Lab ② - 19/12/2023

Lab Program 2 : Student marks and SGPA

```java
import java.util.Scanner;
class Subject
{
    int subject marks;
    int credits;
    int grade;
}
class Student
{
    int i;
    Subject[] subjects = new Subject[9];
    String name;
    String usn;
    float GSGPA = 0;
    Scanner s = new Scanner(System.in);
    Student()
    {
        for(i=0; i<9; i++)
            subject[i] = new Subject();

    void getStudentDetails()
    {
        System.out.println("Enter the name of the student");
        this.name = s.nextLine();
        System.out.println("Enter the usn of the student");
        this.usn = s.nextLine();
    }
}
```

```java
void getMarks()
{
    for(i=0; i<8; i++)
    {
        System.out.printn("Enter the marks for
        subject " + (i+1));
        this.subject[i].subjectMarks = s.nextInt();
        System.out.println("Enter the credits
        for subject" + (i+1));
        this.subject[i].credits = s.nextInt();
        while(this.subject[i].subjectMarks > 100)
        {
            System.out.println("Marks cannot be
            greater than 100 Enter valid marks.");
            this.subject[i].subjectMarks = s.nextInt();
        }
        if(this.subject[i].subjectMarks == 100)
            this.subject[i].grade = 10;
        elx if(this.subject[i].subjectMarks < 40)
            this.subject[i].grade = 0;
        else
            this.subject[i].grade = (int)
            (int)(this.subject[i].subjectMarks/10)+1
    }
}

void computeSGPA()
{
    int totalcredits = 0;
    for(i=0; i<8; i++)
    {
        this.SGPA = this.subject[i].grade
            * this.subject[i].credits;
        totalcredits = totalcredits + this.subject[i].credits;
    }
    this.SGPA = this.SGPA / totalcredits;  ? ?
```

```java
class Student_Main
{
    public static void main(String args[])
    {
        Student s1 = new Student();
        s1.getStudentDetails();
        s1.getMarks();
        s1.computeSGPA();
        System.out.println("\n" + "Student name:
                + s1.name);
        System.out.println("\n" + "Student VSN:
                + s1.USN);
        System.out.println("\n" + "SGPA of the
                student: " + s1.SGPA);
    }
}
```

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USN: 1BM22CS173

OUTPUT:

Enter the name of the student
Praveen
Enter the USN of the student
1bm22cs122
Enter the marks for subject 1
89
Enter the credits for subject 1
4
Enter the marks for subject 2
90
Enter the credits for subject 2
4
Enter the marks for subject 3
67
Enter the credits for subject 3
3

Enter the marks for subject 4
60
Enter the credits for subject 4
3
Enter the marks for subject 5
76
Enter the credits for subject 5
-3
Enter " " " 6
87
" " credits " " 6
1
" " marks " " 7
97
" " credits " " 7
1
" " marks " " 8
78
" " credits " " 8
1

Student name: Praveen

Student number : 15m22 L5)2Z

0 SGPA of the student: 8.45