→ Create a package CIE which has two classes - Student and Internals. The class Student has members like usn, name, sem. The class Internals derived from Student has an array that stores the internal marks scored in five courses of the current semester of the student. Create another package SEE which has the class External which is a derived class of Student. This class has an array that stores the SEE marks scored in five courses of the current semester of the student. Import the two packages in a file that declares the final marks of n students in all five courses.

```java
package CIE;
import java.util.*;
public class Student{
        protected String name = new String();
        protected String usn = new String();
        protected int sem;
        public void inputStudentDetails(){
            Scanner s = new Scanner(System.in);
            System.out.println("Enter the name: ");
            name = s.nextLine();
            System.out.println("Enter the usn:");
            usn = s.nextLine();
            System.out.println("Enter the sem:");
            sem = s.nextInt();
        }
        public void displayStudentDetails(){
            System.out.println("Name:" + name);
            System.out.println("USN:" + usn);
            System.out.println("Sem:" + sem);
        }
    }
}
```

```java
//Internals
package CIE;
import java.util.*;
public class Internals extends Student{
        protected   int marks[] = new int[5];
        public void inputCIEMarks(){
                Scanner s = new Scanner(System.in);
                for(int i=0; i<5; i++){
                        marks[i] = s.nextInt();
                }
        }
}


//Externals
package SEE;
import CIE.internals;
import java.util.*;
public class Externals extends Internals{
        protected   int marks[];
        protected   int finalmarks[];
        public   Externals(){
                marks = new int[5];
                finalmarks = new int[5];
        }
        public   void   inputSEE
                        calculateFinalMarks(){
                Scanner s = new Scanner(system.in);
                for(int i=0; i<5; i++){
                        System.out.println("Enter Subject"+(i+1)+ "marks");
                        marks[i]=s.nextInt();
                }
        }
}
```

```java
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
import SEE.Externals;
class Main{
    public static void main(String args[]){
        int n=2;
        Externals finalMarks[]= new Externals[n];
        for(int i=0; i<5; i++){
            finalmarks[i]= new Externals();
            finalmarks[i].inputStudentDetails();
            System.out.println("Enter CIE marks:");
            finalmarks[i].input CIEMarks();
            System.out.println("Enter SEE marks:");
            finalmarks[i].input SEEMarks();
        }
        System.out.println("Displaying Data:");
        for(int i=0; i<5; i++){
            finalmarks[i].calculate FinalMarks();
            finalmarks[i].display FinalMarks();
        }
    }
}
```

Output:

Enter the USN: 1BM22CS244

Enter the name: Santosh H Jambagi

Enter Sem: 3

Enter CIE marks:

Subject 1: 44

Subject 2: 47

Subject 3: 42

Subject 4: 43

Subject 5: 44

Enter SEE marks:

Subject 1: 88

Subject 2: 89

Subject 3: 87

Subject 4: 88

Subject 5: 87

Display Data:

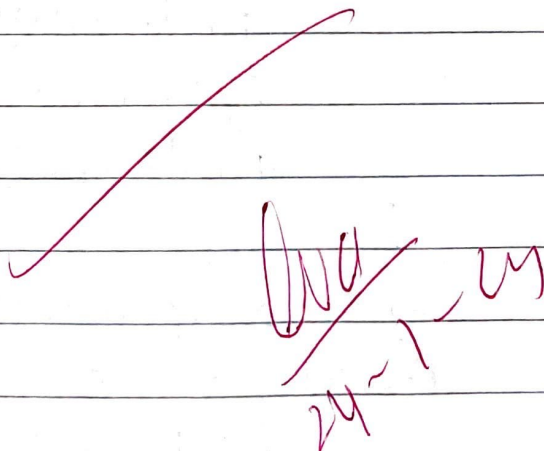USN: 1BM 22CS244

Name: Santosh H Jambagi

Sem: 3

Subject 1: 86

Subject 2: 90

Subject 3: 85

Subject 4: 87

Subject 5: 87