WEEK9

LAB PROGRAM 6:

Code:

CIE PACKAGE:

Student class:

```java
package cie;

import java.util.Scanner;


public class Student
{
    public String usn;

    public String name;

    public int sem;


    public void getdata()
    {
        Scanner sc =new Scanner(System.in);

        System.out.println("Enter name:");

        name=sc.next();

        System.out.println("Enter usn:");

        usn=sc.next();

        System.out.println("Enter sem:");

        sem=sc.nextInt();
    }
}
```

Internals class:

```java
package cie;

import java.util.Scanner;

public class Internals extends cie.Student
{
    public float[] cie_marks=new float[5];

    public void getdata()
    {
        Scanner sc=new Scanner(System.in);

        System.out.println("Enter CIE marks:");

        for(int i=0;i<5;i++)
        {
            System.out.println("Enter marks in subject "+(i+1)+"(out of 50):");

            cie_marks[i]=sc.nextFloat();
        }
    }
}
```

PACKAGE EXTERNALS:

See class:

```java
package see;

import cie.*;

import java.util.Scanner;

public class Externals extends cie.Student
{
    public float[] see_marks=new float[5];

    public void getdata()
```

```java
    {
        Scanner sc=new Scanner(System.in);

        System.out.println("Enter SEE marks:(out of 100)");

        for(int i=0;i<5;i++)

        {
            System.out.println("Enter marks in subject "+(i+1)+":");

            see_marks[i]=sc.nextFloat();
        }
    }

}
```

DRIVER CLASS StudentMain:

```java
import cie.*;

import see.*;

import java.util.Scanner;

public class StudentMain

{
    public static void main(String args[])

    {
        int n,i,j;

        Scanner sc=new Scanner(System.in);

        System.out.println("Enter the number of students:");

        n=sc.nextInt();

        cie.Student[] s=new cie.Student[n];

        cie.Internals[] io=new cie.Internals[n];

        see.Externals[] e=new see.Externals[n];
```

```java
            float [][]final_marks=new float[n][5];

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

            {

                  s[i]=new cie.Student();

                  io[i]=new cie.Internals();

                  e[i]=new see.Externals();

                  System.out.println("Enter Student details of student
"+(i+1)+":\n--------------------------------");

                  s[i].getdata();

                  io[i].getdata();

                  e[i].getdata();

            }

            System.out.println("Student details:\n****************");

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

            {

                  System.out.println("NAME:"+s[i].name+"\nUSN:"+s[i].usn+"\nSEM:"+s[i].sem+"\nFINAL
MARKS:");

                  for(j=0;j<5;j++)

                  {

                        final_marks[i][j]=io[i].cie_marks[j]+(e[i].see_marks[j]/2);

                        System.out.println("Subject"+(j+1)+": "+final_marks[i][j]);

                  }

                  System.out.println("--------");

            }

      }

}
```

OUTPUT:

```
C:\Users\misaf\Desktop\OOJ-LAB\Week9>j

C:\Users\misaf\Desktop\OOJ-LAB\Week9>j
Enter the number of students:
2
Enter Student details of student 1:
-----------------------------------
Enter name:
saf
Enter usn:
1
Enter sem:
3
Enter CIE marks:
Enter marks in subject 1(out of 50):
30
Enter marks in subject 2(out of 50):
40
Enter marks in subject 3(out of 50):
36
Enter marks in subject 4(out of 50):
29
Enter marks in subject 5(out of 50):
39
Enter SEE marks:(out of 100)
Enter marks in subject 1:
87
Enter marks in subject 2:
80
```

```
Enter marks in subject 3:
78
Enter marks in subject 4:
99
Enter marks in subject 5:
100
Enter Student details of student 2:
----------------------------------
Enter name:
jake
Enter usn:
4
Enter sem:
3
Enter CIE marks:
Enter marks in subject 1(out of 50):
34
Enter marks in subject 2(out of 50):
36
Enter marks in subject 3(out of 50):
45.5
Enter marks in subject 4(out of 50):
50
Enter marks in subject 5(out of 50):
41
Enter SEE marks:(out of 100)
Enter marks in subject 1:
78
Enter marks in subject 2:
99
```

```
Enter marks in subject 3:
67
Enter marks in subject 4:
78
Enter marks in subject 5:
95
Student details:
****************
NAME:saf
USN:1
SEM:3
FINAL MARKS:
Subject1: 73.5
Subject2: 80.0
Subject3: 75.0
Subject4: 78.5
Subject5: 89.0
--------
NAME:jake
USN:4
SEM:3
FINAL MARKS:
Subject1: 73.0
Subject2: 85.5
Subject3: 79.0
Subject4: 89.0
Subject5: 88.5
--------
```