```java
import java.util.*;

public class Main
{
    String name;
    String usn;
    int marks[]=new int[5];
    int credits[]=new int[5];
    int tot=0;
    int i;
    int grade=0;
    void read_data()
    {
        Scanner obj=new Scanner(System.in);
        System.out.println("Enter the name of the students");
        name=obj.next();
        System.out.println("Enter the USN");
        usn=obj.next();
        System.out.println("Enter the credits and marks for 5 subjects");

        for(i=0;i<5;i++)
        {
            System.out.println("Credits for subject"+(i+1)+":");
            credits[i]=obj.nextInt();
            System.out.println("Marks for subject"+(i+1)+": ");
            marks[i]=obj.nextInt();
        }
    }
    void calc_SGPA()
    {
```

```
void calc_SGPA()
{
  for(i=0;i<5;i++)
  {
    if(marks[i]>=90&&marks[i]<=100)
    grade=10;
    else  if(marks[i]>=75&&marks[i]<90)
    grade=9;
    else  if(marks[i]>=60&&marks[i]<75)
    grade=8;
    else  if(marks[i]>=50&&marks[i]<60)
    grade=7;
    else  if(marks[i]>=45&&marks[i]<50)
    grade=6;
    else  if(marks[i]>=40&&marks[i]<45)
    grade=5;
    else if(marks[i]<40)
    grade=0;

    tot=tot+grade*credits[i];
  }
  tot=tot/20;
  System.out.println("SGPA:"+tot);
}
  void details()
  {
   System.out.println("Name:"+name);
   System.out.println("USN:"+usn);
   System.out.println("Marks and Credits for all 5 subjects:");
   for(i=0;i<5;i++)
```

```java
        tot=tot+grade*credits[i];
      }
      tot=tot/20;
      System.out.println("SGPA:"+tot);
  }
      void details()
      {
       System.out.println("Name:"+name);
       System.out.println("USN:"+usn);
       System.out.println("Marks and Credits for all 5 subjects:");
       for(i=0;i<5;i++)
       {
          System.out.println(marks[i]);
          System.out.println(credits[i]);
       }
       calc_SGPA();
      }

public static void main(String args[])
{
   Main ob=new Main();
   ob.read_data();
   ob.calc_SGPA();
   ob.details();

}
}
```

```
Command Prompt

Microsoft Windows [Version 10.0.18363.1139]
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C:\Users\sohan>cd C:\Users\sohan\Desktop\Java Programs\SGPA

C:\Users\sohan\Desktop\Java Programs\SGPA>javac Main.java

C:\Users\sohan\Desktop\Java Programs\SGPA>java Main
Enter the name of the students
sohan
Enter the USN
159
Enter the credits and marks for 5 subjects
Credits for subject1:
4
Marks for subject1:
45
Credits for subject2:
3
Marks for subject2:
76
Credits for subject3:
5
Marks for subject3:
88
Credits for subject4:
5
Marks for subject4:
98
Credits for subject5:
2
Marks for subject5:
56
SGPA:8
Name:sohan
USN:159
Marks and Credits for all 5 subjects:
45
4
76
3
88
5
98
5
56
2
SGPA:8

C:\Users\sohan\Desktop\Java Programs\SGPA>
```