J Personal.java 2 ✕   J Internals.java 2   J External.java 2   J FinalMarks.java 2

C: > Users > KALYAN > Desktop > SEM3 > java > cie > J Personal.java > {} cie

```java
package cie;
import java.util.Scanner;
public class Personal {
    public String usn, name;
    public int sem;

    public void read() {
        Scanner sc = new Scanner(System.in);
        System.out.print(s: "Enter USN: ");
        usn = sc.nextLine();
        System.out.print(s: "Enter Name: ");
        name = sc.nextLine();
        System.out.print(s: "Enter Semester: ");
        sem = sc.nextInt();
    }

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

J Personal.java 2 | J Internals.java 2 ✕ | J External.java 2 | J FinalMarks.java 2

C: > Users > KALYAN > Desktop > SEM3 > java > cie > J Internals.java > {} cie

```java
package cie;
import java.util.Scanner;

public class Internals {
    public int internalMarks[] = new int[5];

    public void readInternals() {
        Scanner sc = new Scanner(System.in);
        System.out.println(x: "Enter 5 Internal Marks:");
        for (int i = 0; i < 5; i++) {
            internalMarks[i] = sc.nextInt();
        }
    }
}
```

```java
package see;
import cie.Personal;
import java.util.Scanner;

public class External extends Personal {
    public int seeMarks[] = new int[5];

    public void readSEE() {
        Scanner sc = new Scanner(System.in);
        System.out.println(x: "Enter 5 SEE Marks:");
        for (int i = 0; i < 5; i++) {
            seeMarks[i] = sc.nextInt();
        }
    }
}
```

J Personal.java 2   J Internals.java 2   J External.java 2   J FinalMarks.java 2 ✕

C: > Users > KALYAN > Desktop > SEM3 > java > J FinalMarks.java > ...

```java
import cie.*;
import see.*;
import java.util.*;

public class FinalMarks {
    Run | Debug
    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);
        System.out.print(s:"Enter number of students: ");
        int n = sc.nextInt();

        Personal p[] = new Personal[n];
        Internals in[] = new Internals[n];
        External ex[] = new External[n];

        for (int i = 0; i < n; i++) {
            System.out.println("\nEnter details of Student " + (i+1));

            p[i] = new Personal();
            p[i].read();

            in[i] = new Internals();
            in[i].readInternals();

            ex[i] = new External();
            ex[i].readSEE();
        }

        // Display Final Marks
        System.out.println(x:"\n----- FINAL MARKS OF STUDENTS -----");

        for (int i = 0; i < n; i++) {
            System.out.println("\nStudent " + (i+1));
            p[i].display();

            System.out.println(x:"Final Marks in 5 Courses:");
```

```java
    5    public class FinalMarks {
    6        public static void main(String[] args) {
   36                System.out.println(x: "Final Marks in 5 Courses:");
   37
   38            for (int j = 0; j < 5; j++) {
   39                int finalMarks = in[i].internalMarks[j] + (ex[i].seeMarks[j] / 2);
   40                System.out.println("Course " + (j+1) + ": " + finalMarks);
   41            }
   42        }
   43    }
   44 }
   45
```

PROBLEMS 8   DEBUG CONSOLE   TERMINAL   PORTS   Ru

```
PS C:\Users\KALYAN>  & 'C:\Program Files\Java\jdk-24\bin\java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\KALYAN\AppData\L
dt.ls-java-project\bin' 'FinalMarks'
Enter number of students: 1

Enter details of Student 1
Enter USN: 1bm243fh
Enter Name: ram
Enter Semester: 3
Enter 5 Internal Marks:
45
49
39
45
50
Enter 5 SEE Marks:
98
96
89
93
90

----- FINAL MARKS OF STUDENTS -----

Student 1
USN: 1bm243fh
Name: ram
Semester: 3
Final Marks in 5 Courses:
Course 1: 94
Course 2: 97
Course 3: 83
Course 4: 91
Course 5: 95
PS C:\Users\KALYAN>
```