

LAB 9

LAB PROGRAM - 9

~~package CIE;~~

for
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 sem courses of the current semester of the student. Create another package SEE which has the class Internal 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 a student in all 5 courses.

package CIE;

```
public class Internals extends Student {
    public int[] marks = new int[5];
    public void set(int[] a) {
        for (int i = 0; i < 5; i++) {
            marks[i] = a[i];
        }
    }
}
```

```
public void get(int i) {
    System.out.println("internal marks");
    for (int i = 0; i < 5; i++) {
        System.out.println("subject " + i + " : " + marks[i]);
    }
}
```

package CIE;

```
public class Student {
    public int USN;
    public String name;
    public int sem;

    public void setDetails (int u, String s, int g) {
        USN = u;
        name = s;
        sem = g;
    }
}
```

```
public void getDetails () {
    System.out.println("Student details");
    System.out.println("USN: " + USN + " " +
        Name: " + name + " " + SEM: " + sem);
}
```

```
3
Enter customer number,customer name,item quantity,item price
1 que 5 5000
Enter customer number,customer name,item quantity,item price
2 rty 3 10000
Enter customer number,customer name,item quantity,item price
3 yui 6 20000
-----Customer Details-----
```

```
Customer number: 1
Customer name: que
Quantity: 5
Item price: 5000.0
Total price: 25000.0
Discount: 2500.0
Net price: 22500.0
```

-----Customer Details-----

```
Customer number: 2
Customer name: rty
Quantity: 3
Item price: 10000.0
Total price: 30000.0
Discount: 3000.0
Net price: 27000.0
```

-----Customer Details-----

```
Customer number: 3
Customer name: yui
Quantity: 6
Item price: 20000.0
Total price: 120000.0
Discount: 30000.0
Net price: 90000.0
```

```

package set;
import IE.*;

public class External extends Internal {
    public int[] marks;
    public void set (int[] a) {
        for (int i=0; i<5; i++) {
            marks[i] = a[i];
        }
    }
    public void get () {
        for (int i=0; i<5; i++) {
            System.out.println ("External marks");
            System.out.println ("Subject-1: " + marks[i]);
        }
    }
}

import IE.*;
import set.*;
import java.util.Scanner;

class Test {
    public static void main (String args[]) {
        Scanner s = new Scanner (System.in);
        System.out.println ("Enter number of students");
        int n = s.nextInt();
    }
}

```

```

External[] dets = new External [n];
for (int i=0; i<n; i++) {
    System.out.println ("Enter student details");
    int dsn = s.nextInt();
    String name = s.next();
    int sem = s.nextInt();

    System.out.println ("Enter internal marks");
    int[] intm = new int [5];
    for (int j=0; j<5; j++) {
        int[] ijj = s.nextInt();
    }
    dets[i] = new External();
    dets[i].setdets (dsn, name, sem);
    dets[i].setint (intm);

    System.out.println ("Enter external marks");
    for (int j=0; j<5; j++) {
        int[] ejj = s.nextInt();
    }
    dets[i].set (ejj);
}
for (int i=0; i<n; i++) {
    dets[i].getdets();
    dets[i].getint();
    dets[i].get();
}

```

```

System.out.println("Final marks");
for (int j=0; j<5; j++) {
    System.out.println("Subject "+j+" + "
        + (dots[i].marks + j)/2 + dots[i].marks[j]);
}
}
}
}

Output
Enter number of students
1
Enter student details
1 a 2
Enter external marks
1 2 12 12 12 12
Enter internal marks
1 2 12 12 12 12
USN: 1
Name: a
SEM: 2
Subject 1: 12
Subject 2: 12
Subject 3: 12
Subject 4: 12
Subject 5: 18

```

External marks

Subject 1: 12

Subject 2: 12

Subject 3: 12

Subject 4: 12

Subject 5: 12

Final marks

Subject 1: 18

Subject 2: 18

Subject 3: 18

Subject 4: 18

Subject 5: 18