

```
import java.util.Scanner;  
class Student {  
    private String USN;  
    private String name;  
    private int sem;
```

```
    void getstudentdata()  
    {  
        Scanner xx = new Scanner(System.in);  
        System.out.print("Enter the USN of the student:");  
        USN = xx.next();  
        xx.nextLine();  
        System.out.print("Enter the name of the student:");  
        name = xx.next();  
        xx.nextLine();  
        System.out.print("Enter the semester of the student:");  
        sem = xx.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 tech student is: " + sem);  
    }  
}
```

```
class Test extends Student {  
    private int c1e[];  
    private int credits[];
```



```

private int n;

void setSize (int m)
{
    n = m;
    cie = new int[n];
    credits = new int[n];
}

void getCredits()
{
    Scanner xx = new Scanner(System.in);
    System.out.println("Enter the credits and cie
    marks of each subject:");
    int i;
    for (i=0; i<n; i++)
    {
        System.out.println("Enter the credits and
        marks of " + (i+1) + " subject:");
        credits[i] = xx.nextInt();
        cie[i] = xx.nextInt();
    }
}

int returnCredits (int i)
{
    return cie[i];
}

int returnCredits (int i)
{
    return credits[i];
}
}

```



```
class Exams extends Test {  
    private int see[];  
    private int n1;
```

```
    void setSize (int m)  
{  
        n1 = m;  
        see = new int [n1];  
    }
```

```
    void getseemarks ()  
{  
        Scanner xx = new Scanner (System.in);  
        System.out.println ("Enter the see marks of  
                             each subject :");
```

```
        int i;  
        for (i=0; i<n1; i++)  
        {  
            System.out.println ("Enter the see marks of  
            " + (i+1) + " subject :");  
  
            see[i] = xx.nextInt();  
        }  
    }
```

```
    int returnseemarks (int i)  
    {  
        return see[i];  
    }  
}
```



```
class Result extends Exam {  
    private double result;  
    private int n;
```

```
    Result ()
```

```
{
```

```
    Scanner xx = new Scanner (System.in);
```

```
    getStudentdata();
```

```
    System.out.println ("Enter the no of subject:");
```

```
    int i = xx.nextInt();
```

```
    n = i;
```

```
    setSize (1);
```

```
    setSize (0);
```

```
get exam
```

```
    getcremarks();
```

```
    getseemarks();
```

```
}
```

```
    void calculateResult ()
```

```
{
```

```
    result = 0;
```

```
    double temp = 0;
```

```
    double totalcredits = 0;
```

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

```
{
```

```
        temp = temp + returncremarks(i);
```

```
        temp = temp + (returnseemarks(i)/2);
```

```
        totalcredits = totalcredits + return_credits(i);
```

```
        result = result + ((temp * return_credits(i))/100);
```

```
        temp = 0;
```

```
}
```



```
    result = (result / total credits) * 10;  
}
```

```
void printresult (int i)
```

```
{  
    System.out.println ("The SGPA of the " + (i+1) + "  
    student is " + result);  
}
```

```
}
```

```
public class Main {
```

```
    public static void main (String args[])  
    {
```

```
        Scanner xx = new Scanner (System.in);  
        System.out.println ("Enter the number of  
        students; ");
```

```
        int n = xx.nextInt();
```

```
public class main {
```

```
    public static void main (String args[])  
    {
```

```
        Scanner xx = new Scanner (System.in);  
        System.out.println ("Enter the number of students; ");  
        int n = xx.nextInt();
```

```
        Result r[] = new Result[n];
```

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

```
        { r[i] = new Result();
```

```
          r[i].calculateResult();
```

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

```
        { r[i].printresult(i); }
```

```
    }  
}
```