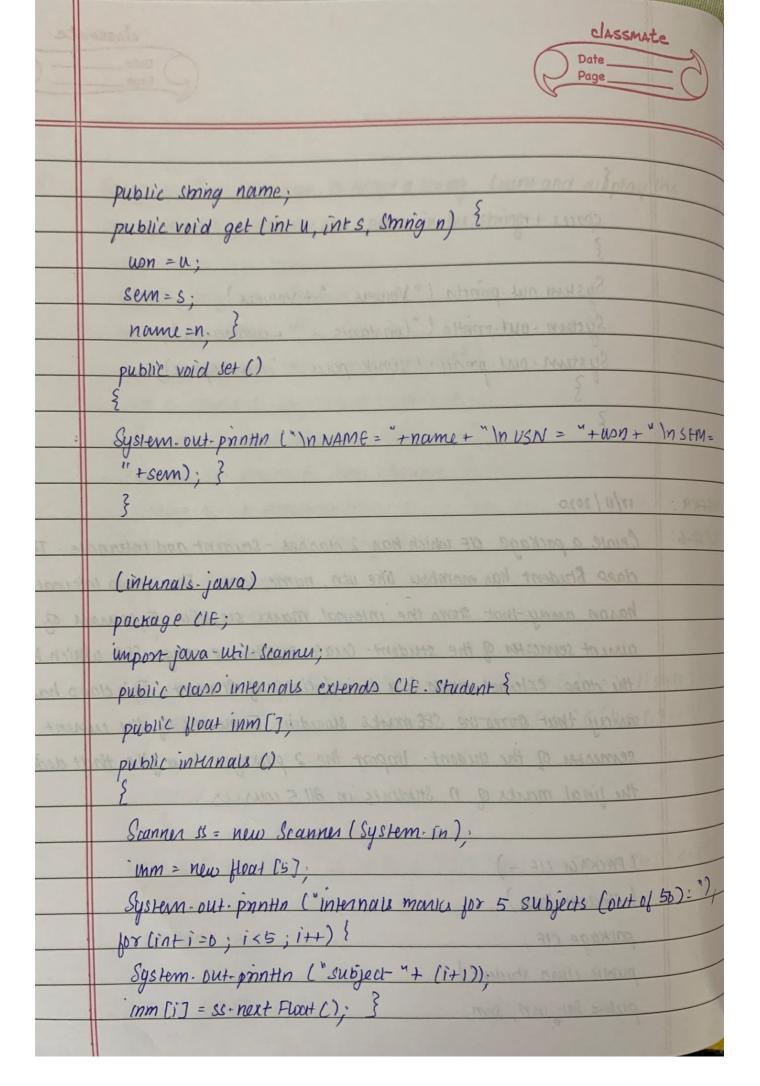17/11/2020

LP#-6: Create a package CIE which has 2 classes - Student and Internals. The class Student has members like usn, name, sem - The class Internals has an array-that stores the internal marks scored in 5 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 5 courses of the current semester of the student. Import the 2 packages in a file that declares the final marks of n Students in all 5 courses.

(PACKAGE CIE -)

(student. java)

package CIE ;

public class student {

public int usn, sem;

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```java
public string name;
public void get (int u, int s, string n) {
uon = u;
sem = s;
name = n. }
public void set ()
{
System.out.println ("\n NAME = " + name + "\n USN = " + uon + "\n SEM=
" + sem); }
}
```

(internals.java)

```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.next Float (); }
```

```
}
}
```

(Package SEE -)
(extenal. java)

```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 subject (out of 100) :");
        for (int i = 0; i < 5; i++) {
            System.out.println ("subject " + (i+1));
            exm[i] = ss.nextFloat();  }
    }
}
```

(Driver class -)
(finalmarks. java)

```java
import CIE.*;
import SEE.*;
```

```java
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 ("\n enter 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]); }
  }

}
}
```