

Q. Develop a Java program to create a class Student with members usn, name and arrays credits, marks. Include methods to accept & display details and a method to calculate SGPA of the student.

```
import java.util.*;  
public class Student  
{
```

```
    String name;  
    String usn;  
    int marks[] = new int [5];  
    int credits[] = new int [5];  
    int tot = 0;  
    int i;  
    int grade = 0;
```

```
    void readdata()  
    {
```

```
        Scanner obj = new Scanner (System.in);  
        System.out.println ("Enter the name of the  
                             Student");
```

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

```
        System.out.println ("Enter the USN");
```

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

```
        System.out.println ("Enter the credits & marks for  
                             5 subjects");
```

```
        for (i = 0; i < 5; i++)
```

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



```
System.out.println("Marks for subject "+(i+1)+" :");  
marks[i] = obj.nextInt();  
}
```

```
{  
void calc_SGPA()  
{  
for(i=0; i<5; i++)  
{  
if(marks[i] >= 90 && marks[i] <= 100)  
grade = 10;  
else if(marks[i] >= 75 && marks[i] < 90)  
grade = 9;  
else if(marks[i] >= 60 && marks[i] < 75)  
grade = 8;  
else if(marks[i] >= 50 && marks[i] < 60)  
grade = 7;  
else if(marks[i] >= 45 && marks[i] < 50)  
grade = 6;  
else if(marks[i] >= 40 && marks[i] < 45)  
grade = 5;  
else if(marks[i] < 40)  
grade = 0;  
tot = tot + grade * credits[i];  
}  
tot = tot / 20;  
System.out.println("SGPA : " + tot);  
}
```

```
void details()
```

```
{  
System.out.println("Name : " + name);  
System.out.println("USN : " + usn);  
}
```



```

System.out.println("Marks & Credits for all 5 subjects:");
for (i=0; i<5; i++)
{
    System.out.println(marks[i]);
    System.out.println(credits[i]);
}
calc_SGPA;
}
public static void main (String args[])
{
main()
    Student ob = new Student();
    ob.readdata();
    ob.calc_SGPA();
    ob.details();
}
}

```

OUTPUT: -

Enter the name of the student

Sneha

Enter the USN

10M19CS158

Enter the credits and marks for 5 subjects

Credits for subject 1:

5

Marks for subject 1:

98



Credits for subject 2:

<sup>2</sup>  
Marks for subject 2:

95

~~4~~ Credits for subject 3:

4

Marks for subject 3:

76

Credits for subject 4:

3

Marks for subject 4:

65

Credits for subject 5:

4

Marks for subject 5:

87

SGPA: 9

Name: Sneha

USN: 16m19cs158

Marks and Credits for all 5 subjects:

98

5

95

4

76

4

65

3

87

4

SGPA: 9