

Develop a Java Program to create a class Student with members usn, name, an array credits and an array marks. Include methods to accept and display details and method to calculate SGPA of the student.

```
CODE: import java.util.Scanner;
class Student
{
    private String usn;
    private String name;
    private int[] credits = new int[20];
    private int[] marks = new int[20];
    private int n;

    void getDetails()
    {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the no. of subjects:");
        n = sc.nextInt();
        System.out.println("Enter the usn");
        usn = sc.next();
        System.out.println("Enter the student name");
        name = sc.next();
        for (int i = 0; i < n; i++)
        {
            System.out.println("Enter credits followed by marks for subject " + (i + 1) + ":");
            credits[i] = sc.nextInt();
            marks[i] = sc.nextInt();
        }
    }
}
```

```
void printDetails()
```

```
{
```

```
System.out.println("Student Details are:");
```

```
System.out.println("Name: " + name + " | Usn: " + usn);
```

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

```
{
```

```
System.out.println("Sub4(i+1) + "Marks is:");
```

```
+ marks[i] + " | Credit is: " + credits[i]);
```

```
}
```

```
}
```

```
void sgpaCalc
```

```
{
```

```
double sgpa;
```

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

```
int credSum = 0, gp, sgpcr = 0;
```

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

```
{
```

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

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

```
{
```

```
gp = 10;
```

```
}
```

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

```
{
```

```
gp = 9;
```

```
}
```

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

```
{
```

```
gp = 8;
```

```
}
```

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

```
{
```



```
gp = 7;  
}
```

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

```
{
```

```
    gp = 6;
```

```
}
```

```
else if (marks[i] >= 45)
```

```
{
```

```
    gp = 5;
```

```
}
```

```
else if (marks[i] >= 40)
```

```
{
```

```
    gp = 4;
```

```
}
```

```
else
```

```
{
```

```
    gp = 0;
```

```
}
```

```
gpcr[i] = gp * credits[i];
```

```
sgpcr += gpcr[i];
```

```
}
```

```
sgpa = sgpcr / (credsum + 0.0);
```

```
System.out.println("Student SGPA is: " + sgpa);
```

```
} }
```

```
class Main
```

```
{
```

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

```
    {
```

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

```
        s1.getDetails();
```

```
        s1.printDetails();
```

```
        s1.sgpaCalc();
```