```
package cie;
import java.util.Scanner;
public class students
{
    protected String usn = new String();
    protected String name = new String();
    protected int sem;
    public void getdetails()
    {
        Scanner s = new Scanner(System.in);
        System.out.println("enter the USN:");
        usn = s.next();
        System.out.println("enter the name:");
        name = s.next();
        System.out.println("enter the sem:");
        sem = s.nextInt();
    }
    public void displaydetails()
    {
        System.out.println("name:" + name + " " + "usn:"
            + usn + " " + "sem:" + sem);
    }
};


package cie;
import java.util.Scanner;
public class internals extends students
{
    protected int[] marks = new int[5];
    public void getinternals()
    {
    }
}
```

```java
Scanner s = new Scanner (System.in);
for (int i = 0; i < 5; i++)
{
    System.out.println ("enter the internal marks
        of course" + (i+1));
    marks[i] = s.nextInt();
}
}
}


package see;
import cie.internals.;
import java.util.Scanner;
public class external extends internals
{
    protected int mark[] = new int[5];
    protected int finalMarks[] = new int[5];
    public void getexternal()
    {
        Scanner s = new Scanner (System.in);
        for (int i = 0; i < 5; i++)
        {
            System.out.println ("enter the external marks
                of course" + (i+1));
            mark[i] = s.nextInt();
        }
    }
    public void cal()
    {
        for (int i = 0; i < 5; i++)
            finalMarks[i] = mark[i]/2 + super.marks[i];
    }
}
```

```java
public void displayFinal()
{
    displaydetails();
    for(int i=0; i<5; i++)
        System.out.println("course"+(i+1)
        ":" +finalMarks[i]);
}
}

import see.external;
class finalMain
{
    public static void main(String args[])
    {
        int no=2;
        external e[]= new external[no];
        for(int i=0; i<no; i++)
        {
            e[i]= new external();
            e[i].getdetails();
            System.out.println("enter cie marks");
            e[i].getinternals();
            System.out.println("enter see marks");
            e[i].getexternal()
        }
        System.out.println("displaying details:");
        for(int i=0; i<no; i++)
        {
            e[i].cal();
            e[i].displayFinal();
        }
    }
}
```

output enter the usn:
   1BM2215205
enter the name:
   Praneeta
enter the sem:
   3
enter cie marks
enter internals marks of course1
45
enter internals marks of course2
46
enter internals marks of course3
47
enter internals marks of course4
48
enter internals marks of course 5
49
enter see marks
enter external marks of course1
   99
enter external marks of course2
80
enter external marks of course3
98
enter external marks of course4
87
enter external marks of course 5
98
enter the usn:
1BM2215206
enter the name:
Ruchila

enter the sem:
3.
enter the cie marks
enter the internals marks of course 1
45
enter the internals marks of course 2
43
enter the internals marks of course 3
46
enter the internals marks of course 4
50
enter the internals marks of course 5
44
enter see marks
enter the external marks of course 1
98
enter the external marks of course 2
99
enter the external marks of course 3
87
enter the external marks of course 4
89
enter the external marks of course 5
90
displaying details:
name: Pranata usn: 1BM22CS205 sem: 3
course1: 94
course2: 86
course3: 96
course4: 91
course5: 98
name: Rishila usn: 1BM22CS206 sem: 3

display:
course1: 94
course2: 92
course3: 89
course4: 94
course5: 89

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