Lab-7

```java
// Student. java
Package .CIE)

import java.util.Scanner;

public class Student {

    protected String usn = new String ();
    protected String name = new string();
    protected int sam;

    public void input Student Details () {

        Scanner scanner = new Scanner (System.in);
        System.out.println ."Enter USN: ");
        USN = scanner.next ();
        System.out.print ("Enter Name:");
        name = Scanner.next ();
        System.out.print ("Enter Semester:");
        Sem = scanner.nextInt ();

    }

    public void display Student Details () {
        System.out.println ("USN" + usn);
        System.out.println ("Name:" + name);
        System.out.println ("Semester:" + sem);

    }
}
```

```java
// Internals.java

package CIE;

import java.util.Scanner;

public class Internals extends Student {

    protected int marks[] = new int[5];

    public void input CIE marks() {

        Scanner scanner = new Scanner(System.in);
        System.out.println("Enter the internal marks for " + name);
        for (int i = 0; i < 5; i++) {
            System.out.print("Subject" + (i+1) + " marks :");
            marks[i] = scanner.nextInt();
        }
    }
}


// Externals.java

package SEE;

import CIE.Internals;
import java.util.Scanner;

public class Externals extends Internals {
    protected int marks[];
    protected int final Marks[];

    public Externals() {
        marks = new int[5];
        final Marks = new int[5];
    }
```

```java
public void inputSEEmarks() {
    Scanner scanner = new Scanner(System.in);
    System.out.println("Enter SEE Marks for "+name);
    for(int i=0; i<5; i++) {
        System.out.print("Subject "+(i+1)+" marks :");
        marks[i] = scanner.nextInt();
    }
}

public void calculateFinalMarks() {
    for(int i=0; i<5; i++)
        finalMarks[i] = marks[i]/2 + super.marks[i];
}

public void displayFinalMarks() {
    displayStudentDetails();
    for(int i=0; i<5; i++)
        System.out.println("Subject"+(i+1)+": "+ finalMarks[i]);
}
```

```java
//Main.java
import SEE.Externals;

public class Main {
    public static void mai

        int numOfStud
        .Externals fin

        for(int i=0; i
            final Mark
            final Mark
            System.o
            final Mark
            System.o
            final M
        }

        System.out.

        for(int i=
```

```java
//Main.java

import SEE.Externals;

public class Main {
    public static void main(String args[]) {

        int numOf Students = 2;
        Externals finalMarks[] = new Externals[numOf Students];

        for (int i=0; i< num of students; i++) {
            finalMarks[i] = new Externals();
            finalMarks[i].input Student Details();
            System.out.println("Enter CIE marks");
            finalMarks[i].input CIE marks();
            System.out.println("Enter SEE marks");
            finalMarks[i].input SEE marks();
        }

        System.out.println("Displayy data : \n");
        for(int i = 0; i< num of students; i++) {
            finalMarks[i].CalculateFinal Marks();
            finalMarks[i].display final Marks();
        }
    }
}
```

Output:-

Enter USN: IBM22CS201

Enter name : A

Enter Semester :2

Enter CIE mark.
Enter Internal mark for A

Sub 1: 45

Sub 2: 40

Sub 3 : 42

Sub 4 : 43

Sub 5 : 44

Enter for SEE marks

Enter SEE marks for A

Sub 1 : 85

Sub 2: 89

Sub 3: 87

Sub 4: 88

Sub 5 : 87

Enter USN: IBM22CS220

Enter name = B

Enter Semester : 2

Enter CIE marks

Enter Internal Marks for B

Sub 1 = 45

Sub 2 : 47

Sub 3: 40

Sub 4 : 43

Sub 5 : 44

Enter SEE marks

Enter . SEE marks

Sub 1 : 90

Sub 2 = 28

Sub 3 : 79

Sub 4 : 89

Sub 5 : 80

Displaying

USN: I

Name: A

Semester

Sub 1 :

Sub 2 :

Sub 3

Sub

Sub

Sub 1 = 45

Sub 2 : 47

Sub 3 : 40

Sub 4 : 43

Sub 5 : 44

Enter SEE marks

Enter ·SEE marks for B

Sub 1 : 90

Sub 2 : 78

Sub 3 : 79

Sub 4 : 89

Sub 5 : 80

10 Displaying data :

USN : IBM22CS201

Name : A

Semester : 2

Sub 1 : 87

Sub 2 : 90

Sub 3 : 85

Sub 4 : 87

Sub. 5 : 87

USN : 1BM22CS220

Name : B

Sem/sec : 2

Sub 1 : 90

Sub 2 : 86

Sub 3 : 76

Sub 4 : 86

Sub 5 : 75

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