6) Create package CIE, SEE & import the package on main.java file.

```
package CIE;
import java.util.Scanner;
public class student {
    public int sem;
    public String usn;
    public String name;
    public void accept()
    {
        Scanner in = new Scanner(System.in);
        System.out.println("Enter usn: ");
        usn = in.next();
        System.out.print("Enter name: ");
        name = in.next();
        System.out.print("Enter sem: ");
        sem = in.next();
    }
}
```

```
package CIE;
public class Internals {
    public int marks[] = new int[5];
}
```

```
package SEE;
import CIE.student;
public class External extends student {
    public int ext = new int[5];
}
```

Main.java

```
import java.util.*;
import SEE.*;
import CIE.*;
public class Main{
    public static void main(String args[]){
        int final[] = new int[5];
        Scanner in = new Scanner(System.in);
        System.out.println("Enter n = ");
        int n = in.nextInt();
        SEE.External end[] = new SEE.External[n];
        CIE.External
        CIE.Internal in[] = new CIE.Internal[n];
        for(int i=0;i<n;i++){
            end[i] = new SEE.External();
            in[i] = new CIE.Internals();
            System.out.println("Enter details of "
            +(i+1));
            end[i].accept();
            for(int j=0 System.out.println("
            Enter internal & external marks");
            for(int j=0;j<5;j++){
                System.out.println("Course "+(j+1));
                in[i].marks[j] = in.nextInt();
                end[i].ext[j] = in.nextInt();
                final[j] = in[i].marks[j] +
                            end[i].ext[j];
            }
            System.out.println("Final marks
            of "+end[i].name);
            for(int k=0;k<5;k++){
                System.out.println("Course "
                +(k+1)+" = "+final[k]);
            }
        }
    }
}
```

Algorithm:

Step 1: Start

Step 2: Initialize variable name, usn, sem, marks[5], ext[5], final[5]

Step 3: Function; void accept() {
Input: "Enter usn ", usn
Input: "Enter name ", name
Input = "Enter sem ", sem.
}

Step 4: Print "Enter no. of students"

Step 5: Read n

Step 6: Create structure of name, usn, sem & name it as st

Step 7: for(i=0; i<n; i++){
st[i].accept();
~~for~~ Print "Enter internal & external marks respectively"
for(j=0; j<5; j++){
~~for~~ Print "Course "+(i+1)
Read ~~mas~~ st[i].marks[j]
Read st[i].ext[j]
~~for~~ st[i].final[j] = st[i].marks[j] + st[i].ext[j];
}
}

Step 8: print "Final marks"
for(i=0; i<n; i++){
print st[i].name
for(j=0; j<5; j++){
print "Final Course "+(j+1)
print st[j].final[j]
}
}

Step 9: Stop

Output:

Enter n: 1
Enter details of 1
Enter usn: 15
Enter name: jseri
Enter sem: 2
Enter internal external marks
Course 1
23 89
Course 2
23 9
Course 3
45 78
Course 4
34 90
Course 5
35 90
Final mark
Course 1 = 56
Course 2 = 16
Course 3 = 61
Course 4 = 62
Course 5 = 62

02.02.24

```
D:\java\oops>javac Main.java

D:\java\oops>java Main
Name: Aditya Dinesh Netrakar
USN: 1BM22CS017
Enter n:
1
Enter details 1
Enter U, N, S:

17
adi
2
Enter im and sm of sub 1
93 95
Enter im and sm of sub 2
96 90
Enter im and sm of sub 3
96 91
Enter im and sm of sub 4
98 97
Enter im and sm of sub 5
90 95
Final marks of adi
Course 1 = 94
Course 2 = 93
Course 3 = 93
Course 4 = 97
Course 5 = 92

D:\java\oops>
```