

Code:

LABProgram6

Pkg CIE:

```
1  package CIE;
2  import java.util.Scanner;
3
4
5  public class internals extends student
6  {
7
8      public int cieMarks[]=new int[5];
9      Scanner get = new Scanner(System.in);
10     public void getCieMarks()
11     {
12         System.out.printf("\n Enter the CIE Marks(out of 50) obtained in 5 courses : ");
13         for(int i=0;i<5;i++)
14             cieMarks[i]=get.nextInt();
15     }
16 }
```

```
1  package CIE;
2  import java.util.Scanner;
3
4  public class student
5  {
6      Scanner get = new Scanner(System.in);
7      String usn,name;
8      int sem;
9      public void getStudentInfo()
10     {
11         System.out.printf("\n\n <----Enter the Student Details----> ");
12         System.out.printf("\n USN: ");usn=get.next();
13         System.out.printf(" Name: ");name=get.next();
14         System.out.printf(" Sem Number: ");sem=get.nextInt();
15     }
16
17     public void displayStudent()
18     {
19         System.out.printf("\n\n <----Student Details----> ");
20         System.out.printf("\n USN: %s",usn);
21         System.out.printf("\n Name: %s",name);
22         System.out.printf("\n Sem Number: %d",sem);
23     }
24 }
25 }
```

Pkg SEE:

```
1  package SEE;
2  import java.util.Scanner;
3
4  public class externals extends CIE.student
5  {
6
7      public int seeMarks[]=new int[5];
8      Scanner get = new Scanner(System.in);
9      public void getSeeMarks()
10     {
11         System.out.printf("\n Enter the SEE Marks(out of 100) obtained in 5 courses : ");
12         for(int i=0;i<5;i++)
13             seeMarks[i]=get.nextInt();
14     }
15 }
```

Main Program:

```
1  import CIE.*;
2  import SEE.*;
3  import java.util.Scanner;
4
5  class finalMarks
6  {
7      public static void main(String[] args)
8      {
9          int n;
10         CIE.internals i[];
11         SEE.externals e[];
12         Scanner get = new Scanner(System.in);
13         System.out.printf("\n Enter the number of Students : ");
14         n=get.nextInt();
15         i=new CIE.internals[n];
16         e=new SEE.externals[n];
17         for (int k=0;k<n;k++ )
18         {
19             i[k]=new CIE.internals();
20             i[k].getStudentInfo();
21             i[k].getCieMarks();
22             e[k]=new SEE.externals();
23             e[k].getSeeMarks();
24         }
25
26         for (int k=0;k<n;k++)
27         {
28             i[k].displayStudent();
29             System.out.printf("\n Final Marks for 5 courses : ");
30             for (int l=0;l<5;l++)
31             {
32                 System.out.printf("\n\t Course %d : %.2f ",(l+1),(i[k].cieMarks[l]+((e[k].seeMarks[l])*0.5)));
33             }
34             System.out.printf("\n <----X----> ");
35         }
36     }
37 }
38
39 }
```

Output:

```
Enter the number of Students : 2

<----Enter the Student Details---->
USN: 1bm19cs008
Name: john
Sem Number: 3

Enter the CIE Marks(out of 50) obtained in 5 courses : 30 30 49 24 48

Enter the SEE Marks(out of 100) obtained in 5 courses : 98 78 67 90 23

<----Enter the Student Details---->
USN: 1bm19cs878
Name: micheal
Sem Number: 3

Enter the CIE Marks(out of 50) obtained in 5 courses : 45
34
34
53
23

Enter the SEE Marks(out of 100) obtained in 5 courses : 90 90 78 98 67

<----Student Details---->
USN: 1bm19cs008
Name: john
Sem Number: 3
Final Marks for 5 courses :
    Course 1 : 79.00
    Course 2 : 69.00
    Course 3 : 82.50
    Course 4 : 69.00
    Course 5 : 59.50
<----X---->

<----Student Details---->
USN: 1bm19cs878
Name: micheal
Sem Number: 3
Final Marks for 5 courses :
    Course 1 : 90.00
    Course 2 : 79.00

    Course 2 : 79.00
    Course 3 : 73.00
    Course 4 : 102.00
    Course 5 : 56.50
<----X---->
```