PACKAGE PROGRAM:

```java
package cie;
import java.util.*;
public class student
{
        public String usn;
        public String name;
        public int sem;

        public void read()
        {
                Scanner sc=new Scanner(System.in);
                System.out.println("Enter the usn of the student ");
                usn=sc.next();
                System.out.println("Enter the name of the student ");
                name=sc.next();
                System.out.println("Enter the semester of the student ");
                sem=sc.nextInt();
        }
}

package cie;
import java.util.*;

public class internals extends student
{
        public int[] a=new int[5];

        public void read()
        {
```

```java
                super.read();

            Scanner sc=new Scanner(System.in);

            System.out.println("Enter the CIE marks of 5 courses ");

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

            {

                    System.out.println("Enter marks of the course " + (i+1));

                    a[i]=sc.nextInt();

            }

        }

        public void display()

        {

                System.out.println("USN of the student is " + usn);

                System.out.println("Name of the stuednt is " + name);

                System.out.println("Semester of the student is " + sem);

        }



}




package see;

import java.util.*;

import java.io.*;

import java.lang.*;


public class external extends cie.student

{

        public int[] b=new int[5];

        public int[] mar;

        public void read()
```

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

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

                {
                        System.out.println("Enter the SEE marks of the course " + (i+1));

                        b[i]=sc.nextInt();

                }

        }

}




import java.util.*;

import java.io.*;

import java.lang.*;

import cie.*;

import see.*;




public class student_end

{

        public static void main(String[] args)

        {

                int n;

                Scanner sc=new Scanner(System.in);

                int final_mark;

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

                n=sc.nextInt();

                internals[] in=new internals[n];

                external[] ex=new external[n];

                internals ob1=new internals();

                external ob2=new external();
```

```java
                ob2.mar=new int[n];


                for(int i=0;i<n;i++)
                {
                        System.out.println("Enter the details of the student " + (i+1));
                        in[i]=new internals();
                        in[i].read();
                        ex[i]=new external();
                        ex[i].read();
                }
        System.out.println();
                for(int i=0;i<n;i++)
                {
                        System.out.println("*************Details Of The
Student************** " + (i+1));
                        System.out.println("USN of the student is " + in[i].usn);
                    System.out.println("Name of the stuednt is " + in[i].name);
                    System.out.println("Semester of the student is " + in[i].sem);
                        for(int j=0;j<5;j++)
                        {
                          final_mark=in[i].a[j]+((ex[i].b[j])/2);
                          System.out.println("Final Mark of the student " + (i+1) + " " + " in course "
+ (j+1) + " " + final_mark);


                        }
                        System.out.println();
                }


        }


}
```

OUTPUT:


```
Final Mark of the student2  in course 5 95

C:\Users\Shreehari Kulkarni\OneDrive\Desktop\LAB SUBJECT\JAVALAB>javac student_end.java

C:\Users\Shreehari Kulkarni\OneDrive\Desktop\LAB SUBJECT\JAVALAB>java student_end
Enter the Number of students
2
Enter the details of the student 1
Enter the usn of the student
1BM19CS153
Enter the name of the student
SHREEHARI
Enter the semester of the student
3
Enter the CIE marks of 5 courses
Enter marks of the course 1
48
Enter marks of the course 2
48
Enter marks of the course 3
42
Enter marks of the course 4
40
Enter marks of the course 5
47
Enter the SEE marks of the course 1
96
Enter the SEE marks of the course 2
98
Enter the SEE marks of the course 3
100
Enter the SEE marks of the course 4
92
Enter the SEE marks of the course 5
88
Enter the details of the student 2
Enter the usn of the student
1BM19CS155
Enter the name of the student
SUBHAS
Enter the semester of the student
3
Enter the CIE marks of 5 courses
Enter marks of the course 1
47
Enter marks of the course 2
47
Enter marks of the course 3
47
Enter marks of the course 4
47
Enter marks of the course 5
47
Enter the SEE marks of the course 1
96
Enter the SEE marks of the course 2
94
Enter the SEE marks of the course 3
92
Enter the SEE marks of the course 4
100
Enter the SEE marks of the course 5
98
```



```
100
Enter the SEE marks of the course 5
98

USN of the student is 1BM19CS153
Name of the stuednt is SHREEHARI
Semester of the student is 3
Final Mark of the student1  in course 1 96
Final Mark of the student1  in course 2 97
Final Mark of the student1  in course 3 92
Final Mark of the student1  in course 4 86
Final Mark of the student1  in course 5 91

USN of the student is 1BM19CS155
Name of the stuednt is SUBHAS
Semester of the student is 3
Final Mark of the student2  in course 1 95
Final Mark of the student2  in course 2 94
Final Mark of the student2  in course 3 93
Final Mark of the student2  in course 4 97
Final Mark of the student2  in course 5 96

C:\Users\Shreehari Kulkarni\OneDrive\Desktop\LAB SUBJECT\JAVALAB>
```