```
package CIE;
import java.util.Scanner;
public class Student {
protected String usn;
protected String name;
  protected int sem;
  public void inputStudentDetails() {
    Scanner scanner = new Scanner(System.in);
System.out.print("Enter USN: ");
scanner.nextLine();
                        System.out.print("Enter
Name: ");
              name = scanner.nextLine();
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);
  }}
package CIE;
import java.util.Scanner;
public class Internals extends Student {
  protected int[] marks = new int[5];
  public void inputCIEmarks() {
    Scanner scanner = new Scanner(System.in);
    System.out.println("Enter Internal marks for 5 courses:");
for (int i = 0; i < 5; i++) {
      System.out.print("Enter marks for Course " + (i + 1) + ": ");
marks[i] = scanner.nextInt();
    }
  }
  public void displayCIEmarks() {
    System.out.println("Internal Marks for 5 courses:");
for (int i = 0; i < 5; i++) {
      System.out.println("Course " + (i + 1) + ": " + marks[i]);
    }
  }
package SEE;
```

```
import CIE.Internals;
import java.util.Scanner;
public class Externals extends Internals {
protected int[] externalMarks = new int[5];
  protected int[] finalMarks = new int[5];
  public Externals() {
                           marks
= new int[5];
externalMarks = new int[5];
    finalMarks = new int[5];
  }
    public void inputSEEmarks() {
    Scanner scanner = new Scanner(System.in);
     System.out.println("Enter External marks for 5 courses:");
for (int i = 0; i < 5; i++) {
       System.out.print("Enter marks for Course " + (i + 1) + ": ");
externalMarks[i] = scanner.nextInt();
    }
  }
  public void calculateFinalMarks() {
for (int i = 0; i < 5; i++) {
       finalMarks[i] = marks[i] + externalMarks[i];
  }
  public void displayFinalMarks() {
displayStudentDetails();
                              displayCIEmarks();
    System.out.println("Final Marks (Internal + External) for 5 courses:");
for (int i = 0; i < 5; i++) {
       System.out.println("Course " + (i + 1) + ": " +
finalMarks[i]);
    }
  }
}
import SEE.Externals;
import java.util.Scanner;
public class Main {
  public static void main(String[] args) {
    Scanner scanner = new Scanner(System.in);
    System.out.print("Enter the number of students: ");
     int n = scanner.nextInt();
```

```
Externals[] students = new Externals[n];
for (int i = 0; i < n; i++) {
           students[i] = new Externals();
           System.out.println("Enter details for student " + (i + 1));
students[i].inputStudentDetails();
students[i].inputCIEmarks();
students[i].inputSEEmarks();
           students[i].calculateFinalMarks();
       }
       for(int i=0; i<n; i++){
             students[i].displayFinalMarks();
             System.out.println();
       }
   }
}
   C:\Users\Admin\Documents\23cs310\lab6 packages>java Main.java
  Enter the number of students: 1
Enter details for student 1
Enter USN: 1bm23cs310
Enter Name: joey
Enter Semester: 3
Enter Internal marks for 5 courses:
  Enter marks for Course 1: 45
Enter marks for Course 2: 35
Enter marks for Course 3: 42
Enter marks for Course 4: 26
Enter marks for Course 5: 39
  Enter External marks for 5 courses:
  Enter marks for Course 1: 50
  Enter marks for Course 2: 43
  Enter marks for Course 3: 20
Enter marks for Course 4: 38
Enter marks for Course 5: 41
USN: 1bm23cs310
  Name: joey
Semester: 3
Internal Marks for 5 courses:
  Course 1: 45
Course 2: 35
Course 3: 42
Course 4: 26
  Final Marks (Internal + External) for 5 courses:
  Course 1: 95
Course 2: 78
Course 3: 62
   Course 4: 64
   Course 5: 80
```

PROBRAM 6 Greate a package CIC Which has two classes - Student and Internals the class Personal has beenbers like use name, seen the class internals has an array that stores the internal the class introals has an array that stores the internal marks scored in 5 courses of the current seem of the student. Create another package see which has the executed olds of student. The class has an array that after see marks scored in \$5 courses of the Current seem of the Student lumport has a packages in a file than declars has final marks of a student. in ale 5 voures. package CIE: import java util scanner; public dass Student & protected String usn; protected string name; protected int sem; Public void input Sudent Details ()?

Granner Stanner , New Scanner Csyllens in);

5.0.P ("Easter USN"); USM = Scanner-next line(); S.O.P ("Enkr name:"); name : scanner nextline (); S.O.Pl Ener semester: Sem: Sconner-next In+ (); public void display Student Details () ?

	store 67
-	Package SEE;
	Manual 2
	impore Cit. Inkmals;
14	import java-unit-Scouner;
	Public class Exernals exends Internals?
	protected int [] external Marks - new int[5];
	prokered int (3 final Marks = new int (5);
	public Externation &
	marks = new intcs);
10	exkrual Marks = new intest;
	linal Marks = new int C5];
	}
	A Land Angle a Vito and St. 190-190
	Public Upid input SEE Metts () {  Scanner scanner - New Scanner (syllem in);
	S.O.P ("Euro marks for course" + (i+1) + ":");
	cxtrnal MartsCi] = scanner nextlat();
	3 Charles and the South State of the South State of the South State of the State of
	The sales the base of the sales with LEON
	public void (alculate Final Marks) >
	for (int = 0; 65; i+1)?  S.O. P("Enter marks for course" + (i+1)+":");
	exkinal Marksli) - Scanner nextlyt();
	3
	}
	May Charles and Charles and
	public void display final Marks() {
	disgiay Student Details(); dispiay Cle marks();
	display Clevelles Ch
	279
-	
-	
	SOP ("Final marks (Inkernal + Exkmal) for 5 course 1)
	for (inti = 0; i25; i4) {
1	S.O.P ("course" + (i+1)+":" + final Marke (i)).
	1
	The state of the s
	import SEE-Cykrnals;
	import java whit scanner;
	The part of the control of the contr
	Public das Main 9
	PSVM (string C3 args) f
	Scanner scanner = new Scanner (System.jn).
1	S.O.P C"Enter the no. of students:");
1	int n = scanner.next(nt();
7 10	Carlotte Carlotte Carlotte Carlotte Carlotte
	Externals [3 students = new Externals [n];
	1 Charles and the same of the
	for (int i = 0; izn; i++) {
	students[i]=newfyternals();

5.0.P ("Enter details for student" + (+17); Students [i] - input Student Details (); Students [i] - input (16 Morks(); Students [i] - input (55 Morks(); ? students [i] - requestore Firm! Morks();

for lint i=0; icn; iH) {
Students G3. display Final Marks()
3.0.P();

1	Output
1	The shares of thems and obstacles to write Hill
	Enter the no. of students: 1
	Enter the details for student.
	ENER USN: (BH23C5318
	Enter Name: Shreya
	Enjer Semester: 3
	Cuer Internal marks for 5 courses.
	Enter marks for course 1:50
	course 2:50
	Counc 3: 49
	Course 4:50
	tourse 5:50
	A Auge Klay Alban
	Enter external marks for 5 courses:
	EURY Marks for Lourse 1:50
	(ourse 2:50
	Lourse 3:50
	councy: 49
	course 5: 48
	Collections Lays Small
	Final marks (Internal + Esternal) for 5 courses:
	Course 1: au 100
	Course 2: 100, 37 (1000) 4740
	tourse 3: 99
V)	tourse 4: 99
	to course 5. 98
4	Net Market
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