

Lab program - 7.

URBAN
EDGE 23/1/24

```
// Student.java
```

```
Package cIE;
```

```
import java.util.Scanner;
```

```
public class student {
```

```
    protected String usn = new String();
```

```
    protected String name = new String();
```

```
    protected int sem;
```

```
    public void inputStudentDetails() {
```

```
        Scanner Scanner = new Scanner(System.in);
```

```
        System.out.print("Enter USN: ");
```

```
        usn = Scanner.next();
```

```
        System.out.print("Enter name: ");
```

```
        name = Scanner.next();
```

```
        System.out.print("Enter Semester: ");
```

```
        sem = Scanner.nextInt();
```

```
    }
```

```
    public void displayStudentDetails() {
```

```
        System.out.println("USN: " + usn);
```

```
        System.out.println("name: " + name);
```

```
        System.out.println("Semester: " + sem);
```

```
    }
```

```
}
```

Lab-7

```
//Internal.java
package CTE;

import java.util.Scanner;

public class Internal extends Student {

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

    public void inputCTEmarks() {

        Scanner s = new Scanner(System.in);

        System.out.println("Enter Internal Marks for " + name);

        for (int i = 0; i < 5; i++) {

            marks[i] = s.nextInt();

        }

    }

}
```

Lab-7

```
//External.java
package SEE;

import java.util.Scanner;

public class External extends Student {

    protected int marks[];

    protected int finalMarks[];

    public External() {

        marks = new int [5];

        finalMarks = new int [5];

    }

    public void inputSEEmarks() {

        Scanner s = new Scanner(System.in);

        System.out.println("Enter SEE Marks for " + name);

        for (int i = 0; i < 5; i++) {

            System.out.print("Enter " + (i+1) + " marks: ");

            marks[i] = s.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]);

        }

    }

}
```


import sys, random

class Main

{

public static void main (String args[])

{

int numofStudents = 2;

ArrayList<Student>[] = new ArrayList[numofStudents];

for (int i = 0; i < numofStudents; i++)

{

Student[] = new Student[1];

finalMain[i].inputStudentDetails();

System.out.println("Enter CIE marks: ");

finalMain[i].inputCIEmarks();

System.out.println("Enter SEE marks: ");

finalMain[i].inputSEEmarks();

}

System.out.println("display data : ");

for (int i = 0; i < numofStudents; i++)

{

finalMain[i].calculateFinalMarks();

finalMain[i].displayFinalMarks();

}

}

Output:

Enter USN : 218 Enter name: PK Enter sem : 43

Enter CIE marks :

Enter Internal marks for "PK"

Subject 1 marks : 45

Subject 2 marks : 46

Subject 3 marks : 47

Subject 4 marks : 48

Subject 5 marks : 50

Enter SEE marks :

Subject 1 marks : 90

Subject 2 marks : 92

Subject 3 marks : 95

Subject 4 marks : 98

Subject 5 marks : 100

Enter USN : 218 Enter name: Kotic Enter sem : 4

Enter CIE marks :

Enter Internal marks for "Kotic"

Subject 1 marks : 45

Subject 2 marks : 47

Subject 3 marks : 48

Subject 4 marks : 49

Subject 5 marks : 50

Enter SEE marks :

Subject 1 marks : 98

Subject 2 marks : 97

Subject 3 marks : 96

Subject 4 marks : 95

Subject 5 marks : 100

USN : 216 name : Rk Semester : 3

Subject 1 : 90

Subject 2 : 92

Subject 3 : 94

Subject 4 : 93

Subject 5 : 100

USN : 218 name : kshli Semester : 4

Subject 1 : 94

Subject 2 : 95

Subject 3 : 96

Subject 4 : 96

Subject 5 : 100

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