

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

```
class Student
```

```
{
```

```
    private int n, credit[], gp[];
```

```
    private String name, urn;
```

```
    double sum, sgpa, marks[];
```

```
Student()
```

```
{
```

```
    name = " ";
```

```
    urn = " ";
```

```
}
```

```
void accept()
```

```
{
```

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

```
    System.out.println("Enter the  
        number of the subject");
```

```
    n = sc.nextInt();
```

```
    credit = new int[n+1];
```

```
    marks = new double[n+1];
```

```
    System.out.println("Enter urn  
        and name of the student");
```

```
    urn = sc.next();
```

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

```
    System.out.println("Enter credit &  
        marks in each subject");
```

```
    for (int i = 1; i <= n; i++)
```

```
    {
```

```
        System.out.println("Enter subject  
            + i + " credit and marks");
```

```
        credit[i] = sc.nextInt();
```

```
        marks[i] = sc.nextDouble();
```

```
    }
```

```
}
```

```
void calculate()
{
```

```
    gp = new int [n+1];
    int cre = 0;
```

```
    for (int i = 1; i <= n; i++)
```

```
    {
        if (marks[i] >= 90)
```

```
            gp[i] = 10;
```

```
        else if (marks[i] >= 80 && marks[i] < 90)
```

```
            gp[i] = 9;
```

```
        else if (marks[i] >= 70 && marks[i] < 80)
```

```
            gp[i] = 8;
```

```
        else if (marks[i] >= 60 && marks[i] < 70)
```

```
            gp[i] = 7;
```

```
        else if (marks[i] >= 50 && marks[i] < 60)
```

```
            gp[i] = 5;
```

```
        else if (marks[i] < 40)
```

```
            gp[i] = 0;
```

```
        sum = (double)(credit[i] * gp[i]) + sum;
```

```
        cre = cre + credit[i];
```

```
    }
```

```
    sgpa = sum / cre;
```

```
}
```

```
void display()
```

```
{
```

```
    System.out.println("usr:" + usr + "name:" + name);
```

```
    for (int i = 1; i <= n; i++)
```

```
        System.out.println("marks :"
```

```
        + marks[i] + " grade points:" + gp[i]);
```

```
    System.out.println("sgpa = %.2f", sgpa);
```

```
}
```



```
class Student main
```

```
{
```

```
    public static void main (String[] args)
```

```
    {
```

```
        Student s1 = new Student();
```

```
        s1.accept();
```

```
        s1.calculate();
```

```
        s1.display();
```

```
    }
```

```
}
```