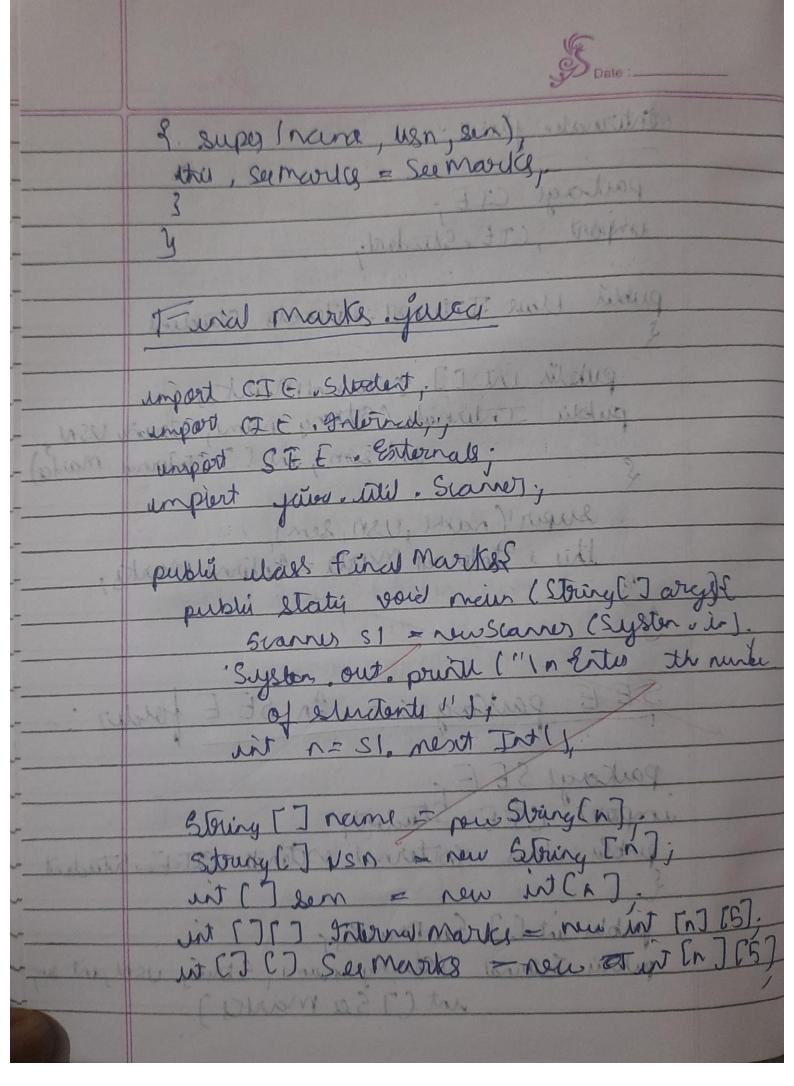
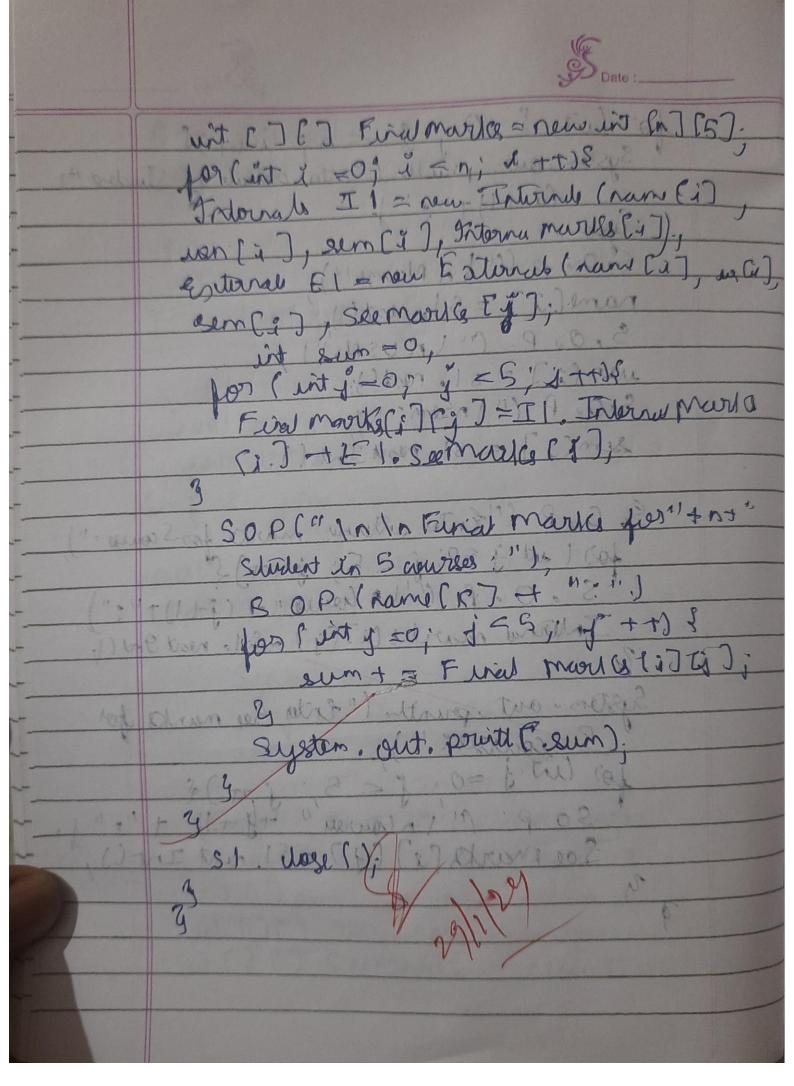


Internal. java. ... partage CIE; uniport, (TE. Student. public blass Internal extends Student public int [] gaternal Marts; public Internal (Strong nam, String USN it sem , it [] Interno Mark Super (nam, USN, Sem) this Fitorny Marta = Interna Marta partage St E. Student," public class conternal extends confice Student public int [] Su marks public External (String name, String USN, int son int (750 marky)





1. Package CIE – Student.java

```
package CIE;

public class Student {
  public String usn, name;
  public int sem;

public Student(String usn, String name, int sem) {
    this.usn = usn;
    this.name = name;
    this.sem = sem;
  }
}
```

2. Package CIE – Internals.java

```
package CIE;
import CIE.Student;
public class Internals extends Student {
   public double[] internalMarks = new double[5];
```

```
public Internals(String usn, String name, int sem, double[] internalMarks) {
    super(usn, name, sem);
    this.internalMarks = internalMarks;
 }
}
  3. Package SEE – External.java
package SEE;
import CIE.*;
public class External extends Student {
  public double[] seeMarks = new double[5];
  public External(String usn, String name, int sem, double[] seeMarks) {
    super(usn, name, sem);
    this.seeMarks = seeMarks;
 }
}
```

4. FinalMarks.java – outside the package folders

```
import CIE.Internals;
import SEE.External;
import java.util.Scanner;
public class FinalMarks {
  public static void main(String[] args) {
    Scanner input = new Scanner(System.in);
    System.out.print("Enter the number of students: ");
    int n = input.nextInt();
    input.nextLine();
    Internals[] internals = new Internals[n];
    External[] externals = new External[n];
    // Input Internal Marks
    for (int i = 0; i < n; i++) {
      System.out.println("Enter details of Student " + (i + 1));
      System.out.print("Enter USN: ");
      String usn = input.nextLine();
      System.out.print("Enter Name: ");
      String name = input.nextLine();
//input.nextLine();
```

```
System.out.print("Enter Semester: ");
      int sem = input.nextInt();
      input.nextLine();
      double[] internalMarks = new double[5];
      System.out.print("Enter Internal Marks for 5 courses: ");
      for (int j = 0; j < 5; j++) {
         internalMarks[j] = input.nextDouble();
      }
input.nextLine();
      internals[i] = new Internals(usn, name, sem, internalMarks);
    }
    // Input SEE Marks
    for (int i = 0; i < n; i++) {
      System.out.println("Enter SEE Marks for 5 courses of Student " + (i+1) + "
" + internals[i].name);
      String usn = internals[i].usn;
      String name = internals[i].name;
      int sem = internals[i].sem;
      double[] seeMarks = new double[5];
      for (int j = 0; j < 5; j++) {
         seeMarks[j] = input.nextDouble();
      }
      externals[i] = new External(usn, name, sem, seeMarks);
```

```
}
    // Display Final Marks
    System.out.println("\nFinal Marks of Students:");
    for (int i = 0; i < n; i++) {
       System.out.println("Student " + (i + 1) + " : USN: " + internals[i].usn +
"\nName: " +
           internals[i].name + "\nSemester: " + internals[i].sem);
       for (int j = 0; j < 5; j++) {
         System.out.println("Subject " + (j + 1) + ": " +
              ((internals[i].internalMarks[j]) + (externals[i].seeMarks[j] / 2)) +
"\n");
       System.out.println();
    }
  }
}
Compilation:
javac CIE/Student.java CIE/Internals.java SEE/External.java FinalMarks.java
java FinalMarks
```

## Output Deekshith B

1BM22CS082
Enter the number of students: 2
Enter details of Student 1
Enter USN 1BM22CS082
Enter Name: Deekshith B
Enter Semester 3
Enter Internal Marks for 5 courses: 43
44
45
46
47
Enter details of Student 2
Enter USN 1BM22CS083
Enter Name: Dixit
Enter Semester: 3
Enter Internal Marka for 5 courses: 40
48
45
48
47
Enter SEE Marks for 5 courses of Student 1 Deekshith E
85

Enter SEE Marks for 5 courses of Student 2 Vibinn Noothan

95

98

99

97

98

Final Marks of Students:

Student 1: USN: 18M22CS082

Name: Deekshith B

Semester: 3

Subject 1: 90.5

Subject 2:91.5

Subject 3: 94.0

Subject 4: 92.5

Subject 5: 99.5

Student 2: USN: 18M22CS083

Name: Dixit

Semester: 3

Subject 1: 96.5

Subject 2: 97.0

Subject 3: 98.5

Subject 4: 97.5

Subject 5-98.0