Program 6

Create a package CIE which has two classes - Personal and Internals. The class Personal has members like usn, name, sem. The class Internals 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 Personal. 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.

G. Create a package CIE which has two classes - Personal and Internals. The class Personal has members like the has seen. The class Anternals has an array that stakes the internal marks scored in five courses of the current se mester of the student. Create another package SEE which has the class External which is a derived class of Personal. This class has an array that shows the SEE marks scored in five courses of the current sem ester of the student. Import the file that classes the final marks of n students in file that classes the final marks of n students in file that circumsco. import gava util . Scanner: import cie. Student; import cie. Student; import cie. Student; import see. Externals; import see. Externals; import see. Externals in I I = new Internals In I; stake Externals e I I = new Creamals In I; stake Externals e I = new Creamals In I; stake Externals e I = new Creamals In I; stake Externals e I = new Creamals In I; stake int in I = new Creamals In I; stake Externals e I = new Creamals In I; stake Externals e I = new Creamals In I; stake Externals e I = new Creamals In I; stake Externals e I = new Creamals In I; stake Externals e I = new Creamals In I; stake Externals e I = new Creamals In I; stake Externals e I = new Creamals In I = new I =	24	Page
internal marks scared 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 Personal. Whis class has an array that shows the SEE marks accred in five courses of the current semester of the Student. 3mport the two packages in file that electores the final marks of students in all five courses. Import gava util. Scanner; Import cie. Internals; Import see. Externals; Class Demo Class Demo Class Temo Class Temo Class Temo Class Temo Class Temo Class Static void dispetatils () Public Static void dispetatils () elij. disp(); in [ij.disp(); elij. disp();		Date Page
internal marks scared 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 Personal. Whis class has an array that shows the SEE marks accred in five courses of the current semester of the Student. 3mport the two packages in file that electores the final marks of students in all five courses. Import gava util. Scanner; Import cie. Internals; Import see. Externals; Class Demo Class Demo Class Temo Class Temo Class Temo Class Temo Class Temo Class Static void dispetatils () Public Static void dispetatils () elij. disp(); in [ij.disp(); elij. disp();	Q.	Charle - i
internal marks scored in five courses of the current se mester of the student. Create another package SEE which has the clark External which is a derived clark of Personal. Whis clark has an array that shows the SEE marks roved in five courses of the current sem ester of the Student. 3mport the two packages in file that electores the final marks of students if all five courses. import sava util. scanner: import cie. Internals; import see. Externals; class Demo Class Demo Class Temo for (int n: Stahic Externals in [] = new Internals [n]; public Static void dispotetails () e[i]. Sdisp(); in [i]. disp(); e[ii]. disp();	-	Sherman My
semester of the student. Create another package SEE which has the class External which is a derived class of Personal. This class has an array that shore the SEE marks accord in five courses of the current semester of the Student. 3mport the two packages in file that electores the final marks of n Students in file that electores the final marks of n Students in fine courses. Import gava util . Scanner; Import cie. Student; Import see. Externals; class Demo Class Demo Class Demo Class Tritemals in [] = new Internals [n]; Stakic int n; Stakic Externals e [] = new Externals [n]; public Stakic void dispotetails () e [i]. Sdisp(); in [i]. disp();		sem Ales class Personal has members like ush
semester of the student. Create another package SEE which has the class External which is a dealtred class of Personal. This class has an array that shores the SEE marks acoxed in five courses of the current semester of the student. 3 mpost the two packages in file that circlases the final marks of n students in all five courses. Import sava-util-scanner: Import see. Externals; Import see. Externals; Class Demo Static int m; Static internals in [] = new Internals In]; Static Externals e [] = new Externals [n]; public Static void dispotetails () for (int i=0; i < n; itt) e [i] disp(); in [i] disp();		internal track contained has an array that stores of
which has the class External which is a derived class of Personal. This class has an array that shown the SEE marks scored in five courses of the current Sem ester of the student. Import the two packages in file that circlases the final marks of n students i all five courses. import sava util. Scanner; import cie. Student; import see. Externals; class Demo class Demo f Stakic int n; Stakic reternals in [] = new Internals [n]; Stakic Externals e [] = new Externals [n]; public Static void dispetatails () for (int i = 0; i < n; itt) e [i] disp(); in [i] disp(); e [i] disp();		semester of the state of the current
of Personal. this class has an array that some of the SEE marks scored in five courses of the current Sem ester of the student. 3mport the two packages in file that ckclases the final marks of n students; all five courses. import j'ava util. scanner; import cie. Student; import see. Externals; class Demo f Stakic int n; Stakic internals in [] = new Internals In]; Stakic Externals e [] = new Externals In]; public Static void dispetatails () for (int i = 0; i < n; itt) e[i']. Sdisp(); in [i]. disp();		which has the class Extended which has package SEE
SEE marks scored in five courses of the current sem ester of the student. Support the two packages in file that electases the final marks of n students in all five courses. import fava util. scanner; import cie. Student; import sec. Externals; class Demo class Demo fine Internals in [] = new Internals In]; static int n; static Externals in [] = new Externals In]; public Static void dispetatils () for (int i = 0; in itt) elical disp(); in [i] disp();		12 4 42 644
sem estex of the Student. 3mpost the two packages in file that electases the final master of n students in all five courses. impost sava util. scannex; impost cie. Student; impost see. Externals; class Demo class Demo stakic int n; stakic int n; stakic externals in [] = new Internals [n]; public static void dispatetails () for (int i = 0; in itt) elicio. Sdisp(); in [i]. disp(); elicio. Sdisp(); elicio. Sdisp(); elicio. Sdisp(); elicio. Sdisp(); elicio. Sdisp();		1 Span 11
import sava util . Scanner; import cie. Student; import see. Externals; import see. Externals; class Demo f Stakic int n; Stakic Internals in [] = new Internals In]; Stakic Externals e [] = new Externals In]; public Static void dispotetails () for (int i=0; i < n; itt) e [i] . Sdisp(); in [i] . disp(); e [i] . disp();		The consider of the constant
import gava util . Scanner; import cie. Student; import see. Externals; import see. Externals; class Demo { Stakic int n; Stakic Internals in [] = new Internals In]; Stakic Externals e [] = new Externals In]; public Stakic void dispotetails () for (int i=0; i < n; itt) e [i] . Sdisp(); in [i] . disp(); e [i] . disp();		life that Gerland the line and packages in
import sava util · Scanner; import cie· Student; import cie· Internals; import sec· Externals; class Demo { Stakic int n; Stakic Internals in [] = new Internalo [n]; Stakic Externalo e [] = new Externalo [n]; public Static void dispetetails () { for (int i = 0; i < n; itt) e [i] · disp(); in [i] · disp(); e [i] · disp();		I students in
impost cie. Student; impost cie. Internals; impost see. Externals; class Demo { Stakic int n; Stakic Internals in [] = new Internals [n]; Stakic Externals e [] = new Externals [n]; public Stakic void dispetetails () for (int i = 0; i < n; itt) e[i']. Sdisp(); in [i]. disp(); e[i']. disp();		gree courses.
impost cie. Student; impost cie. Internals; impost see. Externals; class Demo { Stakic int n; Stakic Internals in [] = new Internals [n]; Stakic Externals e [] = new Externals [n]; public Stakic void dispetetails () for (int i = 0; i < n; itt) e[i']. Sdisp(); in [i]. disp(); e[i']. disp();		e and Balance 5- Scool of the same
impost see. Externals; class Demo Stakic int n; Stakic Internals in [] = new Internals In]; stakic Externals e [] = new Externals [n]; public Stakic void dispetetails () for (int i = 0; i < n; itt) e [i]. sdisp(); e [i]. disp();		
class Demo E Stakic int n; Stakic Internals in [] = new Internals In]; Stakic Enternals e [] = new Externals In]; public Static void disposetails () for (int i = 0; i < n; itt) e[i]. Sdisp(); in [i]. disp(); e[i]. disp();		
class Demo Estakic int n; Stakic Internals in [] = new Internals In]; Stakic Externals e [] = new Externals [n]; public Stakic void dispetails () fox (int i = 0; i < n; itt) e[i]. sdisp(); in [i]. disp(); e[i]. disp();		impost cie. Internals:
Stake int n; Stake Internals in [] = new Internals In]; Stake Externals e [] = new Externals [n]; public Stake void disposetails () for (int i=0; i < n; itt) e[i].disp(); e[i].disp();		impost see. Externals;
Stakic int n; Stakic Internals in [] = new Internals [n]; Stakic Enternals e [] = new Enternals [n]; public Static void dispetails () for (int i = 0; i < n; itt) e[i]. sdisp(); in [i]. disp(); e[i]. disp();		mount withdrawn from the account a soon
Static int n; Static Internals in [] = new Internals In]; Static Externals e [] = new Externals [n]; public Static void dispetatis () fox (int i = 0; i < n; itt) e[i']. Sdisp(); in [i']. disp(); e[i']. disp();		class Demo Ozal sanslas milano
Static int n; Static Internals in [] = new Internals In]; Static Enternals e [] = new Enternals [n]; public Static void dispotetails () for (int i = 0; i < n; itt) e[i]. Sdisp(); in [i]. disp(); e[i]. disp();		The Sayling account which made through home farilly 3
Static Internals in [] = new Internals [n]; Static Enternals e [] = new Externals [n]; public Static void disposetails () for (int i = 0; i < n; itt) e [i]. Sdisp(); in [i]. disp(); e [i]. disp();		
Static Enternals e[] = new Enternals [n]; public Static void disposetails () for (int i = 0; i < n; itt) e[i']. Sdisp(); in [i']. disp(); e[i']. disp();		
public Static void disposetails () for (int i=0; i < n; itt) e[i]. Sdisp(); in [i]. disp(); e[i]. disp();		
public static void disposetails () for (int i=0; i < n; itt) e[i]. sdisp(); in [i]. disp();		
for (int i=0; i <n; <math="" display="block" itt)="">e[i] \cdot sdisp(i); in [i] ·disp(i); $e[i] \cdot disp(i);$</n;>		LOUIS Clother : Ratual
Fox (int $i = 0$; $i < n$; $i + 1$) $e[i] \cdot sdisp(i);$ in $[i] \cdot disp(i);$ $e[i] \cdot disp(i);$		public Static void disposetails ()
e[i]. sdisp(); in [i]. disp(); e[i]. disp();		other Brown to trace cont the the total
e[i]. saisp(); in [i]. disp(); e[i]. disp();		$\operatorname{Fox} \left(\operatorname{int} \right) := \operatorname{con} \left(\operatorname{sch} \right) $
e[i]. sdisp(); in [i]. disp(); e[i]. disp();		
in [i] · disp();		
e [i] disp ();	1 30	eli'J. Sdisp ();
e [i] disp ();		in [i] ·disp();
	1	
arek Moldes : Rahaj	1	
	0	each Moldes i Rahat

```
public static void compute ()
 fox (int i=0; ikn; itt)
   eli] = new Externals ();
   in [i] = new Internals ():
    e[i].ggetd();
   in [i] · geta ();
   e[i].getd();
  for (int j=0; ; 25; j++)
      e [i] finals [j] = e[i] . markarray [j] + in[i].
 public Static void main (string args [7]
  Scanner Sc = new Scanner (system . in);
  System. Out. println ("Enter nog students: ").
   n = sc. next Int ();
  compute ();
  System out print In ("Displaying all Student details: ").
 dispatails ();
```

```
package cie:
 import gava util - scannes:
public class student
  Storing usn;
  String name:
  int sem;
  int finals [] = new int [S].
  public void get d ()
Scanner se = new Scanner (system. in);
  System. out . point ("Enter USN: ");
   USN USN = Sc. next ();
  System · out · point (" Enter Name: ");
   name = sc. next ();
  System. Out print ("Enter Sem: ");
 Sem = sc- next Int ();
         St. = Meter Scanner Conten Tas
public void disp ()
 System. Out. point In (" USN: " + USn)
System. out. print en (" Name: " + name).
  System. out · paint la (" Sem: " +sem );
```

	kage cie;
Em	post j'ava · uhil · Scanner;
	toward the same
Pu	ablic class Internals
-9.	touted absolute descents descent
	int maskassay [] = new int [s];
	public void geta()
•	pathic Extension ()
	System. Out. point (" Enter Internal Marks out of so: ");
	fox (int i= 0; i(S; i++)
	4
	System · out · point ("Enter Marks for subject "+ (it 1)+":"
	markarray [i] = Sc. next ();
	System · Out · point (" In");
	4
1	() gibs hier silder
	public void disp U
	System. out. print (" Internal Marks out of 50: ")
	System out point (Intronce Hauts
	for (int i=0; i'ls; i+t)
	C
	System . Out . println ("Marky for subject "+ (i+1)
	+ maskastay [i]);
-	
	System.out. point ("\n");
X	Court Enter Marks In out a V to
	1 . () tolt + x 9 () . ()
	2 . (" ") + ming - two - many 2
	4
	The state of the s
	() gith that stilling
	1) with dight state

```
package see;
    impost java · util · Scannes;
    impost cie · Student :
    public class Externals extendo Student
      Put maskassay [] = new int [s]:
     public Externals ()
        Super ();
   public void sgetal)
      public void sdisp ()
      super . disp ();
      public void geta ()
Scanner sc = new scanner (system in)
      for (int i= 0; ils; i++)
       System. out. point ("Enter Marks for subject "+(it))
       markarry [i] = sc. next Int ();
      System · Out · print ("\n");
   public void disp ()
    Scannes sc = new Scanner (system . in).
```

	Date
	- Laboratoria de la companya de la c
System · out · point (" external M for (int 1=0; i<5; itt)	the following from
System · Out · println ("Marks + markarray [i]):	for Subject "+ (i+1)+":"
System. out point (" In ");	too dugit with water
and the state of the state of	
I want from the state of	
Entex usn: 1BM23CS001	Student Final Marks:
Enter Name: Alice Singh	USN: 18M23CSD 01
	Name: Alice Singh Samoster: 3
Enter Internal Mark for 5 courses:	Semon AN
20 April and point of the	Course wise Marko:
the Except ("Fother's as Plant so	Course 2: Final Marks = 75 (Internal: 20, SEE:55) Course 3: Final Marks = 87 (Internal: 17, SEE:70)
16 of w alders M	4 : Einel Marky = 84 (Inkmal:19, SEE:65)
Enter SEE Masks for 5 course	course 5: Find Marks = 66 (Internal: 16, SEE:SO)
60	
10	Mark Mark Mark Mark Mark Mark Mark Mark
65	Class Son Extends Plus
20/11/29 50	Part Son Age; Suffice
34	public san (lot som a
7 st page of many small (square the	- Comment J. And
() () () () () () () () () ()	0 0 0 2) 1:

```
package CIE;
public class Student {
  private String usn;
  private String name;
  private int sem;
  public Student(String usn, String name, int sem) {
     this.usn = usn;
     this.name = name;
     this.sem = sem;
  }
  public String getUsn() {
     return usn;
  }
  public String getName() {
     return name;
  }
  public int getSem() {
     return sem;
  }
}
package CIE;
public class Internals {
  private int[] internalMarks;
  public Internals() {
     internalMarks = new int[5];
   }
  public void setInternalMarks(int[] marks) {
     if (marks.length == 5) {
       this.internalMarks = marks;
     } else {
```

```
System.out.println("Error: Marks should be for 5 courses.");
     }
  }
  public int[] getInternalMarks() {
    return internalMarks;
  }
}
package SEE;
import CIE.Student;
public class External extends Student {
  private int[] externalMarks;
   public External(String usn, String name, int sem) {
     super(usn, name, sem);
    externalMarks = new int[5];
  }
  public void setExternalMarks(int[] marks) {
    if (marks.length == 5) {
       this.externalMarks = marks;
     } else {
       System.out.println("Error: Marks should be for 5 courses.");
     }
  }
  public int[] getExternalMarks() {
    return externalMarks;
  }
  public int[] getFinalMarks(int[] internalMarks) {
    int[] finalMarks = new int[5];
    for (int i = 0; i < 5; i++) {
       finalMarks[i] = internalMarks[i] + externalMarks[i];
     }
```

```
return finalMarks;
  }
}
import CIE.Internals;
import SEE.External;
import java.util.Scanner;
public class Main {
  public static void main(String[] args) {
     Scanner scanner = new Scanner(System.in);
     System.out.print("Enter number of students: ");
     int n = scanner.nextInt();
     External[] externalStudents = new External[n];
     Internals[] internalMarks = new Internals[n];
     for (int i = 0; i < n; i++) {
       scanner.nextLine();
       System.out.print("\nEnter USN for student " + (i + 1) + ": ");
       String usn = scanner.nextLine();
       System.out.print("Enter name for student " + (i + 1) + ": ");
       String name = scanner.nextLine();
       System.out.print("Enter semester for student " +(i + 1) + ": ");
       int sem = scanner.nextInt();
       externalStudents[i] = new External(usn, name, sem);
       internalMarks[i] = new Internals();
       int[] internalMarksArray = new int[5];
       System.out.println("Enter internal marks for 5 courses: ");
       for (int j = 0; j < 5; j++) {
```

```
internalMarksArray[j] = scanner.nextInt();
                         }
                         internalMarks[i].setInternalMarks(internalMarksArray);
                         int[] externalMarksArray = new int[5];
                         System.out.println("Enter external marks for 5 courses: ");
                         for (int j = 0; j < 5; j++) {
                                 externalMarksArray[j] = scanner.nextInt();
                         externalStudents[i].setExternalMarks(externalMarksArray);
                 }
                System.out.println("\nFinal Marks for Students:");
                for (int i = 0; i < n; i++) {
                        System.out.println("\nStudent" + (i+1) + ":" + externalStudents[i].getName() + " (" + (i+1) + ":" + externalStudents[i].getName() + " (" + (i+1) + ":" + externalStudents[i].getName() + " (" + (i+1) + ":" + externalStudents[i].getName() + " (" + (i+1) + ":" + externalStudents[i].getName() + " (" + (i+1) + ":" + externalStudents[i].getName() + " (" + (i+1) + ":" + externalStudents[i].getName() + " (" + (i+1) + ":" + externalStudents[i].getName() + " (" + (i+1) + ":" + externalStudents[i].getName() + " (" + (i+1) + ":" + (i+1) + ":" + (i+1) + " (" + (i+1) + ") 
+ externalStudents[i].getUsn() + ")");
                         int[] finalMarks =
externalStudents[i].getFinalMarks(internalMarks[i].getInternalMarks());
                         System.out.println("Semester: " + externalStudents[i].getSem());
                         System.out.println("Final Marks: ");
                         for (int j = 0; j < 5; j++) {
                                 System.out.println("Course " +(j+1) + ": " + finalMarks[j]);
                          }
                scanner.close();
        }
}
```

```
D:\24BMSCE>java Main
Enter number of students: 1
Enter USN for student 1: 11234
Enter name for student 1: anupriyaa
Enter semester for student 1: 3
Enter internal marks for 5 courses:
22
23
24
25
Enter external marks for 5 courses:
90
91
92
93
Final Marks for Students:
Student 1: anupriyaa (11234)
Semester: 3
Final Marks:
Course 1: 110
Course 2: 112
Course 3: 114
Course 4: 116
Course 5: 118
```