

```
1 package CIE;
2
3 public class Student {
4     public String name;
5     public String usn;
6     public int sem;
7
8     public Student() {}
9
10    public Student(String name, String usn, int sem) {
11        this.usn = usn;
12        this.name = name;
13        this.sem = sem;
14    }
15
16    public void displayDetails() {
17        System.out.println("USN: " + usn);
18        System.out.println("Name: " + name);
19        System.out.println("Sem: " + sem);
20    }
21}
```

```
1 package CIE;
2
3 import java.util.Scanner;
4 public class Internals extends Student {
5     public int imarks[] = new int[5];
6     Scanner sc = new Scanner(System.in);
7
8     public void setImarks(){
9         for (int i=0;i<5;i++){
10             imarks[i]=sc.nextInt();
11         }
12     }
13
14     public void displayImarks(){
15         for (int i=0;i<5;i++){
16             System.out.println("Subject"+ " "+(i+1)+": "+imarks[i]);
17         }
18     }
19 }
20
```

```
1 package SEE;
2
3 import java.util.Scanner;
4
5 public class External extends CIE.Student {
6     public int emarks[] = new int[5];
7     Scanner sc = new Scanner(System.in);
8
9     public void setMarks(){
10         for (int i=0;i<5;i++){
11             emarks[i]=sc.nextInt();
12         }
13     }
14
15     public void displayMarks(){
16         for (int i=0;i<5;i++){
17             System.out.println("Subject"+ " "+(i+1)+": "+emarks[i]);
18         }
19     }
20 }
```

```
1 import CIE.Student;
2 import CIE.Internals;
3 import SEE.External;
4 import java.util.Scanner;
5 public class Main {
6     Run | Debug
7     public static void main(String[] args) {
8         int n,sem; String name,usn;
9         System.out.println("Enter number of students:");
10        Scanner sc=new Scanner(System.in);
11        n=sc.nextInt();
12        Student stds[]=new Student[n];
13        Internals i[]=new Internals[n];
14        External e[]=new External[n];
15        for(int j=0;j<n;j++){
16            System.out.println("Enter Details of Student "+(j+1)+":");
17            sc.nextLine();
18            System.out.println("Name:");
19            name=sc.nextLine();
20            System.out.println("USN:");
21            usn=sc.nextLine();
22            System.out.println("Enter Semester");
23            sem=sc.nextInt();
24            stds[j]=new Student(usn,name,sem);
25            i[j]=new Internals();
26            System.out.println("Enter internal marks");
27            i[j].setImarks();
28            e[j]=new External();
29            System.out.println("Enter external marks");
30            e[j].setEmarks();
31        }
32        for(int j=0;j<n;j++){
33            System.out.println();
34            System.out.println("Student "+(j+1)+" details:");
35            stds[j].displayDetails();
36            System.out.println("Internal Marks:");
37            i[j].displayImarks();
38            System.out.println("External Marks:");
39            e[j].displayEmarks();
40            System.out.println("Total Marks :");
41            for(int k=0;k<5;k++){
42                System.out.println("Subject " + " " + (k+1) + " : " +(i[j].imarks[k]+e[j].emarks[k]));
43            }
44        }
45    }
```


Student 1 details:

USN: YASH KUMAR

Name: 1BM24CS336

Sem: 3

Internal Marks:

Subject 1: 48

Subject 2: 49

Subject 3: 50

Subject 4: 49

Subject 5: 50

External Marks:

Subject 1: 50

Subject 2: 49

Subject 3: 50

Subject 4: 49

Subject 5: 48

Total Marks :

Subject 1: 98

Subject 2: 98

Subject 3: 100

Subject 4: 98

Subject 5: 98

Student 2 details:

USN: YASHAS S

Name: 1BM24CS337

Sem: 3

Internal Marks:

Subject 1: 45

Subject 2: 49

Subject 3: 47

Subject 4: 46

Subject 5: 50

External Marks:

Subject 1: 50

Subject 2: 46

Subject 3: 48

Subject 4: 49

Subject 5: 45

Total Marks :

Subject 1: 95

Subject 2: 95

Subject 3: 95

Subject 4: 95

Subject 5: 95