Code for SGPA:

```java
import java.util.*;

class student
{
String usn,name;
static int credits[];
static double marks[];
void input(int n)
{
  Scanner sc=new Scanner(System.in);
  System.out.println("Enter the Usn and Name ");
  usn=sc.nextLine();
  name=sc.nextLine();
  System.out.println("Enter marks and credits");
for(int i=0;i<n;i++)
{
  marks[i]=sc.nextDouble();
  credits[i]=sc.nextInt();
  System.out.println();
}
}
double calculate(int n)
{
  int c,cred=0;
  double tot,total=0.0;
```

```
for(int i=0;i<n;i++)
{
tot=marks[i];
if(tot>=90)
        c=10;
        else if(tot>=80)
        c=9;
        else if(tot>=70)
        c=8;
        else if(tot>=60)
        c=7;
        else if(tot>=50)
        c=6;
        else if(tot>=40)
c=4;
   else
c=0;
   total=total+(c*credits[i]);
cred=cred+credits[i];
}
total=total/cred;
return(total);
}
void display(int n,double total)
{
```

```java
    System.out.println("Student Name : "+name);

    System.out.println("Student USN : "+usn);

    System.out.println("Marks of the Student with Credits");

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

{

    System.out.println(marks[i]+"   "+credits[i]);

}

    System.out.println("SGPA: "+total);

}

public static void main(String args[])

{

    Scanner sc=new Scanner(System.in);

    student obj=new student();

    System.out.println("Number of Credits: ");

    int n=sc.nextInt();

    credits=new int[n];

    marks=new double[n];

    obj.input(n);

    double total=obj.calculate(n);

    obj.display(n,total);

}

}
```

Output Screenshot:

```
        at student.input(sgpa.java:16)
        at student.main(sgpa.java:67)

D:\JDK\bin>javac sgpa.java

D:\JDK\bin>java student
Number of Credits:
4
Enter the Usn and Name
1bm18cs021
Abhinav
Enter marks and credits
76 4

88 3

65 3

60 3

Student Name : Abhinav
Student USN : 1bm18cs021
Marks of the Student with Credits
76.0   4
88.0   3
65.0   3
60.0   3
SGPA: 7.769230769230769

D:\JDK\bin>
```