Lecture 4

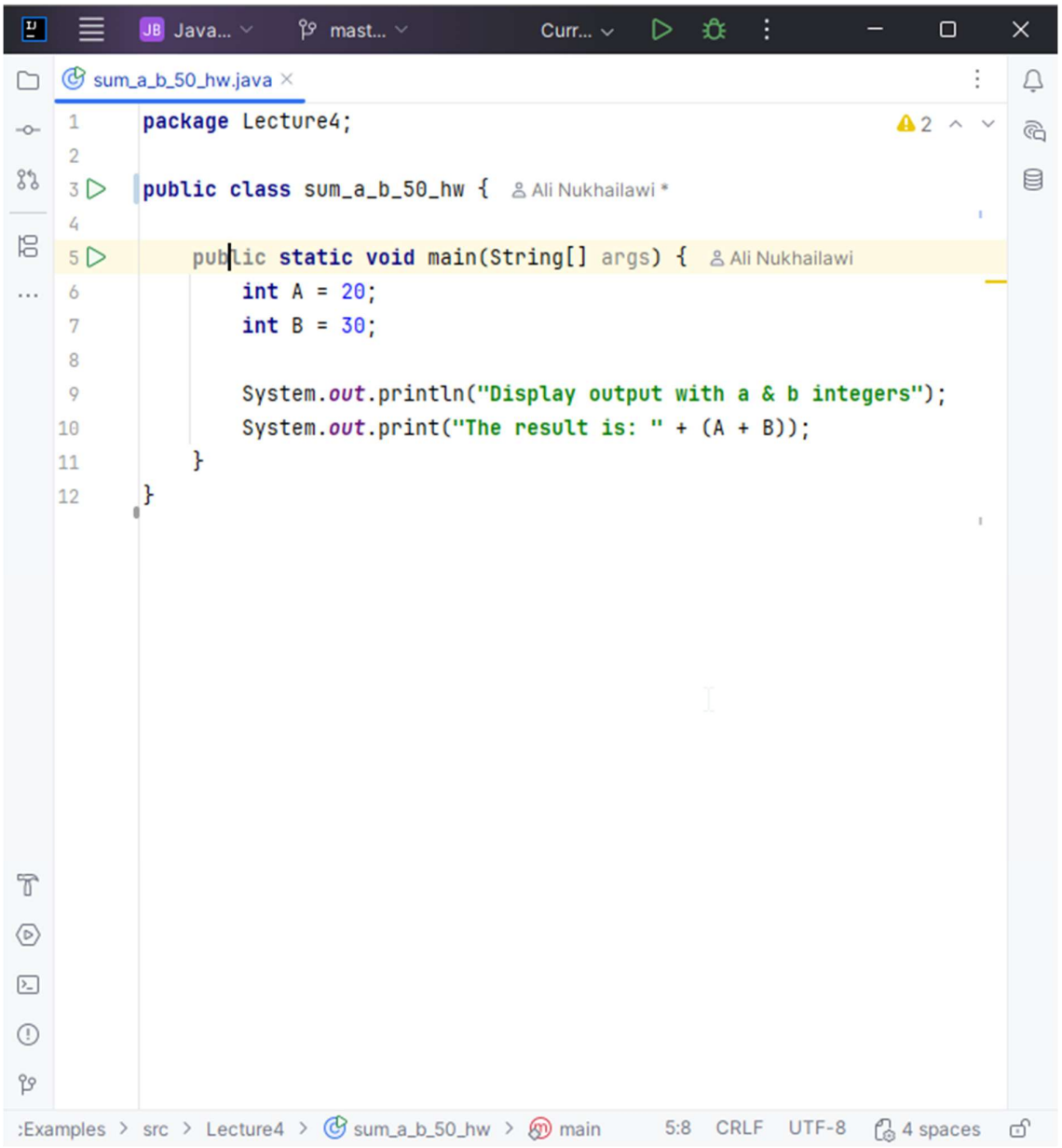
Homework

Use print( ) with code to get the following output

Int A=20;

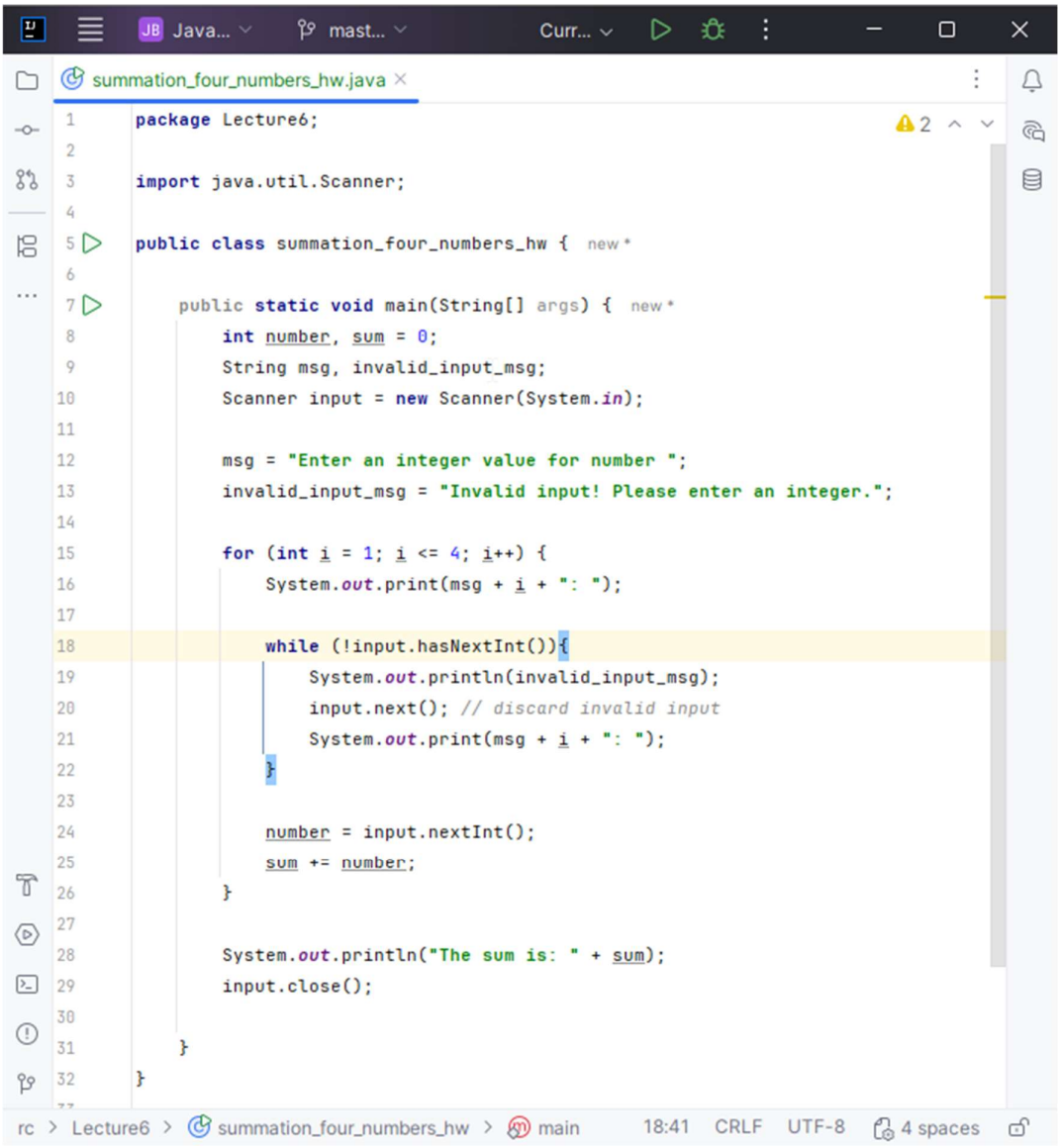
Int B=30;

Output: The result is: 50

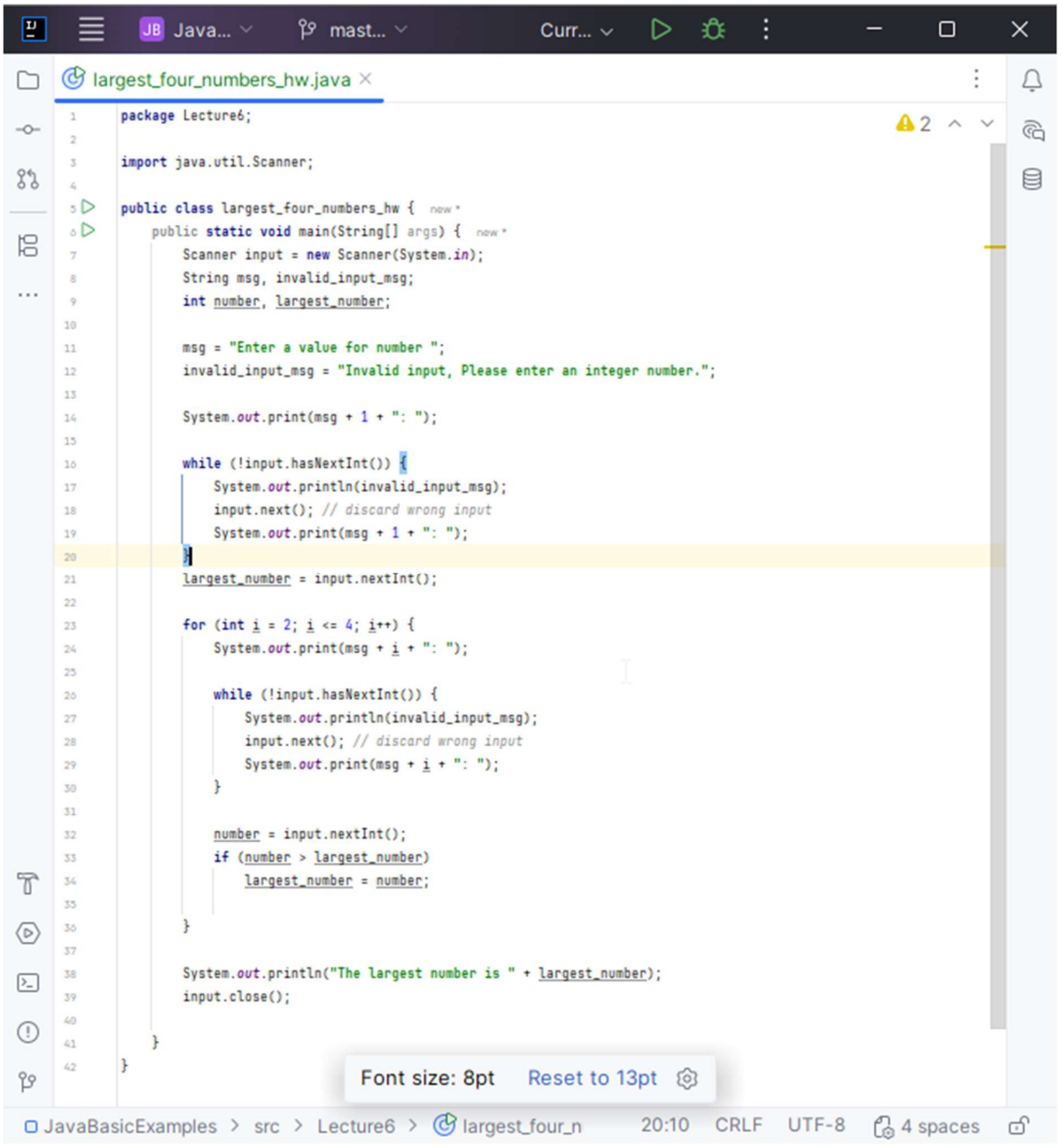


Lecture 6

1. Write a program in Java to read four numbers from the user, then find the summation between them?

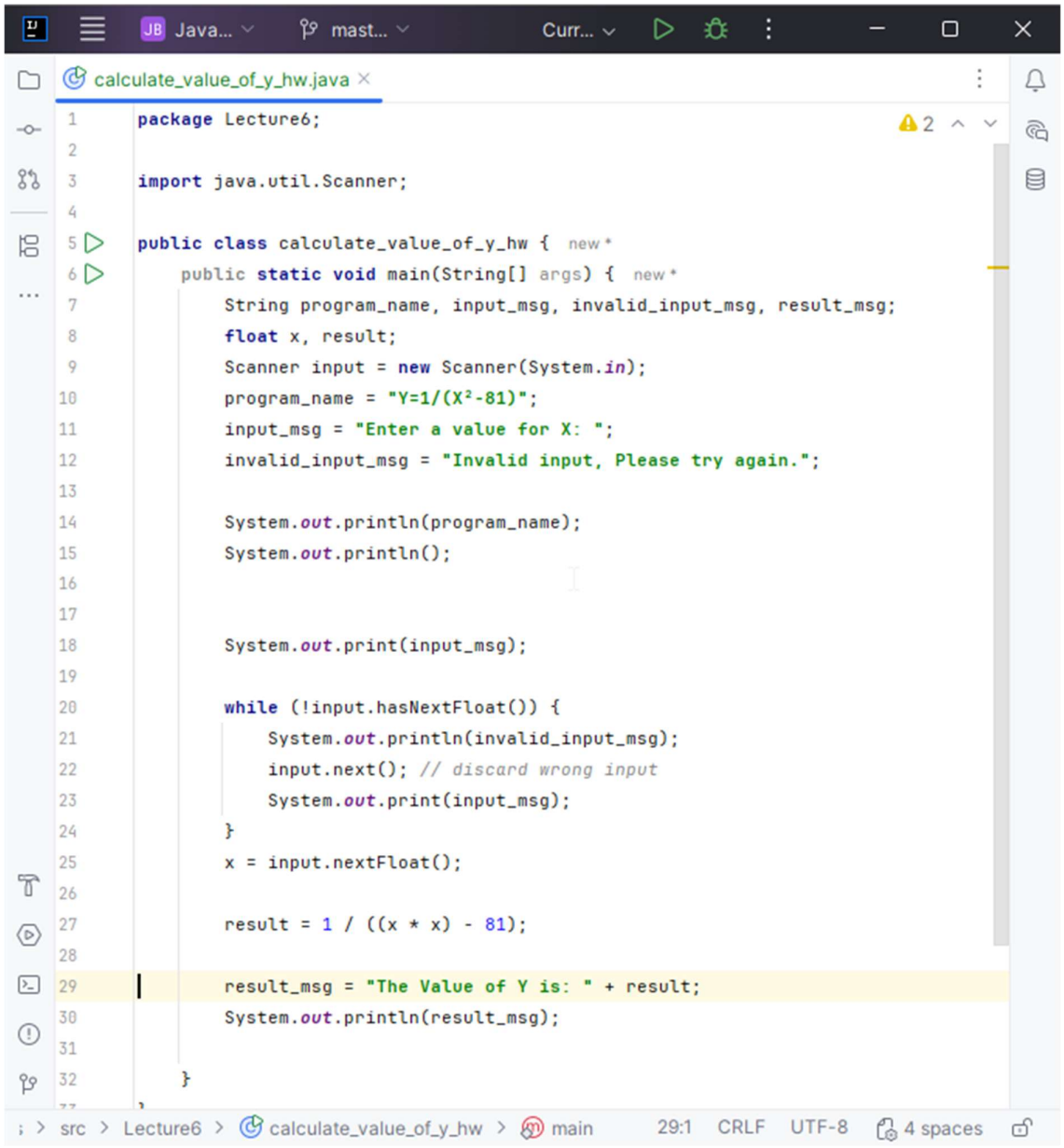


2. Write a program in Java to read four numbers from the user, then find the largest number between them?



3. Write a program in Java to calculate the value of Y from the following equation?

$Y = 1/X^2 - 81.$



```java
package Lecture6;

import java.util.Scanner;

public class calculate_value_of_y_hw {
    public static void main(String[] args) {
        String program_name, input_msg, invalid_input_msg, result_msg;
        float x, result;
        Scanner input = new Scanner(System.in);
        program_name = "Y=1/(X²-81)";
        input_msg = "Enter a value for X: ";
        invalid_input_msg = "Invalid input, Please try again.";

        System.out.println(program_name);
        System.out.println();


        System.out.print(input_msg);

        while (!input.hasNextFloat()) {
            System.out.println(invalid_input_msg);
            input.next(); // discard wrong input
            System.out.print(input_msg);
        }
        x = input.nextFloat();

        result = 1 / ((x * x) - 81);

        result_msg = "The Value of Y is: " + result;
        System.out.println(result_msg);

    }
}
```

4. Write a program to print the student average as follows:

   average >100 and average < 0 print “The average is out of range”

   average >=0 and average < 50 print “The average is Fail”

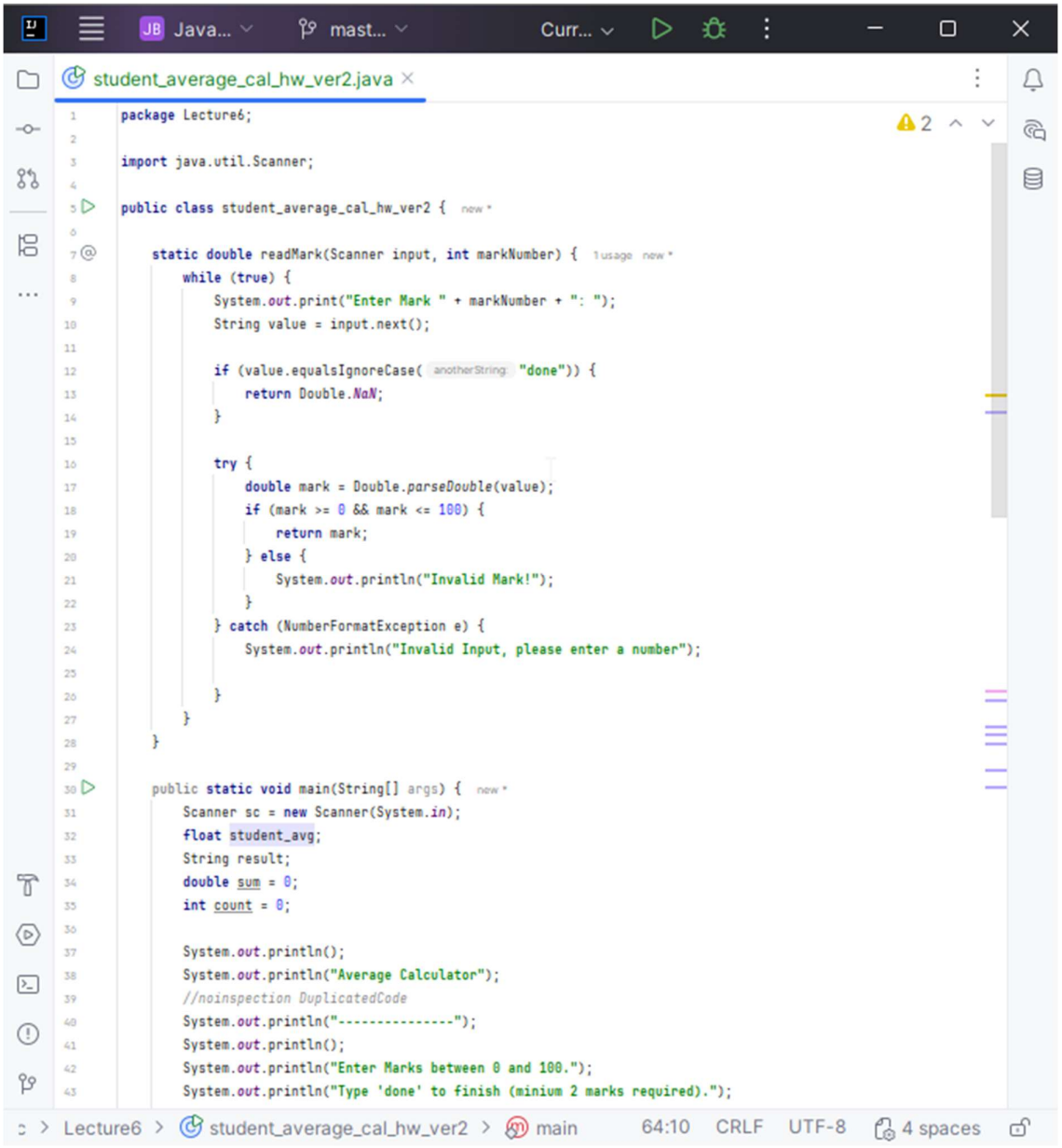
   average >=50 and average <= 59 print “The average is Accepted”

   average >=60 and average <= 69 print “The average is Medium”

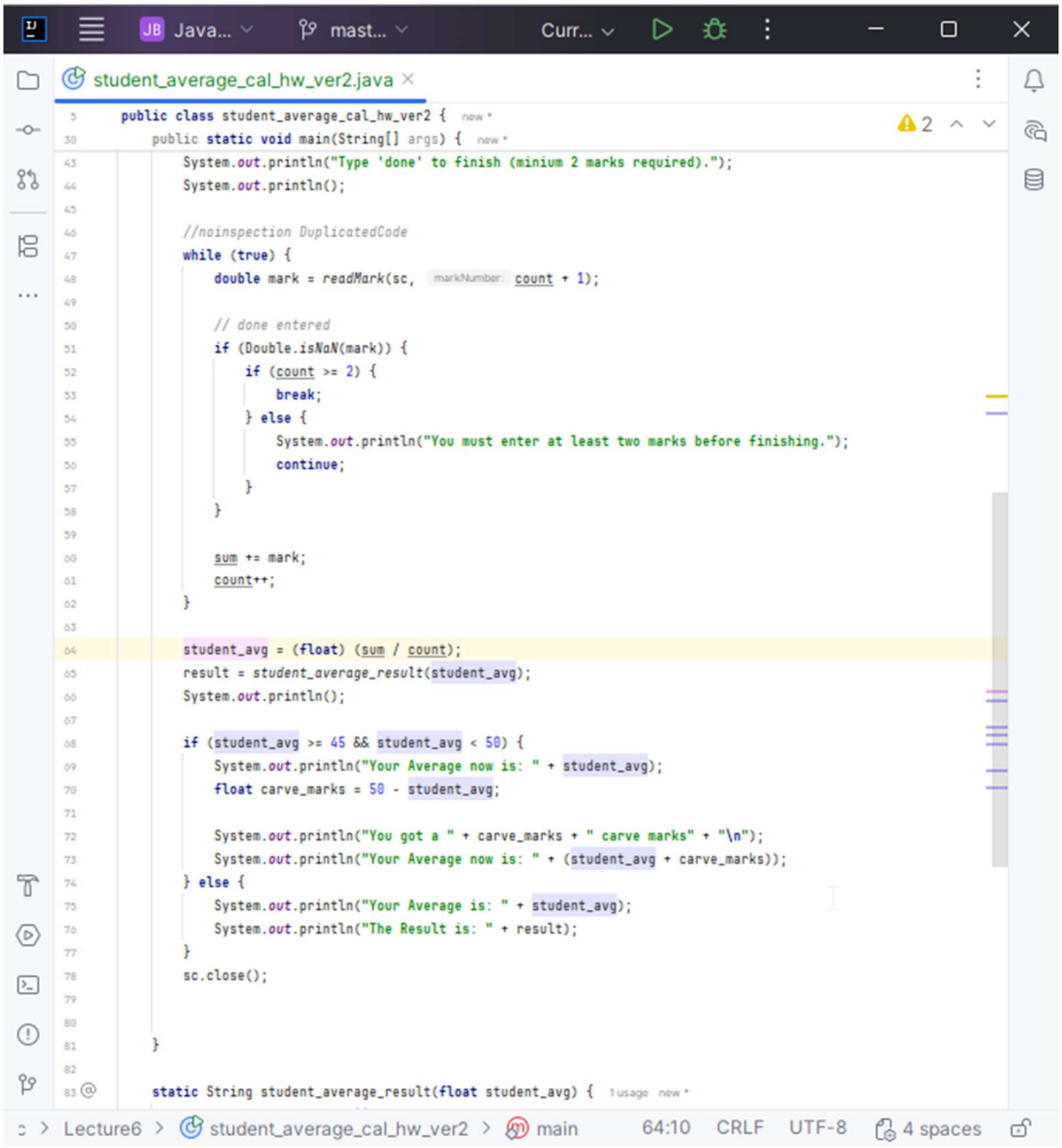
   average >=70 and average <= 79 print “The average is Good”

   average >=80 and average <= 89 print “The average is Very Good”

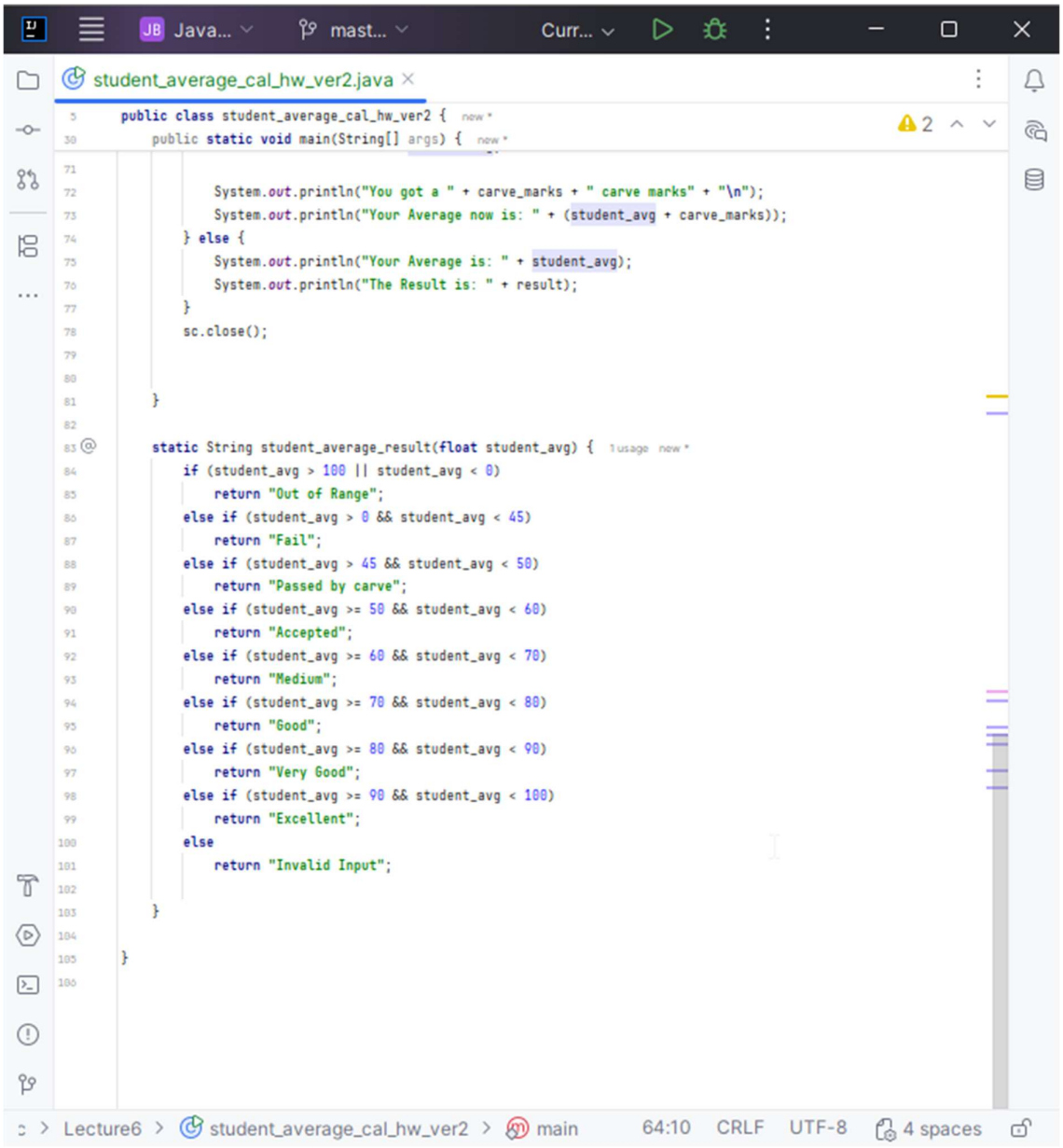
   average >=90 and average <= 100 print “The average is Excellent”



(pic 1)


Java...
mast...
Curr...
student_average_cal_hw_ver2.java
public class student_average_cal_hw_ver2 {
public static void main(String[] args) {
System.out.println("Type 'done' to finish (minium 2 marks required).");
System.out.println();
//noinspection DuplicatedCode
while (true) {
double mark = readMark(sc, markNumber: count + 1);
// done entered
if (Double.isNaN(mark)) {
if (count >= 2) {
break;
} else {
System.out.println("You must enter at least two marks before finishing.");
continue;
}
}
sum += mark;
count++;
}
student_avg = (float) (sum / count);
result = student_average_result(student_avg);
System.out.println();
if (student_avg >= 45 && student_avg < 50) {
System.out.println("Your Average now is: " + student_avg);
float carve_marks = 50 - student_avg;
System.out.println("You got a " + carve_marks + " carve marks" + "\n");
System.out.println("Your Average now is: " + (student_avg + carve_marks));
} else {
System.out.println("Your Average is: " + student_avg);
System.out.println("The Result is: " + result);
}
sc.close();
}
static String student_average_result(float student_avg) {
Lecture6
student_average_cal_hw_ver2
main
64:10
CRLF
UTF-8
4 spaces

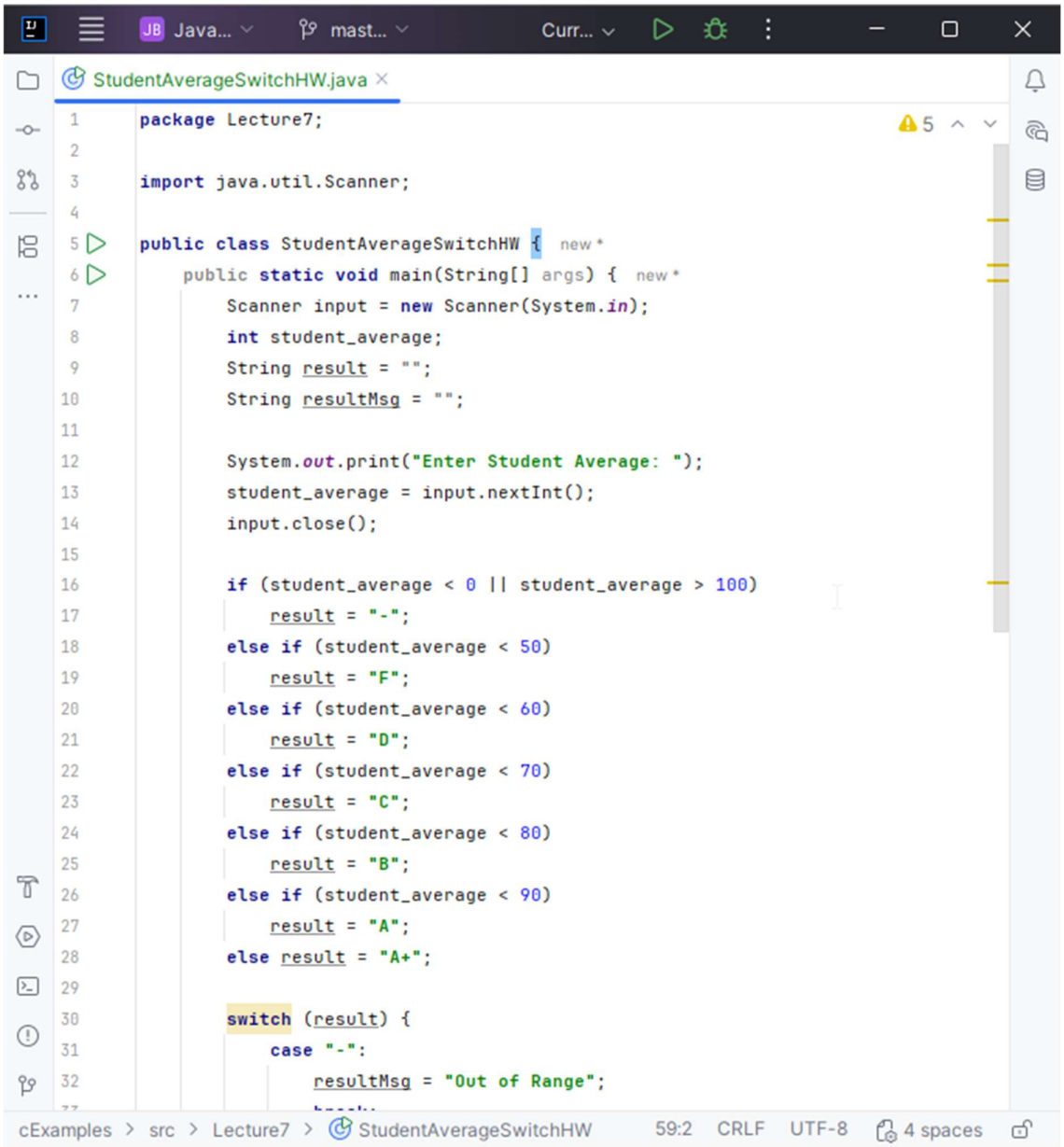
(pic 2)


Java...
mast...
Curr...
student_average_cal_hw_ver2.java
public class student_average_cal_hw_ver2 {
public static void main(String[] args) {
System.out.println("You got a " + carve_marks + " carve marks" + "\n");
System.out.println("Your Average now is: " + (student_avg + carve_marks));
} else {
System.out.println("Your Average is: " + student_avg);
System.out.println("The Result is: " + result);
}
sc.close();
}
static String student_average_result(float student_avg) {
if (student_avg > 100 || student_avg < 0)
return "Out of Range";
else if (student_avg > 0 && student_avg < 45)
return "Fail";
else if (student_avg > 45 && student_avg < 50)
return "Passed by carve";
else if (student_avg >= 50 && student_avg < 60)
return "Accepted";
else if (student_avg >= 60 && student_avg < 70)
return "Medium";
else if (student_avg >= 70 && student_avg < 80)
return "Good";
else if (student_avg >= 80 && student_avg < 90)
return "Very Good";
else if (student_avg >= 90 && student_avg < 100)
return "Excellent";
else
return "Invalid Input";
}
}
Lecture6
student_average_cal_hw_ver2
main
64:10
CRLF
UTF-8
4 spaces

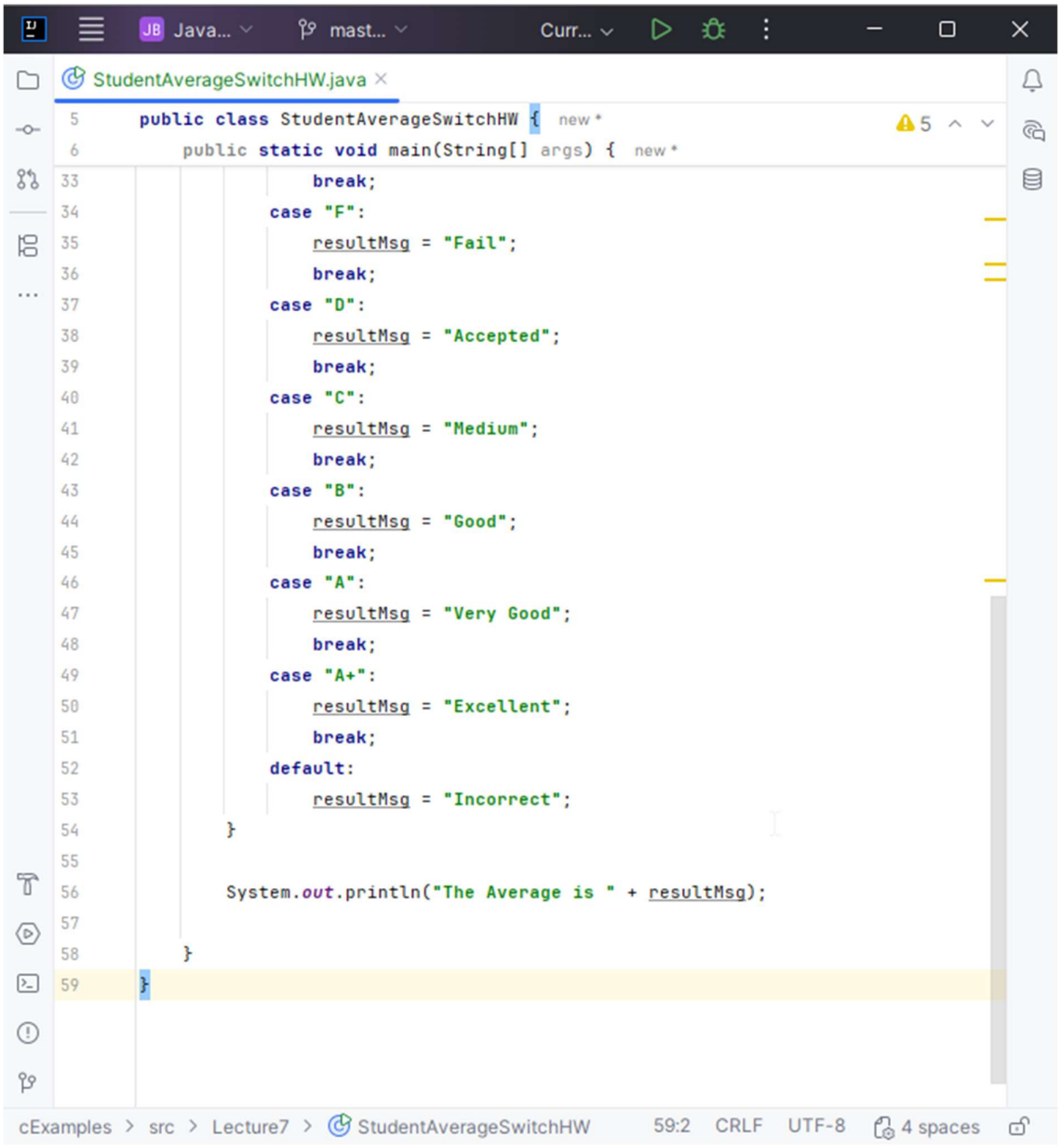
(pic 3)

Lecture 7

1. Write a program to print the student average as follows: using switch case statement:
   average >100 and average < 0 print “The average is out of range”
   average >=0 and average < 50 print “The average is Fail”
   average >=50 and average <= 59 print “The average is Accepted”
   average >=60 and average <= 69 print “The average is Medium”
   average >=70 and average <= 79 print “The average is Good”
   average >=80 and average <= 89 print “The average is Very Good”
   average >=90 and average <= 100 print “The average is Excellent”



(pic 1)


Java...
mast...
Curr...
StudentAverageSwitchHW.java
5 public class StudentAverageSwitchHW { new *
6 public static void main(String[] args) { new *
33 break;
34 case "F":
35 resultMsg = "Fail";
36 break;
37 case "D":
38 resultMsg = "Accepted";
39 break;
40 case "C":
41 resultMsg = "Medium";
42 break;
43 case "B":
44 resultMsg = "Good";
45 break;
46 case "A":
47 resultMsg = "Very Good";
48 break;
49 case "A+":
50 resultMsg = "Excellent";
51 break;
52 default:
53 resultMsg = "Incorrect";
54 }
55
56 System.out.println("The Average is " + resultMsg);
57
58 }
59 }
cExamples > src > Lecture7 > StudentAverageSwitchHW
59:2 CRLF UTF-8 4 spaces

(pic 2)

2. Write a program in Java to read number a month of the year, then print the name of the month?