OOJ LAB WEEK 9- LAB PROGRAM 6

Program and Output

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Program-

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-

Student.java

```
package CIE;

public class student{

  public int usn,sem;

   public String name;

   public void get(int u,int s,String n)

   {

      usn=u;

      sem=s;

      name=n;

   }

   public void set()
```

```
    {
        System.out.println("\nNAME= "+name+"\nUSN= "+usn+"\nSEM= "+sem);
    }
}
```

internals.java

```
package CIE;
import java.util.Scanner;
public class internals extends CIE.student{
   public float inm[];
   public internals()
      {
         Scanner ss= new Scanner(System.in);
         inm=new float[5];
System.out.println("internals marks for 5 subjects (out of 50):");
for(int i=0;i<5;i++){
   System.out.println("subject "+(i+1));
   inm[i]=ss.nextFloat();
}
      }
}
```

Package SEE

external.java

```
package SEE;
```

```
import CIE.*;
import java.util.Scanner;
public class external extends CIE.student{
  public float exm[];
   public external()
   {
      Scanner ss= new Scanner(System.in);
         exm=new float[5];
System.out.println("external marks for 5 subjects (out of 100):");
for(int i=0;i<5;i++){
   System.out.println("subject "+(i+1));
   exm[i]=ss.nextFloat();
}
   }
}
```

Driver class

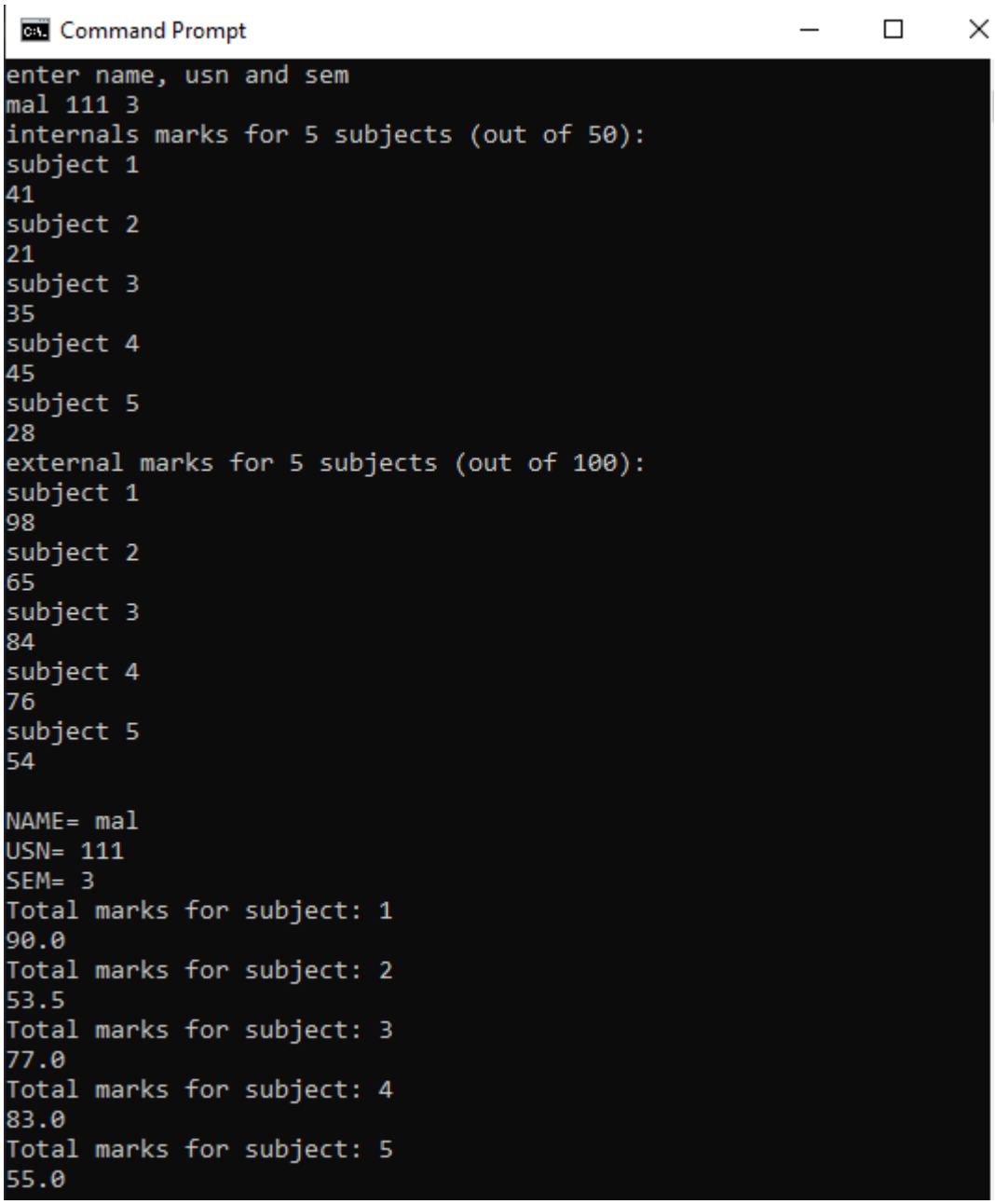
finalmarks.java

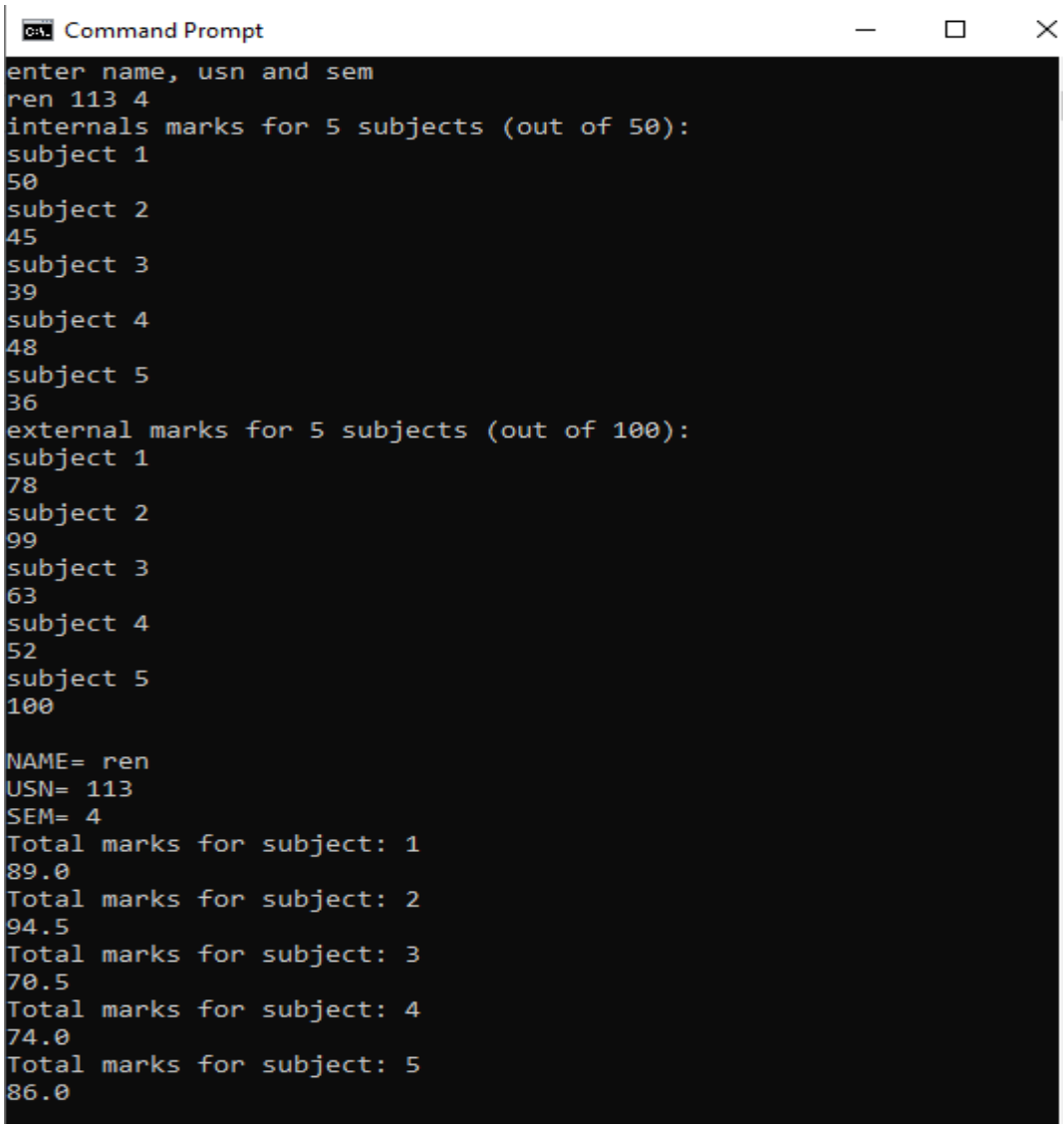
```
import CIE.*;
import SEE.*;
import java.util.Scanner;
class finalmarks{
   public static void main(String args[]){
      Scanner ss=new Scanner(System.in);
```

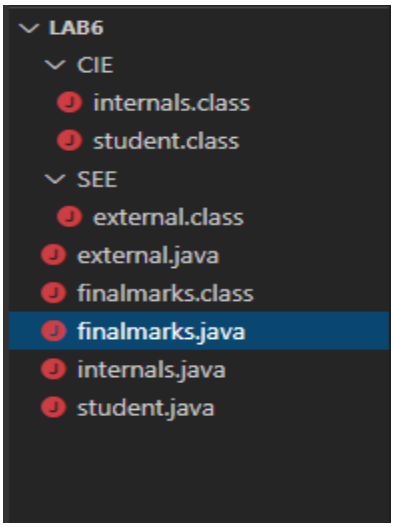
```
        System.out.println("enter the number of students");
        int no=ss.nextInt();
        for(int j=0;j<no;j++){
        float tot[]=new float[5];
        CIE.student stud=new CIE.student();
        System.out.println("\nenter name, usn and sem");
        String n=ss.next();
        int u=ss.nextInt();
        int s=ss.nextInt();
        stud.get(u,s,n);
        CIE.internals ci=new CIE.internals();
        SEE.external se=new SEE.external();
        stud.set();
        for(int i=0;i<5;i++){
           tot[i]=(ci.inm[i]+(se.exm[i]/2));
           System.out.println("Total marks for subject: "+(i+1));
           System.out.println(tot[i]);
        }

        }
    }
}
```

Output-


Command Prompt
enter name, usn and sem
mal 111 3
internals marks for 5 subjects (out of 50):
subject 1
41
subject 2
21
subject 3
35
subject 4
45
subject 5
28
external marks for 5 subjects (out of 100):
subject 1
98
subject 2
65
subject 3
84
subject 4
76
subject 5
54
NAME= mal
USN= 111
SEM= 3
Total marks for subject: 1
90.0
Total marks for subject: 2
53.5
Total marks for subject: 3
77.0
Total marks for subject: 4
83.0
Total marks for subject: 5
55.0


Command Prompt
enter name, usn and sem
ren 113 4
internals marks for 5 subjects (out of 50):
subject 1
50
subject 2
45
subject 3
39
subject 4
48
subject 5
36
external marks for 5 subjects (out of 100):
subject 1
78
subject 2
99
subject 3
63
subject 4
52
subject 5
100
NAME= ren
USN= 113
SEM= 4
Total marks for subject: 1
89.0
Total marks for subject: 2
94.5
Total marks for subject: 3
70.5
Total marks for subject: 4
74.0
Total marks for subject: 5
86.0


LAB6
CIE
internals.class
student.class
SEE
external.class
external.java
finalmarks.class
finalmarks.java
internals.java
student.java