

## JAVA LAB 07 - Package

12-11-24

### LAB - 07

Create a package CIE which has 2 classes Student and Internals with members usn, name, sem. It stores CIE marks as array of 5 subjects.

Another package SEE has class External which derives from Student. It stores an array of SEE marks.

Import 2 packages that declares final marks of n students.

```
package CIE;
```

```
class Student {
    public String usn;
    public String name;
    public int sem;
    public Student(String usn, String name, int sem) {
        this.usn = usn; this.name = name; this.sem = sem;
    }
    class Internals {
        int marks[] = new int[5];
        public Internals(int marks[]) {
            this.marks[] = marks[];
        }
    }
}
```

```
package SEE;

import javacom.CIE;

class External extends Student
{
    public External(String usn, String name, int sem,
                    int smarks[])
    {
        super(usn, name, sem);
        this.smarks[] = smarks[];
    }
}

import java.util.*;
import com.CIE;
import com.SEE;
```

```

public class FinalMarks {
    public static void main (String[] args)
    {
        Scanner sc = new Scanner(System.in);
        String name = next sc.next();
        String usn = sc.next();
        int sem = sc.nextInt();
        Internals[] i = new Internals[n];
        Externals[] e = new Externals[n];

        for (m=0; m<n; m++)
        {
            System.out.println("Enter name, usn, sem,
                               see marks");
            for (b=0; b<5; b++)
            {
                int smarks[b] = sc.nextInt();
            }
            System.out.println("Enter CIE marks");
            for (b=0; b<5; b++)
            {
                int marks[b] = sc.nextInt();
            }

            e[a] = new Externals(name, usn, sem, smarks);
            i[a] = new Internals(marks);
            System.out.println("Final Marks:");
            for (a=0; a<n; a++)
            {
                for (b=0; b<5; b++) {
                    final[b] = i.marks[a] + e.smarks[a];
                    System.out.println(final[b]);
                }
            }
            System.out.println();
        }
    }
}

```



## Output:

```
Enter the number of students: 2
Enter details for student 1
Enter USN: 1BM23CS065
Enter Name: BHoomi
Enter Semester: 3
Enter 5 Internal Marks: 45 46 47 48 43
Enter 5 SEE Marks: 98 97 96 95 94
Enter details for student 2
Enter USN: 1BM23CS004
Enter Name: Bhoomi
Enter Semester: 3
Enter 5 Internal Marks: 45 46 43 42 49
Enter 5 SEE Marks: 91 92 93 94 95
```

Final Marks of Students:

USN: 1BM23CS066

Name: BHoomi

Semester: 3

Internal Marks: 45 46 47 48 43

SEE Marks: 98 97 96 95 94

Final Marks: 94 94 95 95 90

USN: 1BM23CS004

Name: Bhoomi

Semester: 3

Internal Marks: 45 46 43 42 49

SEE Marks: 91 92 93 94 95

Final Marks: 90 92 89 89 96