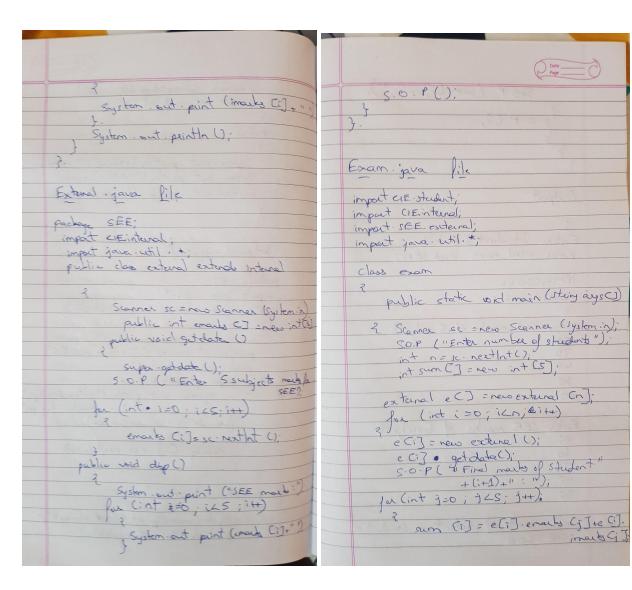# Lab Program 8:

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 courses of the current semester of the student. Create another package SEE which has the class External 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 n students in all five courses.

Code:

LAB - PROGRAM - 8

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 courses of the current semester of the student. Create another package SEE which has the class External 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 n student in all five courses.

Student. java file.

```
package CIE;
import java.util.*;
public class student
{
    Scanner sc = new Scanner (System.in);
    public String usn, name;
    public int sem;
    public void getdata ()
    {
        System.out.println ("Enter USN, name and sem")
        USN = sc.nextLine();
```

name = sc.nextLine();
sem = sc.nextInt();
```
    }
    public void disp ()
    {
        System.out.println (+Name :" + name);
        System.out.println ("USN:" + usn);
        System.out.println ("SEM:" + sem);
    }
}
```

Internal. java file.

```
package CIE;
import java.util.*;
public class internal extends student
{
    Scanner sc = new Scanner (System.in);
    public int marks [] = new int [5];
    public void getdata ()
    {
        super.getdata()
        System.out.println ("enter 5 subject
                              marks for see").
        for (int i = 0; i < 5; i++)
        {
            marks [i] = sc.nextInt();
        }
    }
    public void disp ()
    {
        System.out.print ("CIE marks:");
        for (int i = 0; i < 5; i++).
```

```java
            System.out.print (marks[i] + " ");
        }
        System.out.println ();
    }
}


External.java file

package SEE;
import CIE.internal;
import java.util.*;
public class external extends internal
{
        Scanner sc = new Scanner (System.in)
        public int emarks[] = new int[5];
    public void getdata ()
    {
        super.getdata ();
        S.O.P ("Enter 5 subjects marks for
                                        SEE");
        for (int i=0; i<5; i++)
        {
            emarks[i] = sc.nextInt ();
        }
    public void disp ()
    {
        System.out.print ("SEE mark:")
        for (int i=0; i<5; i++)
        {
            System.out.print (emarks[i]+ " ");
```

```java
        S.O.P ();
    }
}


Exam.java file

import CIE.student;
import CIE.internal;
import SEE.external;
import java.util.*;

class exam
{
    public static void main (String args[])
    {
        Scanner sc = new Scanner (System.in);
        S.O.P ("Enter number of students");
        int n = sc.nextInt ();
        int sum[] = new int[5];

        external e[] = new external [n];
        for (int i =0; i<n; i++)
        {
            e[i] = new external ();
            e[i].getdata ();
            S.O.P ("Final marks of student"
                        + (i+1)+" : ");
            for (int j=0; j<5; j++);
            {
                sum [i] = e[i].emarks[j]+e[i].
                                        imarks[j]
```

```
                S.O.P (sum [i] + "  ");
        }
        s.o.p ();
        }
    }
}.
```

Output:

1
Enter Student 1 details.
Enter USN, name and SEM:

1BM24CS002
Aadishwae
3
Enter CIE marks of 5 subjects:
50
70
40
80
60

Enter SEE marks of 5 subjects:
35
60
70
45
35

Final marks of student in student in
   CIE : 300.