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.

Program solution :

Package CIE:

Internals:

```java
package CIE;

import java.util.Scanner;

public class Internals extends CIE.Student
{
    public int ciem[]=new int[5];
    Scanner xx =new Scanner (System.in);
    public void accept()
    {
        for(int i=0;i<5;i++)
```

```java
        {
            System.out.println("Enter the cie marks of subject"+(i+1)+" out of 50");
            {
                ciem[i]=xx.nextInt();
            }
        }
    }
}
```

Student:

```java
package CIE;
import java.util.Scanner;


public class Student
{
    String name,usn;
    int sem;
    Scanner xx=new Scanner(System.in);
    public void accept()
    {
```

```java
        System.out.println("Enter name:");
        name=xx.nextLine();
        System.out.println("Enter usn:");
        usn=xx.next();
        System.out.println("Enter sem:");
        sem=xx.nextInt();
    }
    public void display()
    {
        System.out.println("Name :"+name);
        System.out.println("Usn :"+usn);
        System.out.println("Sem :"+sem);
    }
}
```

Package SEE:

Externals:

```java
package SEE;
import CIE.*;
import java.util.Scanner;

public class Externals extends CIE.Student
{
    public int seem[]=new int[5];
    Scanner xx =new Scanner (System.in);
    public void accept()
    {
        for(int i=0;i<5;i++)
        {
            System.out.println("Enter the see marks of subject"+(i+1)+" out of 100");
            {
                seem[i]=xx.nextInt();
            }
        }
```

```
      }



}
```

Main Program:

TotalMarks:

```java
package SEE;

import CIE.*;

import java.util.Scanner;


public class Externals extends CIE.Student
{
    public int seem[]=new int[5];

    Scanner xx =new Scanner (System.in);

    public void accept()
    {
        for(int i=0;i<5;i++)
        {
            System.out.println("Enter the see marks of subject"+(i+1)+" out
of 100");
```

```
        {
            seem[i]=xx.nextInt();
        }
    }
}


}
```

Outputs:

```
C:\Windows\System32\cmd.exe

Microsoft Windows [Version 10.0.19041.388]
(c) 2020 Microsoft Corporation. All rights reserved.

C:\Users\dell\OneDrive\Desktop\java\lab assignments\packages>javac CIE/Student.java

C:\Users\dell\OneDrive\Desktop\java\lab assignments\packages>javac CIE/Internals.java

C:\Users\dell\OneDrive\Desktop\java\lab assignments\packages>javac SEE/Externals.java

C:\Users\dell\OneDrive\Desktop\java\lab assignments\packages>TotalMarks
'TotalMarks' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\dell\OneDrive\Desktop\java\lab assignments\packages>javac TotalMarks.java

C:\Users\dell\OneDrive\Desktop\java\lab assignments\packages>java TotalMarks
Enter the number of students
4
ENTER STUDENT1 DETAILS
Enter name:
ishan
Enter usn:
1bm19cs555
Enter sem:
3
Enter the cie marks of subject1 out of 50
49
Enter the cie marks of subject2 out of 50
48
Enter the cie marks of subject3 out of 50
47
Enter the cie marks of subject4 out of 50
49
Enter the cie marks of subject5 out of 50
50
Enter the see marks of subject1 out of 100
78
Enter the see marks of subject2 out of 100
99
Enter the see marks of subject3 out of 100
80
Enter the see marks of subject4 out of 100
85
Enter the see marks of subject5 out of 100
100
```

```
ENTER STUDENT2 DETAILS
Enter name:
vishal
Enter usn:
1bm19cs666
Enter sem:
3
Enter the cie marks of subject1 out of 50
50
Enter the cie marks of subject2 out of 50
48
Enter the cie marks of subject3 out of 50
46
Enter the cie marks of subject4 out of 50
45
Enter the cie marks of subject5 out of 50
38
Enter the see marks of subject1 out of 100
99
Enter the see marks of subject2 out of 100
98
Enter the see marks of subject3 out of 100
85
Enter the see marks of subject4 out of 100
90
Enter the see marks of subject5 out of 100
87
```

```
ENTER STUDENT3 DETAILS
Enter name:
Kishan
Enter usn:
1bm19cs199
Enter sem:
3
Enter the cie marks of subject1 out of 50
50
Enter the cie marks of subject2 out of 50
48
Enter the cie marks of subject3 out of 50
47
Enter the cie marks of subject4 out of 50
39
Enter the cie marks of subject5 out of 50
38
Enter the see marks of subject1 out of 100
100
Enter the see marks of subject2 out of 100
99
Enter the see marks of subject3 out of 100
99
Enter the see marks of subject4 out of 100
90
Enter the see marks of subject5 out of 100
96
```

```
ENTER STUDENT4 DETAILS
Enter name:
abhishek
Enter usn:
1bm19cs777
Enter sem:
3
Enter the cie marks of subject1 out of 50
48
Enter the cie marks of subject2 out of 50
47
Enter the cie marks of subject3 out of 50
46
Enter the cie marks of subject4 out of 50
44
Enter the cie marks of subject5 out of 50
43
Enter the see marks of subject1 out of 100
90
Enter the see marks of subject2 out of 100
86
Enter the see marks of subject3 out of 100
85
Enter the see marks of subject4 out of 100
80
Enter the see marks of subject5 out of 100
66
```

```
DETAILS OF STUDENT 1
Name :ishan
Usn :1bm19cs555
Sem :3
Total marks in subject1 is 88
Total marks in subject2 is 97
Total marks in subject3 is 87
Total marks in subject4 is 91
Total marks in subject5 is 100
DETAILS OF STUDENT 2
Name :vishal
Usn :1bm19cs666
Sem :3
Total marks in subject1 is 99
Total marks in subject2 is 97
Total marks in subject3 is 88
Total marks in subject4 is 90
Total marks in subject5 is 81
DETAILS OF STUDENT 3
Name :Kishan
Usn :1bm19cs199
Sem :3
Total marks in subject1 is 100
Total marks in subject2 is 97
Total marks in subject3 is 96
Total marks in subject4 is 84
Total marks in subject5 is 86
DETAILS OF STUDENT 4
Name :abhishek
Usn :1bm19cs777
Sem :3
Total marks in subject1 is 93
Total marks in subject2 is 90
Total marks in subject3 is 88
Total marks in subject4 is 84
Total marks in subject5 is 76

C:\Users\dell\OneDrive\Desktop\java\lab assignments\packages>
```