

Outp

Lab program no. 2:

Develop a Java program to create a class Student with members usn, name, an array credits and an array marks.

```
import java.util.*;
```

```
public class
```

```
class Subject {
```

```
    int subjectMarks;
```

```
    int credits;
```

```
    int grades
```

```
}
```

```
class student {
```

```
    Subject subject[];
```

```
    String name;
```

```
    String usn;
```

```
    double SGPA;
```

```
    Scanner s;
```

```
    student()
```

```
{
```

```
    subject subject[];
```

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

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

```
{
```

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

```
}
```

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

```
void getStudentDetails() {  
    System.out.println("Enter your name: ");  
    this.name = s.nextLine();  
    this.name  
    System.out.println("Enter your urn: ");  
    this.urn = s.nextLine();  
}
```

```
void getMarks() {
```

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

```
    {
```

```
        System.out.println("Enter the marks  
        of " + (i+1) + " subject");
```

```
        subject[i].subjectMarks = s.nextInt();
```

```
        System.out.println("Enter the credits  
        of " + (i+1) + " subject");
```

```
        subject[i].credits = s.nextInt();
```

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

```
        if (subject[i].grades > 10)
```

```
        {
```

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

```
        }
```

```
        if (subject[i].grades < 4)
```

```
        {
```

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

```
        }
```

```
    }
```



```

void computeSGPA() {
    int sum = 0;
    int totalCredits = 0;
    for (int i = 0; i < 9; i++) {
        sum += (subject[i].grade * subject[i].credits);
        totalCredits += subject[i].credits;
    }
    this.SGPA = (double) sum / totalCredits;
}

```

```

}

public class Main {
    public static void main (String args[]) {
        Student s1 = new Student();
        s1.getStudentDetails();
        s1.getMarks();
        s1.computeSGPA();
        System.out.println("Name: " + s1.name);
        System.out.println("USN: " + s1.usn);
        System.out.println("SGPA: " + s1.SGPA);
    }
}

```

Output:

Enter Your Name:

Shashidhar B M

Enter your usn:

IBM22CS257

Enter the marks of the 7 subject  
98.



Enter the credits of the 1 subject

4.

Enter the marks of the 2 subject.

90

Enter the credits of the 3 subject.

4

Enter the marks of the 3 subject.

89

Enter the credits of the 3 subject.

3

Enter the marks of the 4 subject.

90

Enter the credits of the 4 subject.

3

Enter the marks of the 5 subject

92

Enter the credits of the 5 subject

3

Enter the marks of the 6 subject.

89

Enter the credits of the 6 subject

1

Enter the ~~credits~~ marks of the 7 subject

93

Enter the credits of the 7 subject.

1

Enter the marks of the 8 subject

91

Enter the ~~credits~~ of the 8 subject.

1

Name: Shashidhar B M

USN: IBM22CS257.

SEPA

9.8.

19/12/2023