

## # WEEK - 6 :

// Student.java file

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 s = new Scanner(System.in);

    System.out.print("Enter USN: ");

    usn = s.next();

    System.out.print("Enter Name: ");

    name = s.next();

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

    sem = s.nextInt();

    public void displayStudentDetails()

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

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

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

## // Internals.java file

```
package CIE;  
import java.util.Scanner;  
public class Internals extends Student  
{  
    protected int marks[] = new int[5];  
    public Internals() {}  
    public void inputCIMarks()  
{  
        Scanner s = new Scanner(System.in);  
        System.out.println("Enter Internal Marks for "+name);  
        for(int i=0; i<5; i++)  
        {  
            System.out.print("Subject "+(i+1)+" marks: ");  
            marks[i] = s.nextInt();  
        }  
    }  
}
```

## // External.java file

```
package SEE;  
import CIE.Internals;  
import java.util.Scanner;  
public class External extends Internals  
{  
    protected int marks[];  
    protected int finalMarks[];  
    public External()  
    {  
        marks = new int[5];  
        finalMarks = new int[5];  
    }  
}
```

```
public class SEE-External {
    public void marks() {
        Scanner s = 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] = 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]);
        }
    }
}

main.java file
import SEE-External;
public class Main {
    public static void main (String args[])
    {
    }
}
```

```

int numofstudents = 2;
Externalmarks finalMarks[] = new Externalmarks [numofstudents];
for(int i=0 ; i<numofstudents ; i++)
{
    finalMarks[i] = new Externalmarks();
    finalMarks[i].inputStudentDetails();
    System.out.println("Enter CIE marks :");
    finalMarks[i].inputCIEmarks();
    System.out.println("Enter SEE marks :");
    finalMarks[i].inputSEEmarks();
}
System.out.println("Displaying data :");
for(int i=0 ; i<numofstudents ; i++)
{
    finalMarks[i].calulateFinalMarks();
    finalMarks[i].displayFinalMarks();
}
}

```

### Output

Enter USN : 111

Enter Name : Ram

Enter Semester : 3

Enter CIE Marks :

Enter Internal marks for Ram

Subject 1 marks : 33

Subject 2 marks : 36

Subject 3 marks : 28

Subject 4 marks : 31

Subject 5 marks : 40

Enter SEE marks for Rom

Subject 1 marks: 89

Subject 2 marks: 91

Subject 3 marks: 78

Subject 4 marks: 84

Subject 5 marks: 90

Enter USN: 112

Enter Name: Raju

Enter Semester: 3

Enter CIE Marks:

Enter Internal marks for Raju

Subject 1 marks: 33

Subject 2 marks: 28

Subject 3 marks: 23

Subject 4 marks: 27

Subject 5 marks: 36

Enter SEE marks:

Enter SEE marks for Raju

Subject 1 marks: 84

Subject 2 marks: 85

Subject 3 marks: 99

Subject 4 marks: 92

Subject 5 marks: 77

Displaying data:

USN: 111

Name: Rom

Semester: 3

Subject 1: 77

Subject 2: 81

Subject 3: 67

Subject 4: 73

Subject 5: 85

USN: 112

Name: Raju

Semester: 3

Subject 1: 75

Subject 2: 70

Subject 3: 72

Subject 4: 73

Subject 5: 74

✓ 22  
23.01.2021  
M