```java
import java.util.*;
class Student
{
    private String USN;
    private String name;
    private int sem;
    void getstudentdata()
    {
        Scanner sc=new Scanner(System.in);
        System.out.print("Enter the USN of the student : ");
        USN=sc.nextLine();
        System.out.print("Enter the name of the student : ");
        name=sc.next();
        sc.nextLine();
        System.out.print("Enter the semester of the student : ");
        sem=sc.nextInt();
    }
    void printstudentdata()
    {
        System.out.println("The name of the student is : "+name);
        System.out.println("The USN of the student is : "+USN);
        System.out.println("The Semester of teh student is : "+sem);
    }
}
class Test extends Student
{
    private int cie[];
    private int credits[];
    private int n;
    void setsize(int m)
    {
```

```java
    void setsize(int m)
    {
        n=m;
        cie=new int[n];
        credits=new int[n];
    }
    void getciemarks()
    {
        Scanner sc=new Scanner(System.in);
        System.out.print("Enter the credits and cie marks of each subject ");
        int i;
        for(i=0;i<n;i++)
        {
            System.out.print("Enter the credits and marks of "+(i+1)+" subject : ");
            credits[i]=sc.nextInt();
            cie[i]=sc.nextInt();
        }
    }
    int returnciemarks(int i)
    {
        return cie[i];
    }
    int return_credits(int i)
    {
        return credits[i];
    }
}
class Exams extends Test
{
    private int see[];
    private int n1;
```

```java
    void setsize1(int m)
    {
        n1=m;
        see=new int[n1];
    }
    void getseemarks()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the see marks of each subject");
        int i;
        for(i=0;i<n1;i++)
        {
            System.out.print("Enter the see marks of "+(i+1)+" subject : ");
            see[i]=sc.nextInt();
        }
    }
    int returnseemarks(int i)
    {
        return see[i];
    }
}
class Result extends Exams
{
    private double result;
    private int n;
    Result()
    {
        Scanner sc=new Scanner(System.in);
        getstudentdata();
        System.out.print("Enter the number of subjects : ");
        int i=sc.nextInt();
```

```java
        System.out.print("Enter the number of subjects : ");
        int i=sc.nextInt();
        n=i;
        printstudentdata();
        setsize(i);
        setsize1(i);
        getciemarks();
        getseemarks();

    }
    void calculateresult()
    {
        result=0;
        double temp=0;
        double totalcredits=0;
        for(int i=0;i<n;i++)
        {
            temp=temp+returnciemarks(i);
            temp=temp+(returnseemarks(i)/2);
            totalcredits=totalcredits+return_credits(i);
            result=result+((temp*return_credits(i))/100);
            temp=0;
        }
        result=(result/totalcredits)*10;
    }
    void printresult(int i)
    {
        System.out.print("The SGPA of the "+(i+1)+" student is : "+result);
    }
}
class Main
```

```java
120  class Main
121  {
122      public static void main(String args[])
123      {
124          Scanner sc=new Scanner(System.in);
125          System.out.print("Enter the number of students : ");
126          int n=sc.nextInt();
127          Result r[]=new Result[n];
128          for(int i=0;i<n;i++)
129          {
130              r[i]=new Result();
131              r[i].calculateresult();
132          }
133          for(int i=0;i<n;i++)
134          {
135              r[i].printresult(i);
136          }
137      }
138  }
139
```