Lab program 6 (week 9):-

Student.java:- (..\packs\CIE\Student.java)

```java
package CIE;
import java.util.Scanner;
public class Student
{

    public class String usn, name;
    public int sem;
    public Scanner ss=new Scanner(System.in);
    public void getData()
    {

        System.out.println("Name: ");
        name = ss.next();
        System.out.println("USN: ");
        usn = ss.next();
        System.out.println("Semester: ");
        sem = ss.nextInt();
    }
}
```

Internals.java:- (..\packs\CIE\Internals.java)

```java
package CIE;
import java.util.Scanner;
public class Internals extends Students
{

    public int ciemarks[]=new int[5];
    public void getmarks()
    {

        getData();
        System.out.println("Enter the CIE marks of the student:
        for(int i=0; i<5; i++)
        {

            System.out.println("Subject "+ (i+1)+ " :");
            ciemarks[i] = ss.nextInt();
        }
    }
}
```

```java
public void display()
{
    System.out.println("Name: "+this.name);
    System.out.println("USN: " + this.usn);
    System.out.println("Semester: "+ this.sem);
}
}
```

Externals.java :- (..\pack 3\ SEE\ Externals.java).

```java
package SEE;
import java.util.Scanner;
public class Externals extends CIE.Students
{
    public int seemarks[] = new int[5];
    Scanner ss = new Scanner(System.in);
    public void getmarks()
    {
        System.out.println("Enter the SEE marks of the student:");
        for(int i=0; i<5; i++)
        {
            System.out.println("Subject "+(i+1) +" :");
            seemarks[i] = ss.nextInt();
        }
    }
}
```

Main.java:- (..\packs \ Main.java)

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

class Main
{
    public static void main (String args[])
    {
        Scanner ss = new Scanner( System.in);
        int n;
        int finalmarks [] = new int[5];
        System.out.println("Enter the number of Students : ");
        n = ss.nextInt();
        Internals studcie [] = new Internals [n];
        Externals studsee [] = new Externals [n];
        for ( int i = 0; i<n; i++)
        {
            System.out.println ("\n x x x x x x  x x  x x x x x x x \n");
            studcie [i] = new Internals();
            studsee [i] = new Externals();
            studcie [i] . getmarks();
            studsee [i] . getmarks();
            for (int j = 0; j<5; j++)
                    finalmarks [j] = studcie [i].ciemarks [j] +
                                (studsee [i]. seemarks [j] /2 );
        }
        System.out.println ("\n x x x x  x x  x x  x x  x x \n");
        System.out.print ln (" The student and their finals marks are: \n");
        for ( int i = 0; i<n; i++)
        {
            studcie [i].display();
```

```java
for (int j=0; j<5; j++)
{
    System.out.println("Subject " +(j+1)+" : "+ finelmarks[j]);
}
System.out.println("\n x x x   x   x   x   x   x   x   x x x \n");
}
}
```

```
Enter the number of Students:
2

***********************************************************************************

Name:
Khushil
USN:
1BM19CS072
Semester:
3
Enter the CIE marks of the Student:
Subject 1 :34
Subject 2 :50
Subject 3 :48
Subject 4 :46
Subject 5 :40
Enter the SEE marks of the Student:
Subject 1 :89
Subject 2 :
90
Subject 3 :92
Subject 4 :76
Subject 5 :78

***********************************************************************************

Name:
Sharat
USN:
1BM19CS072
Semester:
3
Enter the CIE marks of the Student:
Subject 1 :50
Subject 2 :48
Subject 3 :45
Subject 4 :43
Subject 5 :35
Enter the SEE marks of the Student:
Subject 1 :76
Subject 2 :78
Subject 3 :98
Subject 4 :80
Subject 5 :90
```

```
****************************************************************************

The Students and their finals marks are:

Name: Khushil
USN: 1BM19CS072
Semester: 3
Subject 1 :78
Subject 2 :95
Subject 3 :94
Subject 4 :84
Subject 5 :79

****************************************************************************

Name: Sharat
USN: 1BM19CS072
Semester: 3
Subject 1 :88
Subject 2 :87
Subject 3 :94
Subject 4 :83
Subject 5 :80

****************************************************************************
```