

```
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("Enter The Number of Courses:  
        n = get.nextInt();  
        marks = new double[n];  
        credits = new int[n];  
    }  
  
    void getInfo()  
    {  
        System.out.printf("Enter the USN and Name:");  
        usn = get.next();  
        name = get.next();  
        System.out.printf("Enter the marks(out of 100)  
        and credits:");  
        for (int i = 0; i < n; i++)  
        {  
            System.out.printf("Course %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 += gpcal(marks[i]) * credits[i];
        creditSum += credits[i];
    }
    System.out.println("The credit sum is " + creditSum);
    sgpa = sgpaSum / creditSum;
    return sgpa;
}
```

```
void details()
```

```
{
    System.out.println("The student Details Are:");
    System.out.println("USN: " + USN + " Name: " + name);
    System.out.printf("\n");
    for (int i = 0; i < n; i++)
        System.out.print("Course - %d " + i + 1);
    System.out.print("\nMarks : ");
    for (int i = 0; i < n; i++)
    {
        System.out.print(" " + marks[i]);
    }
}
```

```

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

System.out.print ("In credits are ");
for (int i=0 ; i<n ; i++)
{
    System.out.printf ("\t%.1f\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 ("The SGPA of the
student is : %.2f / 10.00", sgpa);
    }
}

```