LAB 6 WEEK 9
MOHAMMED ABDUL HAMID

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.

```java
package CIE;
import java.util.*;
public class personal
{
        public String name;
        public int sem;
        public String usn;

        public void read()
        {
                Scanner sc = new Scanner(System.in);
                System.out.println("Enter the name");
                name = sc.next();
                System.out.println("Enter the semester");
                sem = sc.nextInt();
                System.out.println("Enter the USN");
                usn = sc.next();
        }
        public void display()
        {
                System.out.println("Student details: ");
                System.out.println("Name: "+name+"\nUSN: "+usn+"\nSem: "+sem);
        }

}
```

```java
package CIE;
import java.util.*;
public class internals extends personal
{
        public double cie[];

        public void accept()
        {
                cie= new double[5];
                Scanner sc = new Scanner(System.in);
                for(int i=0;i<5;i++)
                {
                        System.out.println("CIE mark for course "+(i+1)+" : ");
                        cie[i]= sc.nextDouble();
                }
```

```java
        }


}
package SEE;
import java.util.*;
import CIE.*;
public class externals extends personal
{
        public double see[];

        public void get()
        {
                see= new double[5];
                Scanner sc = new Scanner(System.in);
                for(int i=0;i<5;i++)
                {
                        System.out.println("SEE mark for course "+(i+1)+" : ");
                        see[i]= sc.nextDouble();
                }
        }


}


import CIE.*;
import SEE.*;
import java.util.*;

class Main
{
        public static void main(String args[])
        {
                Scanner sx = new Scanner(System.in);
                System.out.println("Enter the number of students");
                int n= sx.nextInt();
                CIE.internals in[]= new CIE.internals[n];
                SEE.externals en[]= new SEE.externals[n];
                int i,j;
                for(i=0;i<n;i++)
                {
                        System.out.println("Student "+(i+1));
                        in[i] = new CIE.internals();
                        en[i] = new SEE.externals();
                        in[i].read();

                        System.out.println("CIE MARKS:");
                        in[i].accept();
                        System.out.println("SEE MARKS:");
                        en[i].get();
                        System.out.println();
                        in[i].display();
                        for(j=0;j<5;j++)

                        System.out.println("Total Marks for course "+(j+1)+": "+(in[i].cie[j] +
(en[i].see[j]/2)));
                }
```

```
                    }
                }
```

```
Last login: Fri Nov 20 15:40:02 on ttys000

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
abduls-MacBook-Pro:~ abdulhamid$ cd Documents/
abduls-MacBook-Pro:Documents abdulhamid$ cd PACKAGES
abduls-MacBook-Pro:PACKAGES abdulhamid$ java Main
Enter the number of students
3
Student 1
Enter the name
hamid
Enter the semester
3
Enter the USN
1bm2020
CIE MARKS:
CIE mark for course 1 :
40
CIE mark for course 2 :
40
CIE mark for course 3 :
40
CIE mark for course 4 :
40
CIE mark for course 5 :
40
SEE MARKS:
SEE mark for course 1 :
89
SEE mark for course 2 :
89
SEE mark for course 3 :
89
SEE mark for course 4 :
89
SEE mark for course 5 :
89

Student details:
Name: hamid
USN: 1bm2020
Sem: 3
Total Marks for course 1: 84.5
Total Marks for course 2: 84.5
Total Marks for course 3: 84.5
Total Marks for course 4: 84.5
Total Marks for course 5: 84.5
Student 2
Enter the name
abd
Enter the semester
3
Enter the USN
1qq33
CIE MARKS:
CIE mark for course 1 :
34
CIE mark for course 2 :
40
CIE mark for course 3 :
33

CIE mark for course 5 :
33
SEE MARKS:
SEE mark for course 1 :
89
SEE mark for course 2 :
89
SEE mark for course 3 :
89
SEE mark for course 4 :
89
SEE mark for course 5 :
89

Student details:
Name: abd
USN: 1qq33
Sem: 3
Total Marks for course 1: 78.5
Total Marks for course 2: 84.5
Total Marks for course 3: 77.5
Total Marks for course 4: 77.5
Total Marks for course 5: 77.5
Student 3
Enter the name
hamid2
Enter the semester
3
Enter the USN
1bm2002
CIE MARKS:
CIE mark for course 1 :
34
CIE mark for course 2 :
34
CIE mark for course 3 :
3
CIE mark for course 4 :
40
CIE mark for course 5 :
34
SEE MARKS:
SEE mark for course 1 :
90
SEE mark for course 2 :
90
SEE mark for course 3 :
90
SEE mark for course 4 :
90
SEE mark for course 5 :
90

Student details:
Name: hamid2
USN: 1bm2002
Sem: 3
Total Marks for course 1: 79.0
Total Marks for course 2: 79.0
Total Marks for course 3: 48.0
Total Marks for course 4: 85.0
Total Marks for course 5: 79.0
abduls-MacBook-Pro:PACKAGES abdulhamid$
```