

BÁO CÁO THỰC HÀNH LAB 11

Lập trình hướng đối tượng

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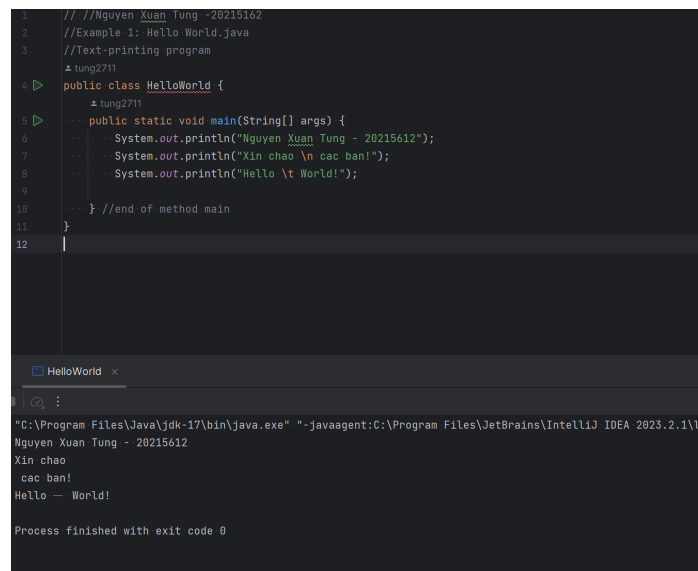
Ngày 15 tháng 10 năm 2023

The Very First Java Programs

2.2.1 Write, compile the first Java application:

```
1 //Example 1: HelloWorld.java
2 //Text-printing program
3 public class HelloWorld {
4
5     public static void main(String args[]){
6         System.out.println("Xin chào \n các bạn!");
7         System.out.println("Hello \t world!");
8     } // end of method main
9 }
10 }
```

Hình 1: đề bài 2.2.1



The screenshot shows an IDE with two panels. The top panel displays the source code for a Java class named HelloWorld. The code includes comments and a main method that prints two lines of text. The bottom panel shows the output of the program, which matches the printed text in the code. The output is displayed in a console window with a dark background.

```
1 // Nguyễn Xuân Tùng - 20215162
2 //Example 1: Hello World.java
3 //Text-printing program
4 //tung2711
5 public class HelloWorld {
6     public static void main(String[] args) {
7         System.out.println("Nguyễn Xuân Tùng - 20215162");
8         System.out.println("Xin chào \n các bạn!");
9         System.out.println("Hello \t World!");
10    } //end of method main
11 }
12
```

Output:

```
"C:\Program Files\Java\jdk-17\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2023.2.1\lib\idea_rt.jar" 2634.0
Nguyễn Xuân Tùng - 20215162
Xin chào
các bạn!
Hello — World!

Process finished with exit code 0
```

Hình 2: Mã nguồn và kết quả 2.2.1

2.2.2 Write, compile the first dialog Java program

```
1 // Example 2: FirstDialog.java
2 import javax.swing.JOptionPane;
3 public class FirstDialog{
4     public static void main(String[] args){
5         JOptionPane.showMessageDialog(null,"Hello world! How are you?");
6         System.exit(0);
7     }
8 }
```

Hình 3: Đề bài 2.2.2

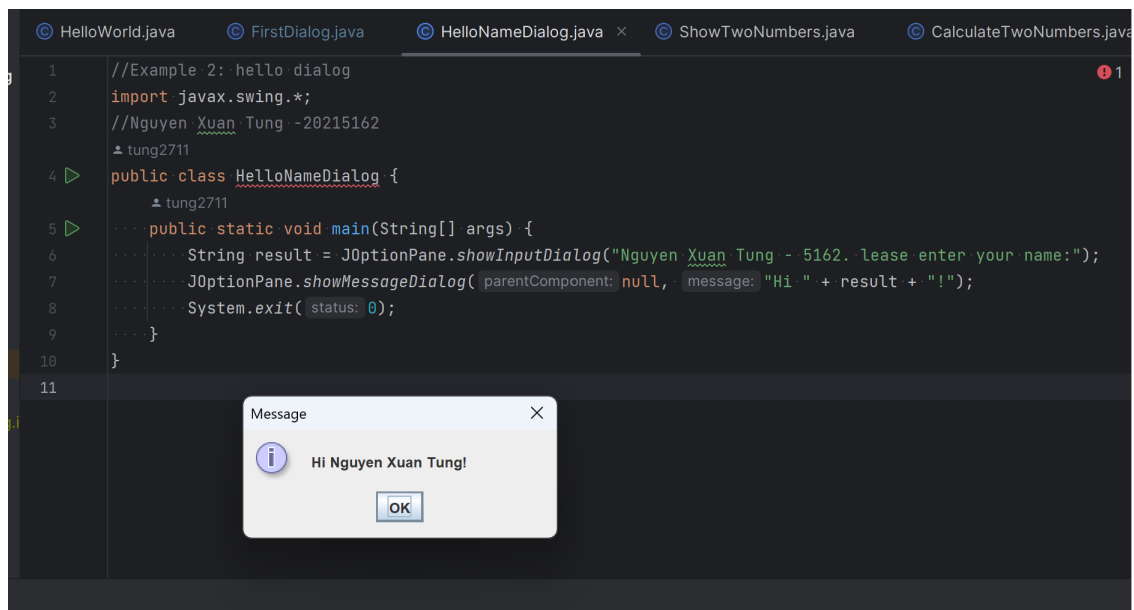
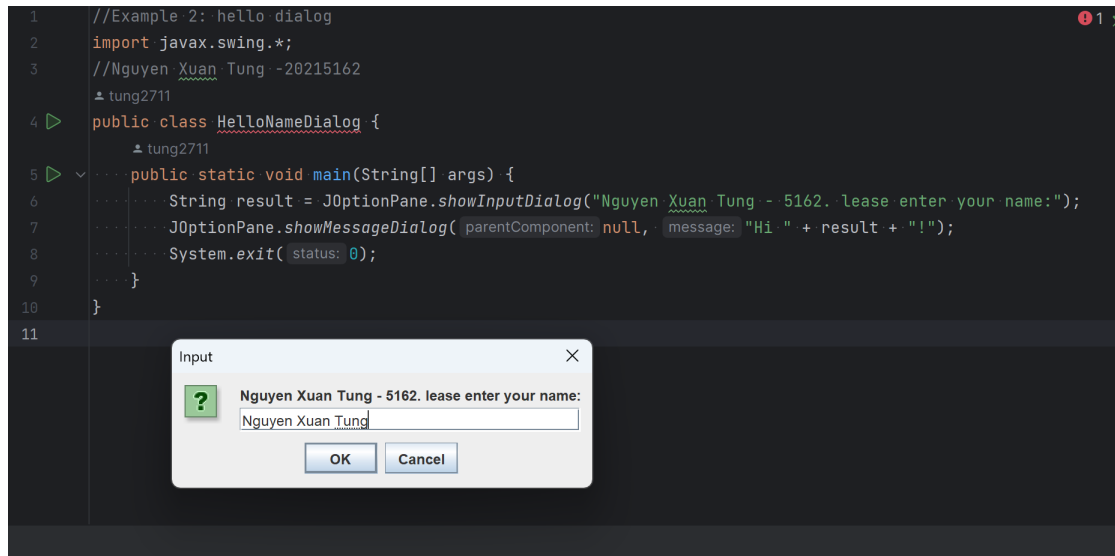


Hình 4: Mã nguồn và kết quả 2.2.2

2.2.3 Write, compile the first input dialog Java application

```
1 // Example 3: HelloNameDialog.java
2 import javax.swing.JOptionPane;
3 public class HelloNameDialog{
4     public static void main(String[] args){
5         String result;
6         result = JOptionPane.showInputDialog("Please enter your name:");
7         JOptionPane.showMessageDialog(null, "Hi " + result + "!");
8         System.exit(0);
9     }
10 }
```

Hình 5: Đề bài 2.2.3



Hình 6: Kết quả 2.2.3

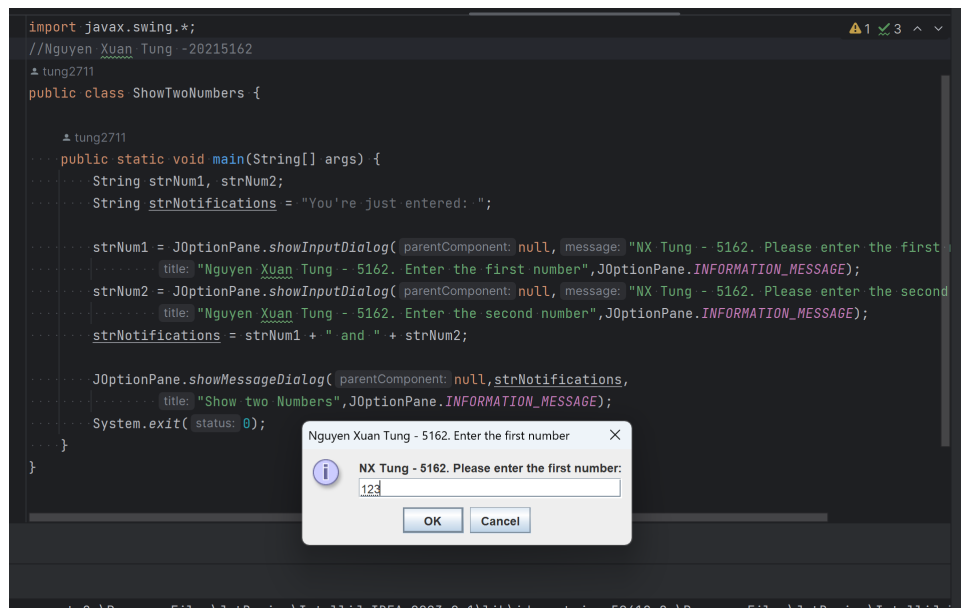
2.2.4 Write, compile, and run the following example:

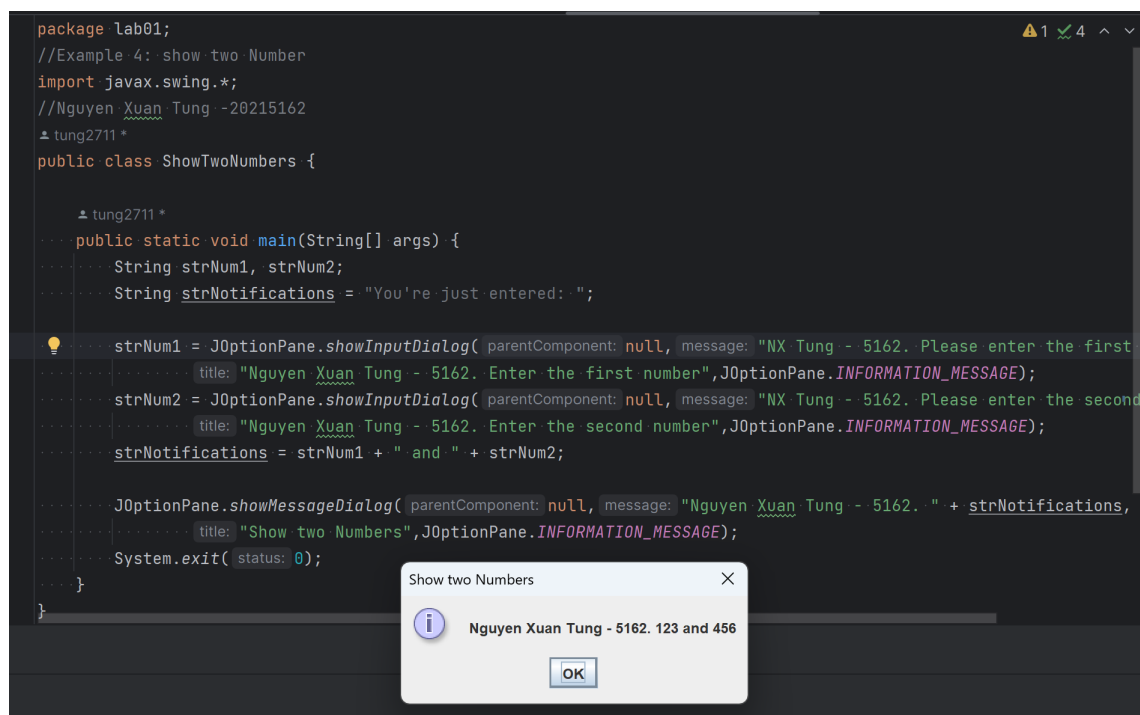
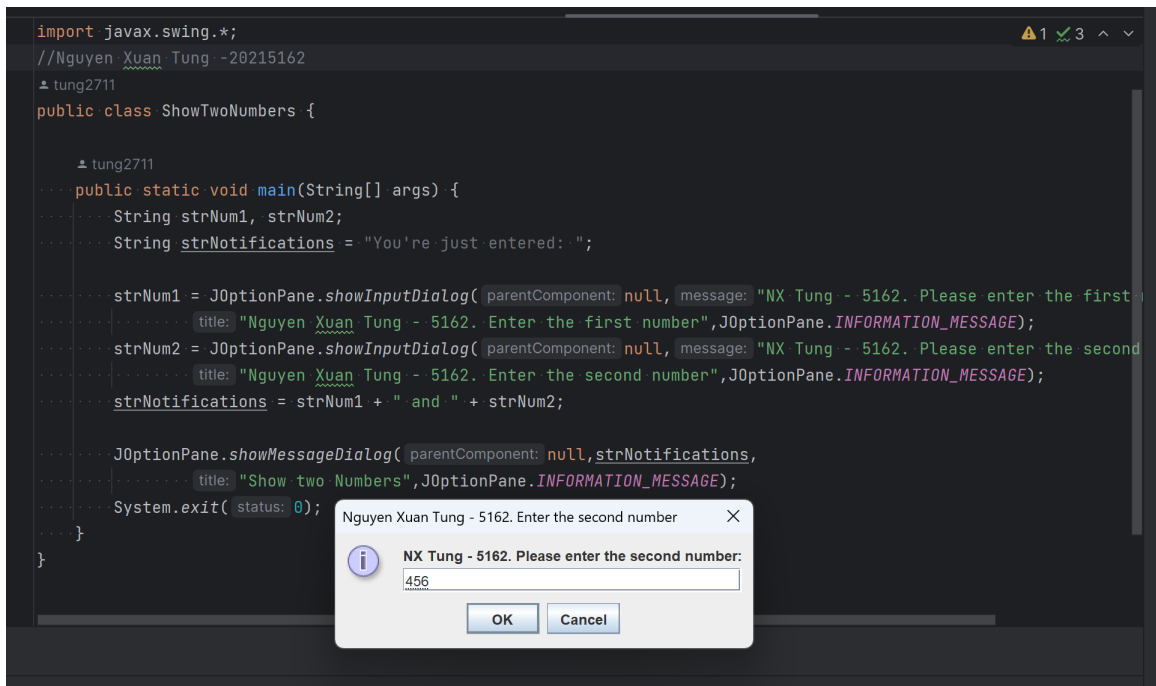
```

1 // Example 5: ShowTwoNumbers.java
2 import javax.swing.JOptionPane;
3 public class ShowTwoNumbers {
4     public static void main(String[] args){
5         String strNum1, strNum2;
6         String strNotification = "You've just entered: ";
7
8         strNum1 = JOptionPane.showInputDialog(null,
9             "Please input the first number: ", "Input the first number",
10            JOptionPane.INFORMATION_MESSAGE);
11         strNotification += strNum1 + " and ";
12
13         strNum2 = JOptionPane.showInputDialog(null,
14             "Please input the second number: ", "Input the second number",
15            JOptionPane.INFORMATION_MESSAGE);
16         strNotification += strNum2;
17
18         JOptionPane.showMessageDialog(null, strNotification,
19             "Show two numbers", JOptionPane.INFORMATION_MESSAGE);
20         System.exit(0);
21     }
22 }

```

Hình 7: Đề bài 2.2.4





Hình 8: Mã nguồn và kết quả 2.2.4

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

```
//Example5: Calculate two number
import javax.swing.*;
// Tinh toan tong, hieu, tich, thuong tu 2 so nhap vao
tung2711

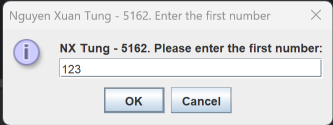
public class CalculateTwoNumbers {
    tung2711

    public static void main(String[] args) {
        String strNum1, strNum2;

        strNum1 = JOptionPane.showInputDialog( parentComponent: null, message: "NX Tung - 5162. Please enter the first number", title: "Nguyễn Xuân Tùng - 5162. Enter the first number",JOptionPane.INFORMATION_MESSAGE);
        strNum2 = JOptionPane.showInputDialog( parentComponent: null, message: "NX Tung - 5162. Please enter the second number", title: "Nguyễn Xuân Tùng - 5162. Enter the second number",JOptionPane.INFORMATION_MESSAGE);

        double num1 = Double.parseDouble(strNum1);
        double num2 = Double.parseDouble(strNum2);

        JOptionPane.showMessageDialog( parentComponent: null, message: "sum: " + (num1+num2) + "\n"
        + "difference: " + (num1 - num2) + "\n"
        + "product: " + num1*num2 + "\n"
        + "quotient: " + num1/num2);
        System.exit( status: 0);
    }
}
```



```
//Example5: Calculate two number
import javax.swing.*;
// Tinh toan tong, hieu, tich, thuong tu 2 so nhap vao
tung2711

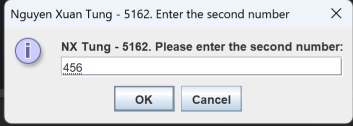
public class CalculateTwoNumbers {
    tung2711

    public static void main(String[] args) {
        String strNum1, strNum2;

        strNum1 = JOptionPane.showInputDialog( parentComponent: null, message: "NX Tung - 5162. Please enter the first number", title: "Nguyễn Xuân Tùng - 5162. Enter the first number",JOptionPane.INFORMATION_MESSAGE);
        strNum2 = JOptionPane.showInputDialog( parentComponent: null, message: "NX Tung - 5162. Please enter the second number", title: "Nguyễn Xuân Tùng - 5162. Enter the second number",JOptionPane.INFORMATION_MESSAGE);

        double num1 = Double.parseDouble(strNum1);
        double num2 = Double.parseDouble(strNum2);

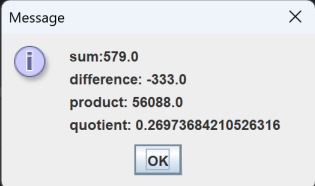
        JOptionPane.showMessageDialog( parentComponent: null, message: "sum: " + (num1+num2) + "\n"
        + "difference: " + (num1 - num2) + "\n"
        + "product: " + num1*num2 + "\n"
        + "quotient: " + num1/num2);
        System.exit( status: 0);
    }
}
```



```
//Examples: calculate two number
import javax.swing.*;
// Tính toán tổng, hiệu, tích, thương từ 2 số nhập vào
tung2711
public class CalculateTwoNumbers {
    tung2711
    public static void main(String[] args) {
        String strNum1, strNum2;

        strNum1 = JOptionPane.showInputDialog( parentComponent: null, message: "NX Tung - 5162. Please enter the first number",
        title: "Nguyễn Xuân Tùng - 5162. Enter the first number",JOptionPane.INFORMATION_MESSAGE);
        strNum2 = JOptionPane.showInputDialog( parentComponent: null, message: "NX Tung - 5162. Please enter the second number",
        title: "Nguyễn Xuân Tùng - 5162. Enter the second number",JOptionPane.INFORMATION_MESSAGE);
        double num1 = Double.parseDouble(strNum1);
        double num2 = Double.parseDouble(strNum2);

        JOptionPane.showMessageDialog( parentComponent: null, message: "sum: " + (num1+num2) + "\n"
        + "difference: " + (num1 - num2) + "\n"
        + "product: " + num1*num2 + "\n"
        + "quotient: " + num1/num2);
        System.exit( status: 0);
    }
}
```



Hình 9: Mã nguồn và kết quả 2.2.5