ĐẠI HỌC BÁCH KHOA HÀ NỘI
TRƯỜNG CÔNG NGHỆ THÔNG TIN VÀ TRUYỀN THÔNG

BÁO CÁO THỰC HÀNH
IT3103-744528-2024.1

BÀI THỰC HÀNH -LAB01

Sinh viên: Đặng Phương Nam

MSSV: 20225892

Lớp: IT-E6-06

GVHD: Lê Thị Hoa

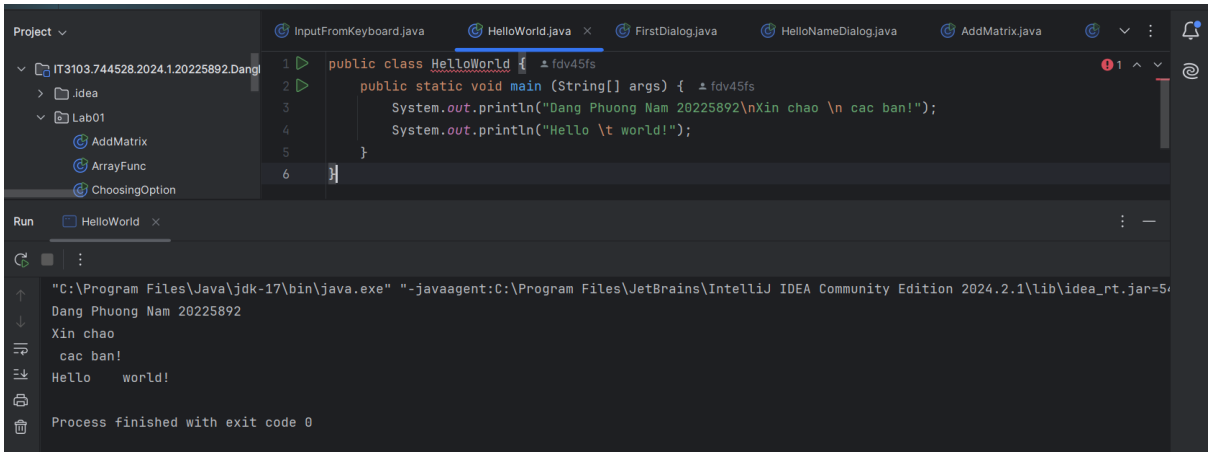
HTGD: Đặng Mạnh Cường

Hà Nội 9/2024

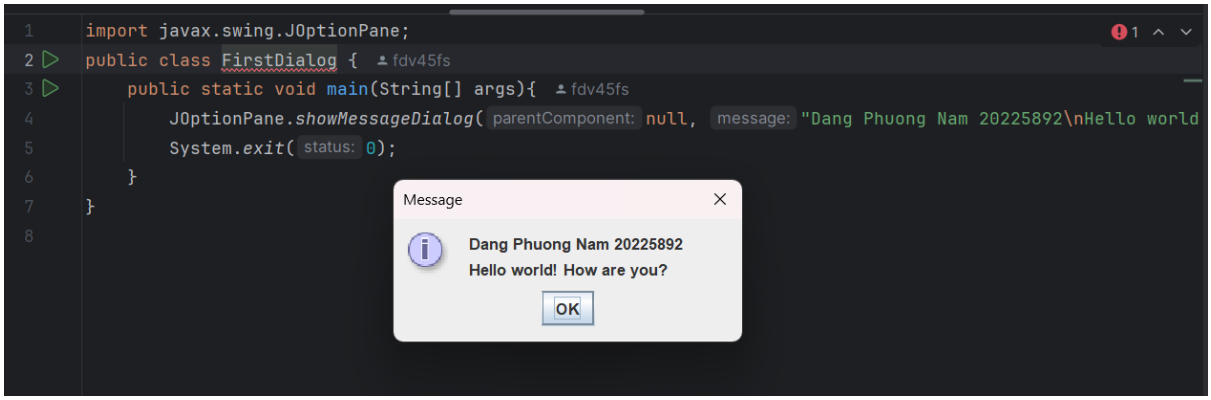
Báo cáo thực hành Lab 1

I. The Very First Java Programs

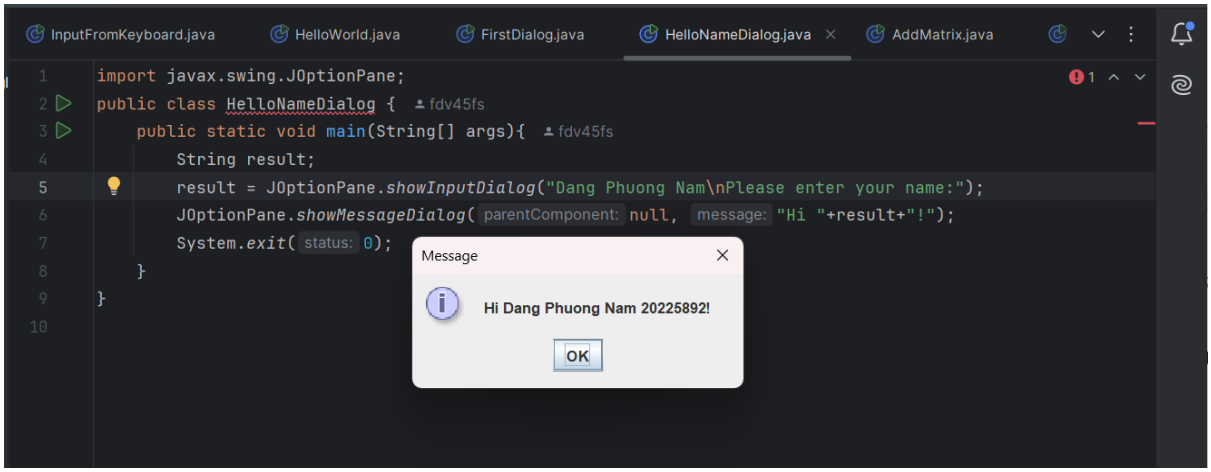
1. Write, compile the first Java application



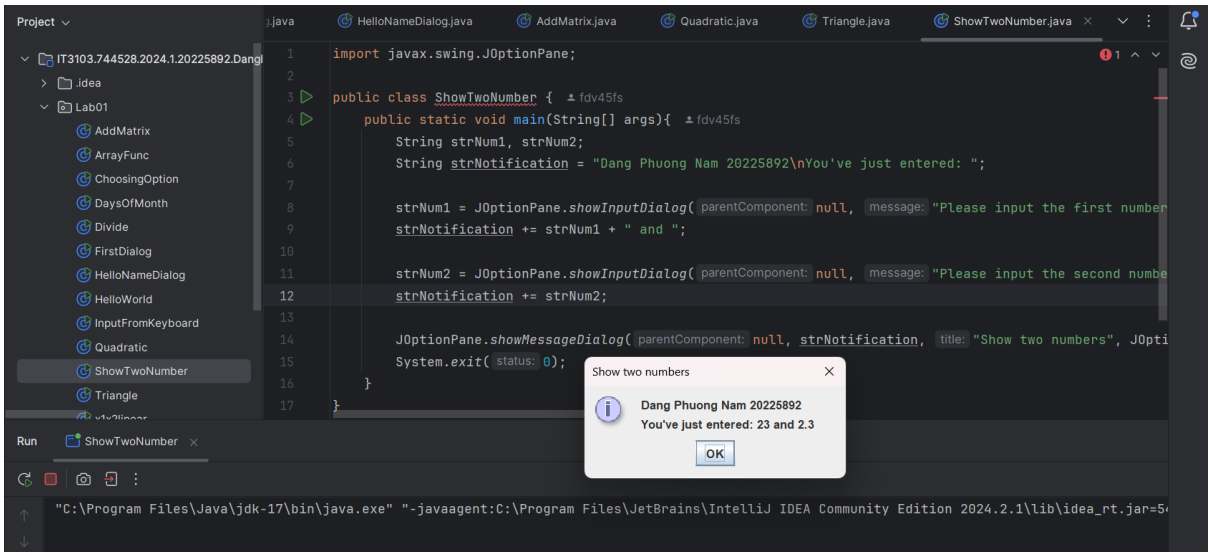
2. Write, compile the first dialog Java program



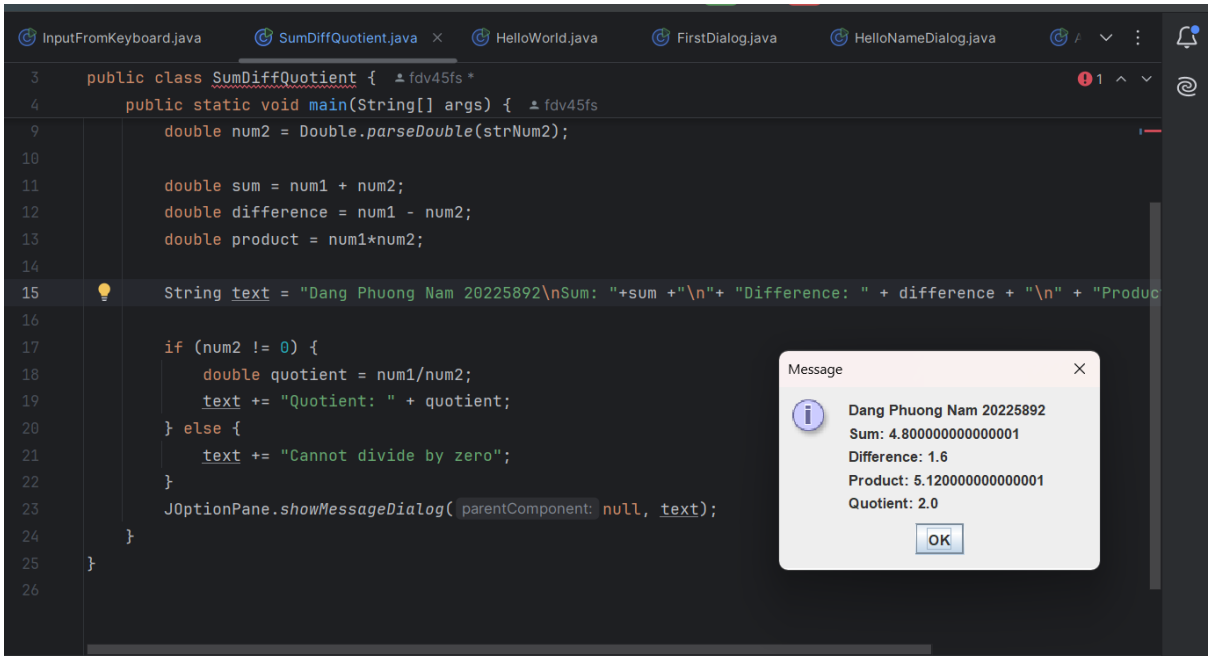
3. Write, compile the first input dialog Java application



4. Write, compile, and run the following example



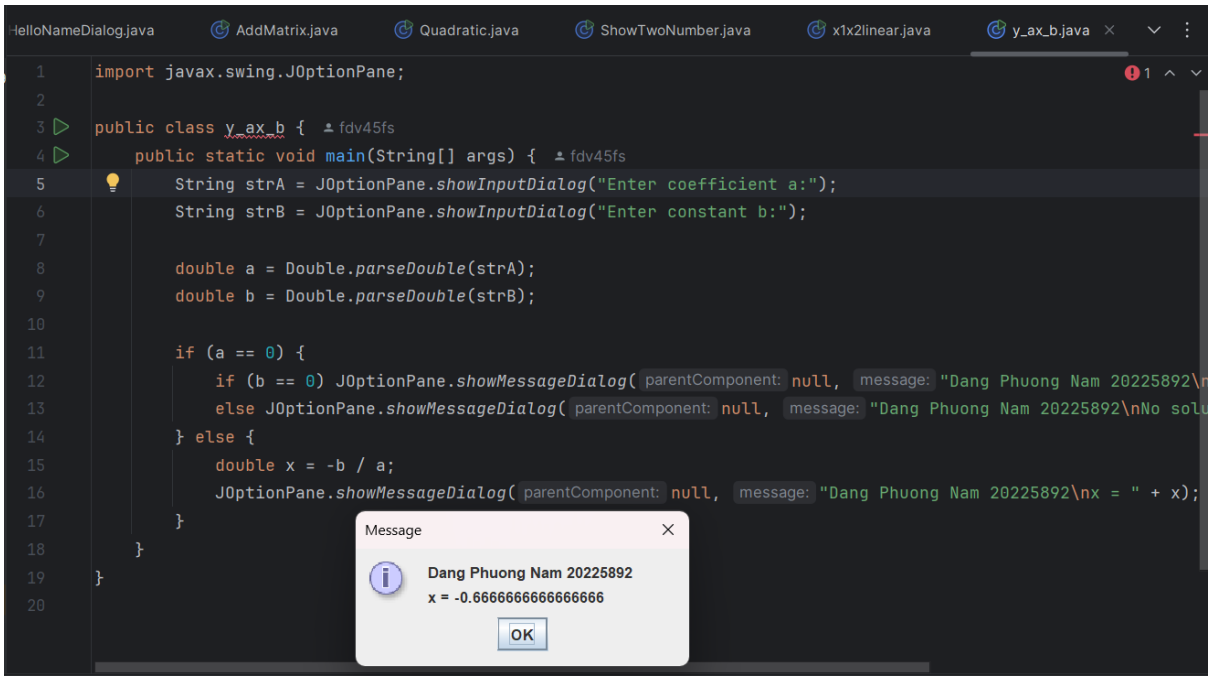
5. Write a program to calculate sum, difference, product, and quotient of 2 double numbers which are entered by users



6. Write a program to solve

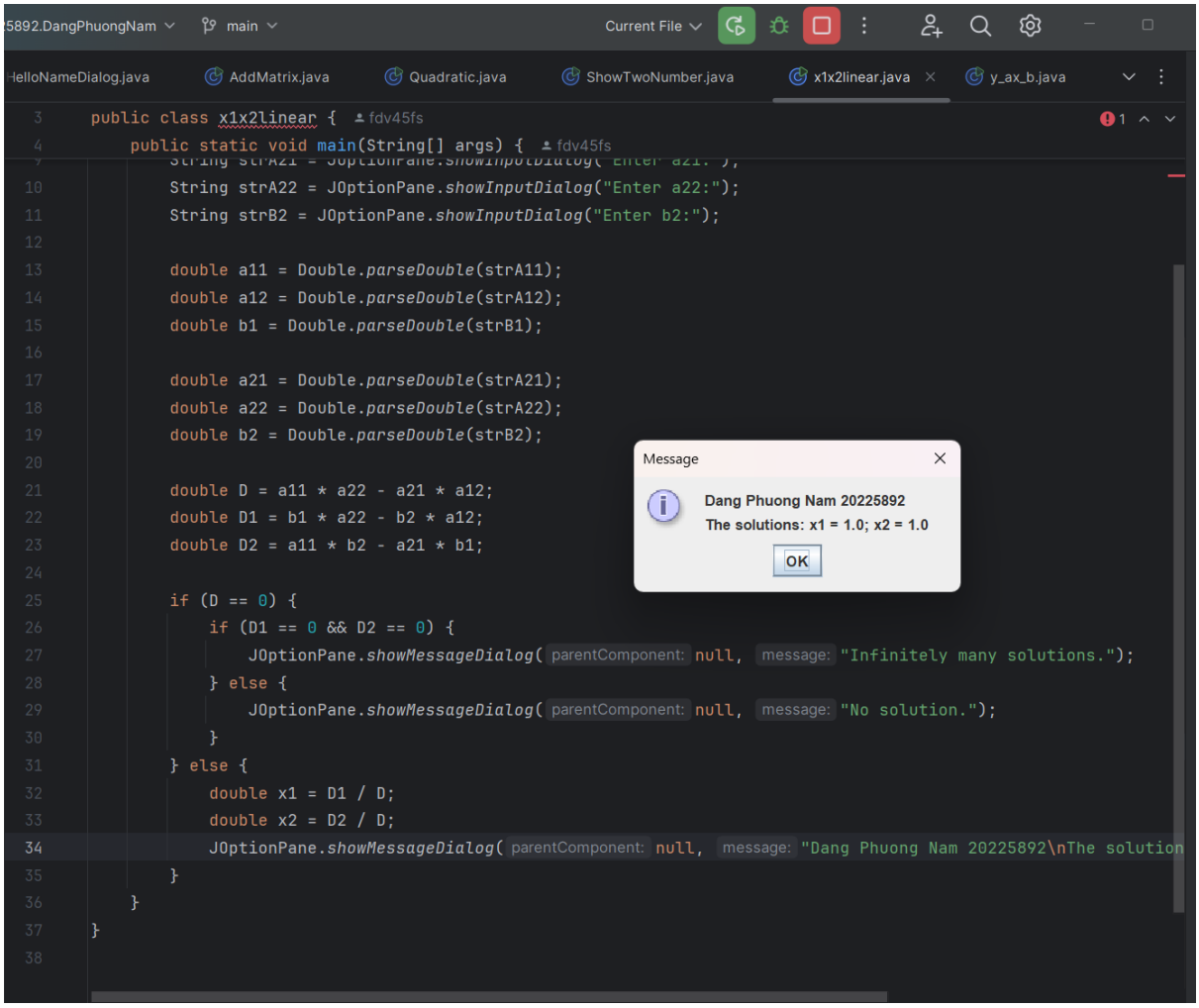
a. The first-degree equation (linear equation) with one variable

- With a = 3, b = 2



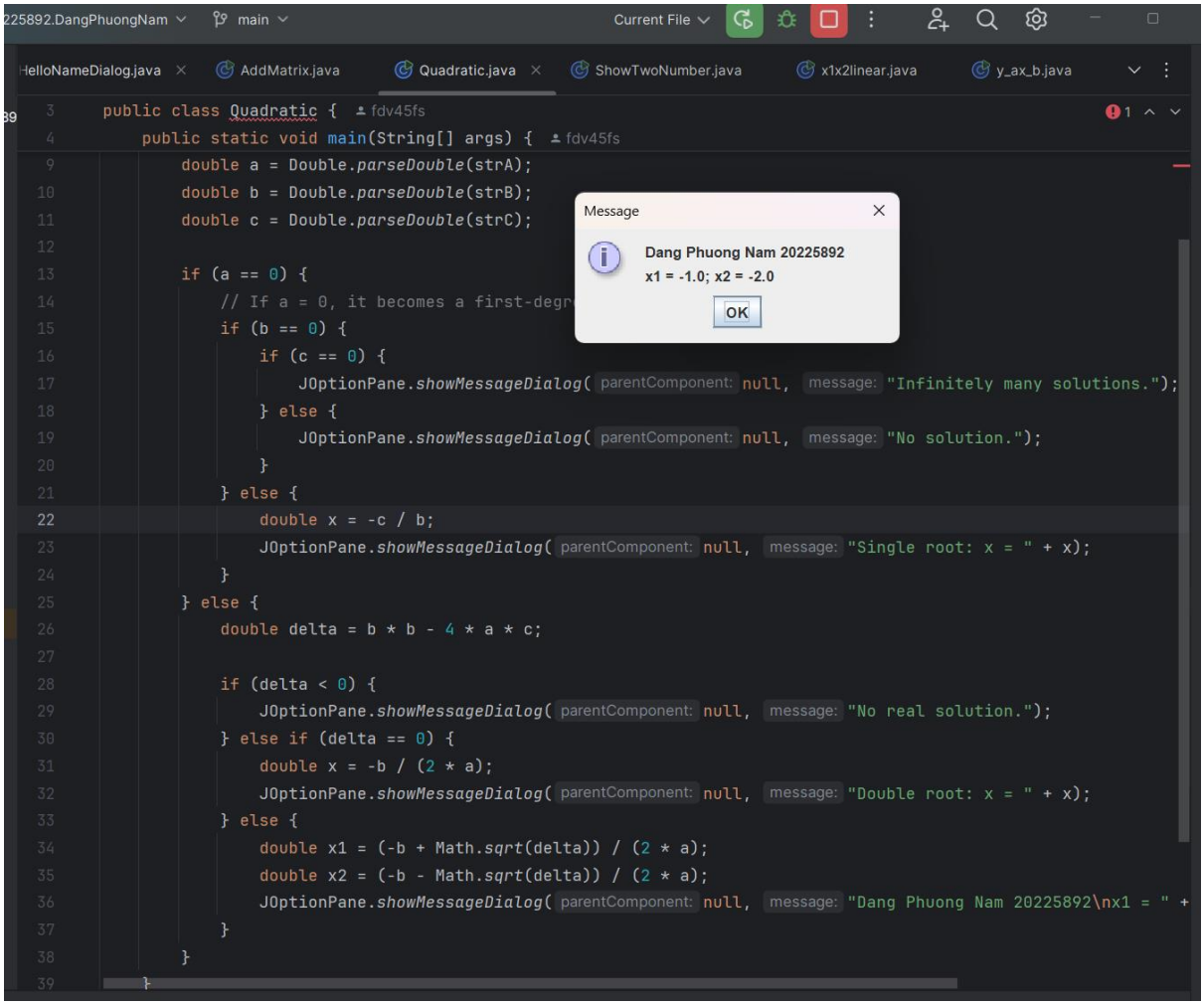
b. The system of first-degree equations (linear system) with two variables

- Với hệ số lần lượt là 1 2 3; 1 -1 0

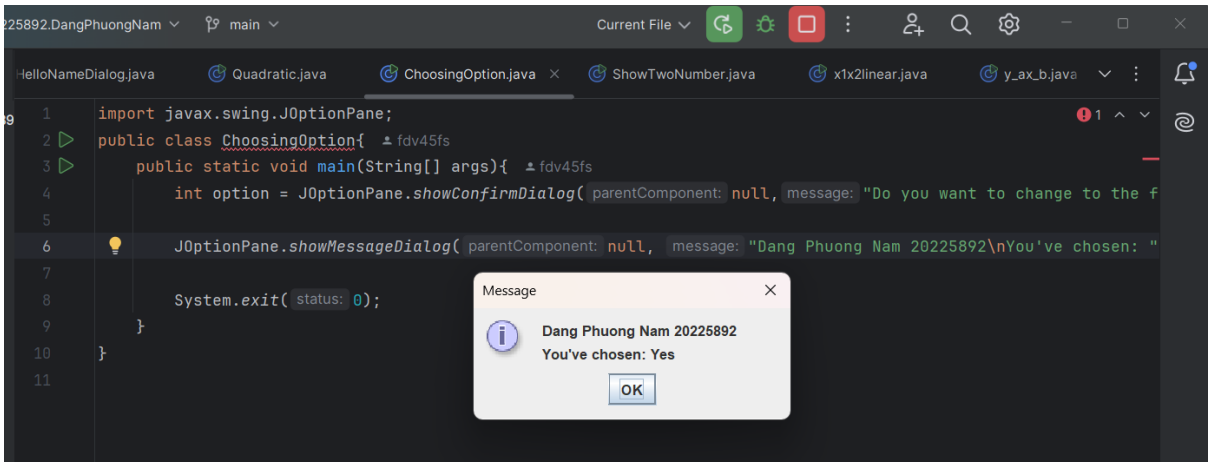


c. The second-degree equation with one variable

- Với hệ số là 1 3 2



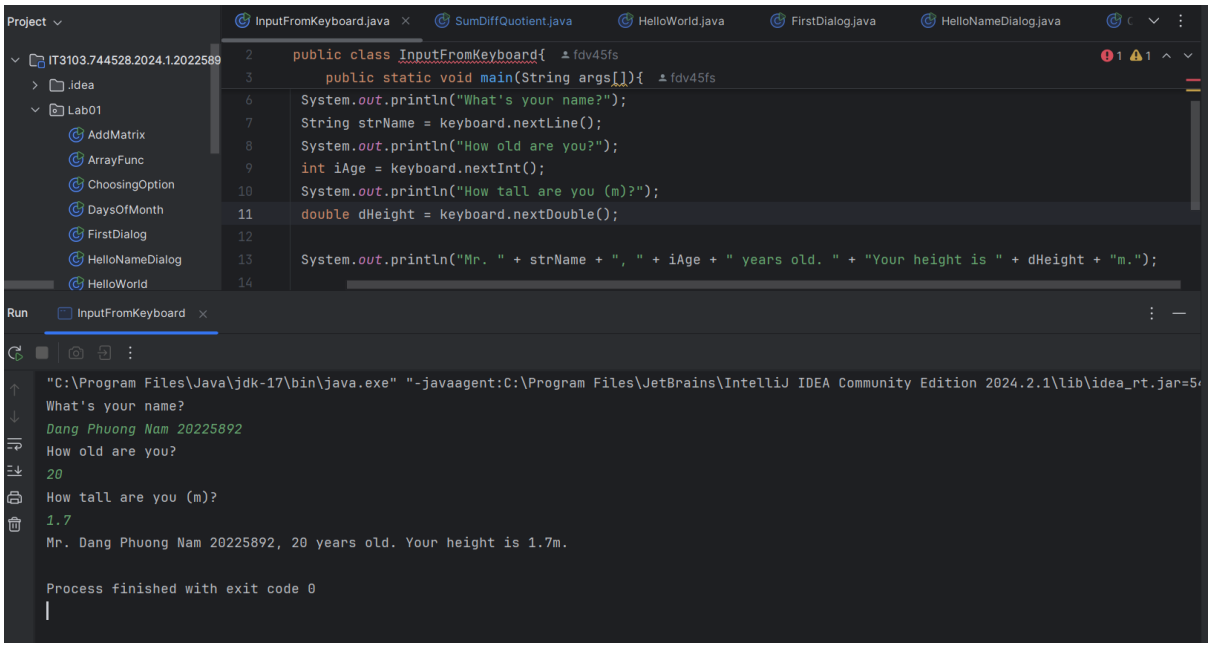
7. ChoosingOption



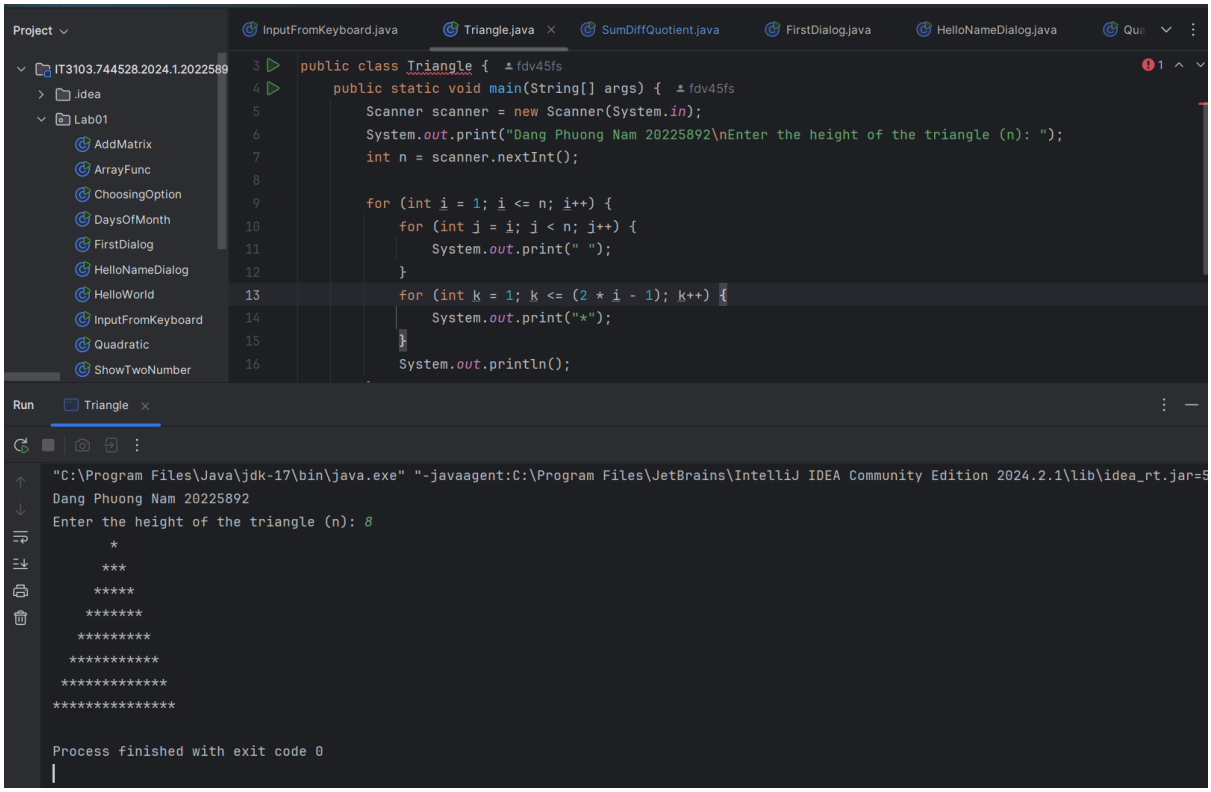
- Với lựa chọn Cancel, chương trình hiển thị “No” vì phép so sánh với giá trị Yes trả về giá trị false
- Ta có thể truyền vào một mảng gồm các chuỗi sẽ được hiển thị ở nút để có thể hiển thị 2 giá trị tuỳ chỉnh

```
String[] options = {"I do", "I don't"};

int choice = JOptionPane.showOptionDialog( parentComponent: null,
        message: "Do you agree?",
        title: "Question",
        JOptionPane.DEFAULT_OPTION,
        JOptionPane.PLAIN_MESSAGE,
        icon: null, options, options[0]);
```

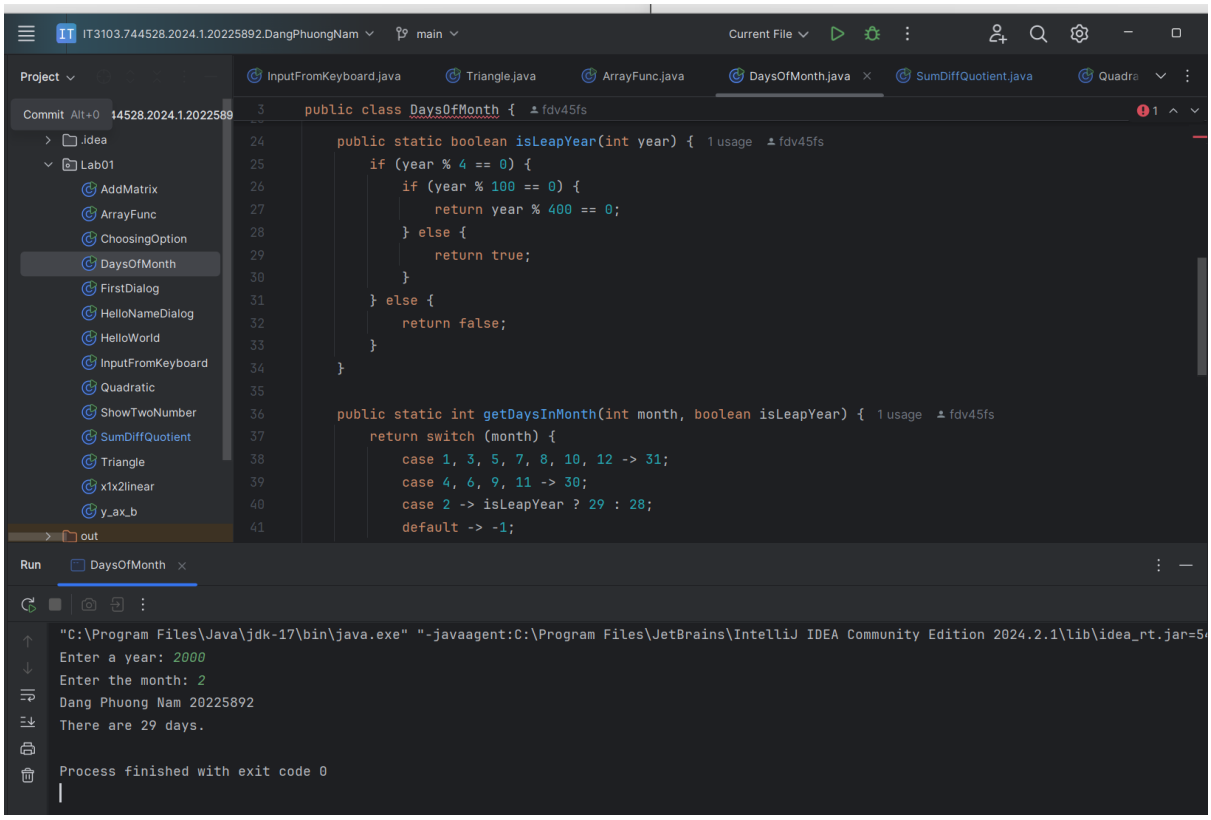
8. Write a program for input/output from keyboard



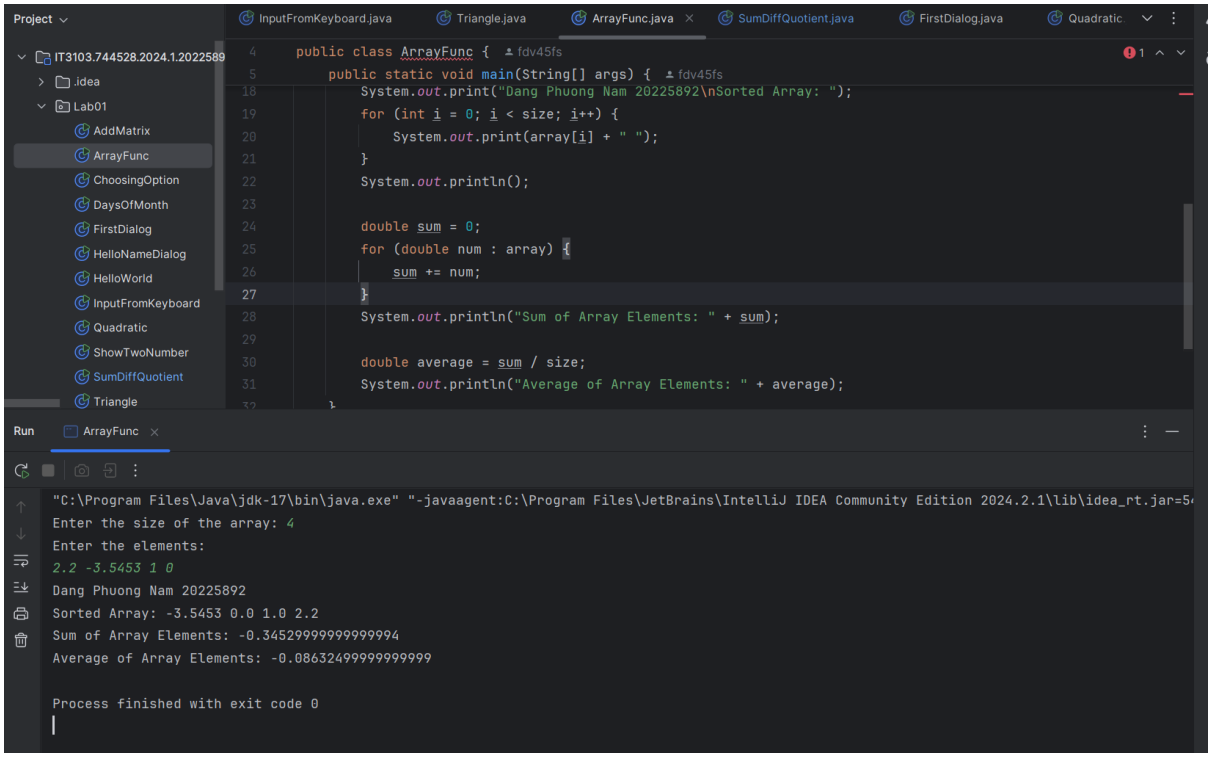
9. Triangle of stars with a height of n lines



10. Days of a month



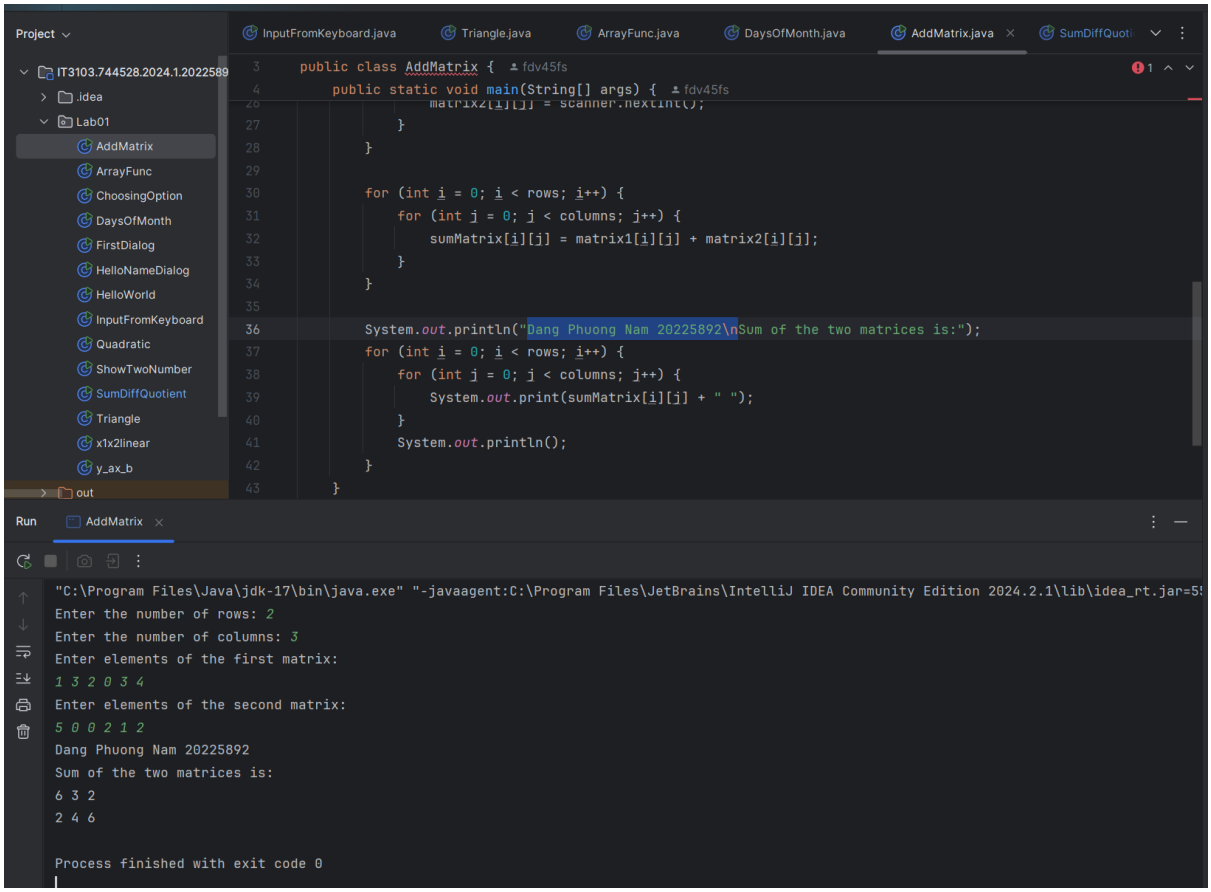
11. Array related operations



```
public class ArrayFunc {
    public static void main(String[] args) {
        System.out.print("Dang Phuong Nam 20225892\nSorted Array: ");
        for (int i = 0; i < size; i++) {
            System.out.print(array[i] + " ");
        }
        System.out.println();

        double sum = 0;
        for (double num : array) {
            sum += num;
        }
        System.out.println("Sum of Array Elements: " + sum);

        double average = sum / size;
        System.out.println("Average of Array Elements: " + average);
```

```
"C:\Program Files\Java\jdk-17\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.2.1\lib\idea_rt.jar=5
Enter the size of the array: 4
Enter the elements:
2.2 -3.5453 1 0
Dang Phuong Nam 20225892
Sorted Array: -3.5453 0.0 1.0 2.2
Sum of Array Elements: -0.34529999999999994
Average of Array Elements: -0.08632499999999999

Process finished with exit code 0
```

12. Add two matrices



```
public class AddMatrix {
    public static void main(String[] args) {
                }
            }

            for (int i = 0; i < rows; i++) {
                for (int j = 0; j < columns; j++) {
                    sumMatrix[i][j] = matrix1[i][j] + matrix2[i][j];
                }
            }

            System.out.println("Dang Phuong Nam 20225892\nSum of the two matrices is:");
            for (int i = 0; i < rows; i++) {
                for (int j = 0; j < columns; j++) {
                    System.out.print(sumMatrix[i][j] + " ");
                }
                System.out.println();
            }
        }
```

```
"C:\Program Files\Java\jdk-17\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.2.1\lib\idea_rt.jar=5
Enter the number of rows: 2
Enter the number of columns: 3
Enter elements of the first matrix:
1 3 2 0 3 4
Enter elements of the second matrix:
5 0 0 2 1 2
Dang Phuong Nam 20225892
Sum of the two matrices is:
6 3 2
2 4 6

Process finished with exit code 0
```