Lab 6

Week 9-Lab Program 6

Solve this program and write the procedure you have used to

execute this in your observation

Create a package CIE which has two classes- Student 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 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.

package CIE;

import java.util.\*;

public class Student

{

public String usn,name;

public int sem;

public void input()

{

Scanner sc=new Scanner(System.in);

System.out.println("---enter student details---");

System.out.print("name : ");

name= sc.nextLine();

System.out.print("usn : ");

usn=sc.nextLine();

System.out.print("sem : ");

sem=sc.nextInt();

System.out.println();

}

public void display()

{

System.out.println("---student details---");

System.out.println("name : "+name);

System.out.println("usn : "+usn);

System.out.println("sem : "+sem);

}

}

package CIE;

import java.util.\*;

public class Internals

{

public int cie\_marks[]=new int[5];

public void input()

{

Scanner sc=new Scanner(System.in);

System.out.println("enter cie marks in 5 courses :");

for(int i=0;i<5;i++)

cie\_marks[i]=sc.nextInt();

}

public void display()

{

System.out.println("cie marks : ");

for(int i=0;i<5;i++)

System.out.print(cie\_marks[i]+" ");

System.out.println();

}

}

package SEE;

import CIE.\*;

import java.util.\*;

public class External extends CIE.Student

{

public int see\_marks[]=new int[5];

public void input()

{

Scanner sc=new Scanner(System.in);

System.out.println("enter see marks in 5 courses :");

for(int i=0;i<5;i++)

see\_marks[i]=sc.nextInt();

}

public void display()

{

System.out.println("see marks : ");

for(int i=0;i<5;i++)

System.out.print(see\_marks[i]+" ");

System.out.println();

}

}

import CIE.\*;

import SEE.\*;

import java.util.\*;

class main

{

int final\_marks[]=new int[5];

public static void main(String args[])

{

Scanner sc=new Scanner(System.in);

System.out.println("enter no of students ");

int n=sc.nextInt();

CIE.Student []o1=new CIE.Student[n];

CIE.Internals []o2=new CIE.Internals[n];

SEE.External []o3=new SEE.External[n];

main []obj=new main[n];

for(int i=0;i<n;i++)

{

o1[i]=new CIE.Student();

o2[i]=new CIE.Internals();

o3[i]=new SEE.External();

obj[i]=new main();

o1[i].input();

o2[i].input();

o3[i].input();

for(int j=0;j<5;j++)

obj[i].final\_marks[j]=o2[i].cie\_marks[j]+(o3[i].see\_marks[j]/2);

}

for(int i=0;i<n;i++)

{

o1[i].display();

o2[i].display();

o3[i].display();

System.out.println("final marks in 5 courses");

for(int j=0;j<5;j++)

System.out.print(obj[i].final\_marks[j]+" ");

System.out.println();

}

}

}



