**Create a package CIE which has two classes- Student and Internals. The class Personal has members like usn, name, sem. The class internals has an array that stores the internal marks scored in five courses of the current semester of the student. Create another package SEE which has the class External which is a derived class of Student. This class has an array that stores the SEE marks scored in five courses of the current semester of the student. Import the two packages in a file that declares the final marks of n students in all five courses.**

```java
package cie;
public class Internals {


        public int internal[]=new int[5];
}
```

```java
package cie;
public class Student {
        public String
        name; public int
        usn; public int
        sem;
}
```

```java
package see;
import cie.Internals;
public class External extends
        Internals { public int
        external[]=new int[5];
}
```

import

```java
java.util.Scanner;
import cie.Student;
import see.External;
public class Marks {
```

```java
    public static void main(String[]

        args) { int n;

        Scanner sc=new Scanner(System.in);

        System.out.println("enter number of

        students"); n=sc.nextInt();

        External student[]=new

        External[n]; Student

        details[]=new Student[n]; int

        final_marks[][]=new int[n][5];

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

        {

            student[i]=new

            External();

            details[i]=new

            Student();

            System.out.println("Enter Student usn and sem

            respectively"); details[i].usn=sc.nextInt();

            details[i].sem=sc.nextInt();

            System.out.println("Enter Internal marks of 5 subject in
            respective

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

            {


                student[i].internal[j]=sc.nextInt();

            }

            System.out.println("Enter external marks of 5 subject in
            respective
```
order"
);

order"
);

```java
for(int
k=0;k                      +)
<5;k+
                            {


                                        student[i].external[k]=sc.nextInt();

                            }

              }
```

```java
        for(int i=0;i<n;i++)
        {
                for(int j=0;j<5;j++)
                final_marks[i][j]=student[i].internal[j]+(int)(student[i].exte
                rnal[j]/2);
        }
        for(int i=0;i<n;i++)
        {
                //System.out.println("Name:
                "+details[i].name);
                System.out.println("USN:
                "+details[i].usn);
                System.out.println("Sem:
                "+details[i].sem);
                System.out.println("Marks of the student
                is"); for(int j=0;j<5;j++)
                {
                        System.out.println(final_marks[
                                i][j]);
                }
        }
    }
}
```

## OUTPUT:

```
C:\Users\admin\OneDrive\Desktop\awt>javac -d . Internals.java

C:\Users\admin\OneDrive\Desktop\awt>javac -d . Student.java

C:\Users\admin\OneDrive\Desktop\awt>javac -d . External.java
```

```
C:\Users\admin\OneDrive\Desktop\awt>javac Marks.java

C:\Users\admin\OneDrive\Desktop\awt>java Marks
enter number of students
2
Enter Student  usn and sem respectively
242
3
Enter Internal marks of 5 subject in respective order
45
40
32
50
28
Enter external marks of 5 subject in respective order
98
89
67
73
82
Enter Student  usn and sem respectively
255
3
Enter Internal marks of 5 subject in respective order
47
42
35
26
39
Enter external marks of 5 subject in respective order
67
90
89
78
97
```

```
USN: 242
Sem: 3
Marks of the student is
94
84
65
86
69
USN: 255
Sem: 3
Marks of the student is
80
87
79
65
87
```