

```
import java.util.Scanner;
```

```
class student {
```

```
    private int n;
```

```
    private int credits[];
```

```
    private String name, usn;
```

```
    private double marks[];
```

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

```
    student()
```

```
{
```

```
    System.out.printf("\nEnter The Number of Courses:
```

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

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

```
    credits = new int[n];
```

```
}
```

```
    void getinfo()
```

```
{
```

```
    System.out.printf("\nEnter the USN and Name:");
```

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

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

```
    System.out.printf("\nEnter the marks(out of 100)  
    and credits:");
```

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

```
{    System.out.printf("\nCourse %d:", i+1);
```

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

```
    credits[i] = get.nextInt();
```

```
}
```

```
}
```

```
int gpcall(double num)
```

```
{
```

```
    if (num >= 50)
```

```
        return (int)(Math.ceil(num/10));
```

```
    else
```

```
        if (num >= 40)
```

```
            return 4;
```

```
        else
```

```
            return 0;
```

```
}
```

```
double calculation()
```

```
{
```

```
    double sgpaSum = 0, sgpa = 0, creditSum = 0;
```

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

```
    {
```

```
        sgpaSum += gpcall(marks[i]) * credits[i];
```

```
        creditSum += credits[i];
```

```
    }
```

```
    System.out.println("In credit sum: " + creditSum);
```

```
    sgpa = sgpaSum / creditSum;
```

```
    return sgpa;
```

```
}
```

```
void details()
```

```
{
```

```
    System.out.println("In The student Details Are: ");
```

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

```
    System.out.printf("\n");
```

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

```
        System.out.print("Course - %d", i+1);
```

```
        System.out.print("Marks: ");
```

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

```
        {
```

```

        System.out.printf ("%.2f", marks[i]);
    }

    System.out.printf ("\n credits : ");
    for (int i=0 ; i<n ; i++)
    {
        System.out.printf ("%d\t", credits[i]);
    }
}
}
}

```

```

class Lab2Student

```

```

{
    public static void main (String[] args)
    {
        double sgpa=0;
        student s1=new student();
        s1.getInfo();
        s1.details();
        sgpa=s1.calculation();
        System.out.printf ("In The SGPA of the\n student is : %.2f /10.00", sgpa);
    }
}

```

```

}

```