# CENG217 – Lab01 Report

## Contents of Listing File

**Task 1 (pt. 1)**

/\*\*

\* Write a description of class Task1 here.

\*

\* @Clarence Oriola

\* @version (0.1)

\*/

public class Task1

{

public static void main(String[] args){

double a = 4;

double b = 3;

double c;

c = Math.sqrt(Math.pow(a, 2) + Math.pow(b, 2));

double m = 7;

double n = 8;

double p = Math.sqrt(Math.abs(m - n)); //m and n weren't declared

double r = 2;

double sum = a \* (Math.pow(r,n) - 1 / (r-1)); //missing a bracket and r wasn't declared

System.out.println("The result of expression a is: " +c);

System.out.println("The result of expression b is: " +p);

System.out.println("The result of expression sum is: " +sum);

}

}

**A screenshot of a computer

Description automatically generated**

**Task 1 (pt. 2)**

**import java.util.Scanner;**

**/\*\***

**\* Write a description of class Task1 here.**

**\***

**\* @Clarence Oriola**

**\* @version (0.1)**

**\*/**

**public class Task1**

**{**

**public static void main (String[] args) {**

**Scanner scanner = new Scanner(System.in); //Create a Scanner object**

**//a.**

**System.out.println("Enter input for a: ");**

**double a = scanner.nextDouble();**

**System.out.println("Enter input for b: ");**

**double b = scanner.nextDouble();**

**double c = Math.sqrt(Math.pow(a, 2) + Math.pow(b, 2));**

**//b.**

**System.out.println("Enter input for m: ");**

**double m = scanner.nextDouble();**

**System.out.println("Enter input for n: ");**

**double n = scanner.nextDouble();**

**double p = Math.sqrt(Math.abs(m - n));**

**//c.**

**System.out.println("Enter input for r: ");**

**double r = scanner.nextDouble();**

**double sum = a \* (Math.pow(r,n) - 1 / (r-1));**

**//result**

**System.out.println("The result of expression a is: " +c);**

**System.out.println("The result of expression p is: " +p);**

**System.out.println("The result of expression sum is: " +sum);**

**}**

**}**

**A screenshot of a computer

Description automatically generated**

**Task 2**

**A.**

**public class ShowErrors {**

**public void main(String[] args) { //Logical Error**

**int newnumber; //Logical Error**

**int initvalue = 1;**

**Newnumber--; //Syntax Error**

**double result = newnumber/initvalue;**

**System.out.println("Result: " result); //Syntax Error**

**}**

**}**

**B. Fixing the errors in Part A**

**Public class ShowErrors {**

**public static void main(String[] args) { //Logical Error**

**int newnumber = 10; //Logical Error**

**int initvalue = 1;**

**newnumber--; //Syntax Error**

**double result = newnumber / initvalue;**

**System.out.println("Result: " +result); //Syntax Error**

**}**

**}**

**Task 3**

**import java.util.Scanner;**

**/\*\***

**\* An Administration system that holds the student's full name,**

**\* student id, and five-course grades.**

**\***

**\* @Clarence Oriola**

**\* @v1.0**

**\*/**

**public class Task3**

**{**

**public static void main(String[] args) {**

**Scanner scanner = new Scanner(System.in); //Creates a Scanner object for user input**

**String fullName, studentID; //Variables that will be used to store Name and Student ID number**

**int grade; //Will be used for my for loop condition for the five-course grade**

**int credits = 0; //Used later for input**

**//User input section**

**System.out.print("Enter a Student Name: ");**

**fullName = scanner.nextLine(); // Reads and stores full name**

**System.out.print("Enter Student ID: ");**

**studentID = scanner.nextLine(); // Reads and stores the student ID**

**// Loop to input grades for five courses**

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

**System.out.print("Enter Student grade " + (i + 1) + ": ");**

**grade = scanner.nextInt(); // Reads and stores the grade**

**if (grade > 50) {**

**credits++; // Increments the credits if the grade is above 50**

**}**

**}**

**// Generates a loginname using the first four letters of fullname and the first three numbers of student id**

**String loginName = fullName.substring(0, 4) + studentID.substring(0, 3);**

**//Output**

**System.out.println("Student Login: " + loginName); // Displays the generated login name**

**System.out.println("Student ID: " + studentID); // Displays the student ID**

**System.out.println("Credits: " + credits); // Displays the total credits**

**}**

**}**