

LAB-6

Create a package CIE which has 2 classes - Student & Internal. The class Student has members like usn, name, sem. The class Internal derived from Student has an array that stores the internal marks scored in 5 courses of the current semester of the student. Create another package JEE which has the class External which is a derived class of Student. This class has an array that stores the JEE marks scored in 5 courses of the current semester of the student. Import the 2 packages in a file that declares the final marks of n students in all 5 courses.

Student.java

```
package CIE;
import java.util.Scanner;
public class Student {
    protected String usn = new String();
    protected String name = new String();
    protected int sem;

    public void input() {
        Scanner s = new Scanner(System.in);
        System.out.println("Enter usn, name, sem:");
        usn = s.next();
        name = s.next();
        sem = s.nextInt();
    }

    public void disp() {
        System.out.println("Student details:");
        System.out.println("usn" + usn);
    }
}
```

```

    sop("name" + name);
    sop("km: " + km);
}
}

```

### Internals.java

```

package CIE;
import java.util.Scanner;
public class internals extends student {
    protected int marks [5] = new int [5];
    public void inputmarks () {
        Scanner s = new Scanner (System.in);
        System.out.println ("Enter marks of 5 courses:");
        for (int i=0; i<5; i++) {
            marks[i] = s.nextInt();
        }
    }
}

```

### Externals.java

```

Package SEE;
import CIE.internals;
import java.util.Scanner;
public class externals extends internals {
    protected int see marks [5];
    protected int finalmarks [5];
    public externals () {
        see marks = new int [5];
        final marks = new int [5];
    }
    public void inputsee marks () {

```

```

Scanner s = new Scanner(System.in);
System.out.println("Enter see. marks of 5 Course:");
for (int i = 0; i < 5; i++) {
    see marks[i] = s.nextInt();
}
}

public void calculateMarks() {
    for (int i = 0; i < 5; i++) {
        final marks[i] = see marks[i] + marks[i];
    }
}

public void displayFinalMarks() {
    disp();
    sop("Final marks:");
    for (int i = 0; i < 5; i++) {
        sop(Final marks[i]);
    }
}
}
}
}

```

**mainrun.java**

```

import see. External;
import java.util. Scanner;
class mainrun {
    public static void main() {
        int n;
        Scanner s = new Scanner(System.in);
        sop("Enter no of students");
        n = s.nextInt();
    }
}

```



```

externals e[] = new externals(n);
for(int i=0; i<n; i++) {
    e[i] = new externals();
    e[i].input();
    e[i].disp();
    e[i].inpcie marks();
    e[i].inpsce marks();
    e[i].calcfinalmarks();
    e[i].display final marks();
}
}

```

1 o/p

enter the number of students.

2 enter usn, name, sem:

231

Abna

student details:

usn: 231

name: Abna

sem: 2

enter marks of 5 courses:

93

34

45

45

45

enter sce marks of 5 courses:

45

34

45

34

45

Student details:

usn: 231

name: Abna

sem: 2

Final marks av.

68

68

90

99

90

Rs

20/1/24