Week 9 Lab Program 6 ~~with~~ ~~Procedure~~
* Below is two programs of class Student and class Internals, both belong to package named CIE
Student.java

class Internals is a subclass of class Student

```java
package CIE;
import java.util.Scanner;
public class Student
{
    public String name;
    public String usn;
    public int sem;
    public void display()
    {
        Scanner s = new Scanner(System.in);
        System.out.println("Name : ");
        name = s.next();
        System.out.println("USN: ");
        usn = s.next();
        System.out.println("Semester: ");
        sem = s.nextInt();
    }
}
```

Internals.java

```java
package CIE;
import java.util.Scanner;
public class Internals extends Student
{
    public double ciem[];
    public void display()
    {
        ciem = new double[5];
        Scanner t = new Scanner(System.in);
        System.out.println("CIE Marks for 5 subjects (out of 50)");
        for(int i=0; i<5; i++)
            ciem[i] = t.nextDouble();
    }
}
```

* class Externals belongs to package SEE and is derived from class Student of package CIE
Externals.java

```java
package SEE;
import java.util.*;
import CIE.*;
public class Externals extends CIE.Student
{
    public double seem[];
    public void display()
    {
        seem = new double[5];
        Scanner s = new Scanner(System.in);
        System.out.println("SEE marks for 5 subjects
                            (out of 100): ");

        for (int i=0; i<5; i++)
            seem[i]= s.nextDouble();
    }
}
```

* Below is driven class main which imports both the packages CIE and SEE
main.java

```java
import CIE.*;
import SEE.*;
import java.util.Scanner;
public class Ade main
{
    public static void main (String args[])
    {
        int n;
        Scanner s=new Scanner (System.in);
        System.out.println ("Enter the number of students: ");
        n = s.nextInt();
        CIE.Student st[] = new CIE.Student[n];
        CIE.Internals in[] = new CIE.Internals[n];
        SEE.Externals e[] = new SEE.Externals[n];
        for (int i = 0; i<n; i++)
        {
            st[i] = new CIE.Student();
```

```java
in[i] = new CIE.Internals();
e[i] = new SEE.Externals();
st[i].display();
in[i].display();
e[i].display();
System.out.println("Total marks of student " +
    st[i].name + " in 5 subjects are:");
for (int j=0; j<5; j++)
{
    System.out.println(in[i].ciem[j] + (e[i].seem[j]/2));
}
}
}
}
```