 8:
enter the marks:
0
enter the Credits:
0

Scanned with OKEN Scanner

Sgpa = 9.300001907734863
Shashank Patil CJ 1BM22CS255

19/12/2023