

```
Internals.java x Student.java x Externals.java x main.java x
1 package CIE;
2 import java.util.Scanner;
3
4 public class Student
5 {
6     public String name;
7     public String usn;
8     public int sem;
9     public void display()
10    {
11        Scanner s2=new Scanner(System.in);
12        System.out.println("Name:");
13        name=s2.next();
14        System.out.println("USN:");
15        usn=s2.next();
16        System.out.println("Semester:");
17        sem=s2.nextInt();
18    }
19 }
```

```
Internals.java x Student.java x Externals.java x main.java x
1 package CIE;
2 import java.util.Scanner;
3
4 public class Internals extends Student
5 {
6     public double[] ciem;
7
8     public void display()
9     {
10         ciem = new double[5];
11         Scanner s1 = new Scanner(System.in);
12         System.out.println("CIE Marks for 5 subjects out of 50:");
13         for(int i=0;i<5;i++){
14             ciem[i]=s1.nextDouble();
15             if(ciem[i] > 50){
16                 System.out.println("Please enter valid internal marks");
17             }
18         }
19     }
20 }
```

```

1 package SEE;
2 import java.util.*;
3 import CIE.*;
4
5 public class Externals extends CIE.Student
6 {
7     public double[] seem;
8
9     public void display()
10    {
11        seem = new double[5];
12        Scanner s=new Scanner(System.in);
13        System.out.println("SEE Marks for 5 subjects(out of 100):");
14        for(int i=0;i<5;i++){
15            seem[i]=s.nextDouble();
16            if(seem[i] > 100){
17                System.out.println("Please enter valid External marks");
18            }
19        }
20    }
21 }

```

```

1 import CIE.*;
2 import SEE.*;
3 import java.util.Scanner;
4 public class main
5 {
6     public static void main(String args[])
7     {
8         int n;
9         Scanner s3=new Scanner(System.in);
10        System.out.println("Enter the number of students:");
11        n=s3.nextInt();
12        CIE.Student[] st =new CIE.Student[n];
13        CIE.Internals[] in =new CIE.Internals[n];
14        SEE.Externals[] ex =new SEE.Externals[n];
15        for(int i=0;i<n;i++)
16        {
17            st[i]=new CIE.Student();
18            in[i]=new CIE.Internals();
19            ex[i]=new SEE.Externals();
20            st[i].display();
21            in[i].display();
22            ex[i].display();
23            System.out.println("Total marks of student "+st[i].name+" in 5 subjects are:");
24            for(int j=0;j<5;j++)
25            {
26                System.out.println(in[i].ciem[j]+(ex[i].seem[j]/2));
27            }
28        }
29    }
30 }
31 }

```



```
((base) jathinsmacbookpro@Jathins-MacBook-Pro lab6 % java main
```

```
Enter the number of students:
```

```
2
```

```
Name:
```

```
jathin
```

```
USN:
```

```
1234
```

```
Semester:
```

```
4
```

```
CIE Marks for 5 subjects out of 50:
```

```
45
```

```
46
```

```
47
```

```
48
```

```
49
```

```
SEE Marks for 5 subjects(out of 100):
```

```
93
```

```
94
```

```
95
```

```
96
```

```
97
```

```
Total marks of student jathin in 5 subjects are:
```

```
91.5
```

```
93.0
```

```
94.5
```

```
96.0
```

```
97.5
```

```
Name:
```

```
qwerty
```

```
USN:
```

```
4567
```

```
Semester:
```

```
5
```

```
CIE Marks for 5 subjects out of 50:
```

```
34
```

```
35
```

```
36
```

```
37
```

```
38
```

```
SEE Marks for 5 subjects(out of 100):
```

```
67
```

```
78
```

```
89
```

```
CIE Marks for 5 subjects out of 50:
45
46
47
48
49
SEE Marks for 5 subjects(out of 100):
93
94
95
96
97
Total marks of student jathin in 5 subjects are:
91.5
93.0
94.5
96.0
97.5
Name:
qwerty
USN:
4567
Semester:
5
CIE Marks for 5 subjects out of 50:
34
35
36
37
38
SEE Marks for 5 subjects(out of 100):
67
78
89
98
87
Total marks of student qwerty in 5 subjects are:
67.5
74.0
80.5
86.0
81.5
(base) jathinsmacbookpro@Jathins-MacBook-Pro lab6 %
```