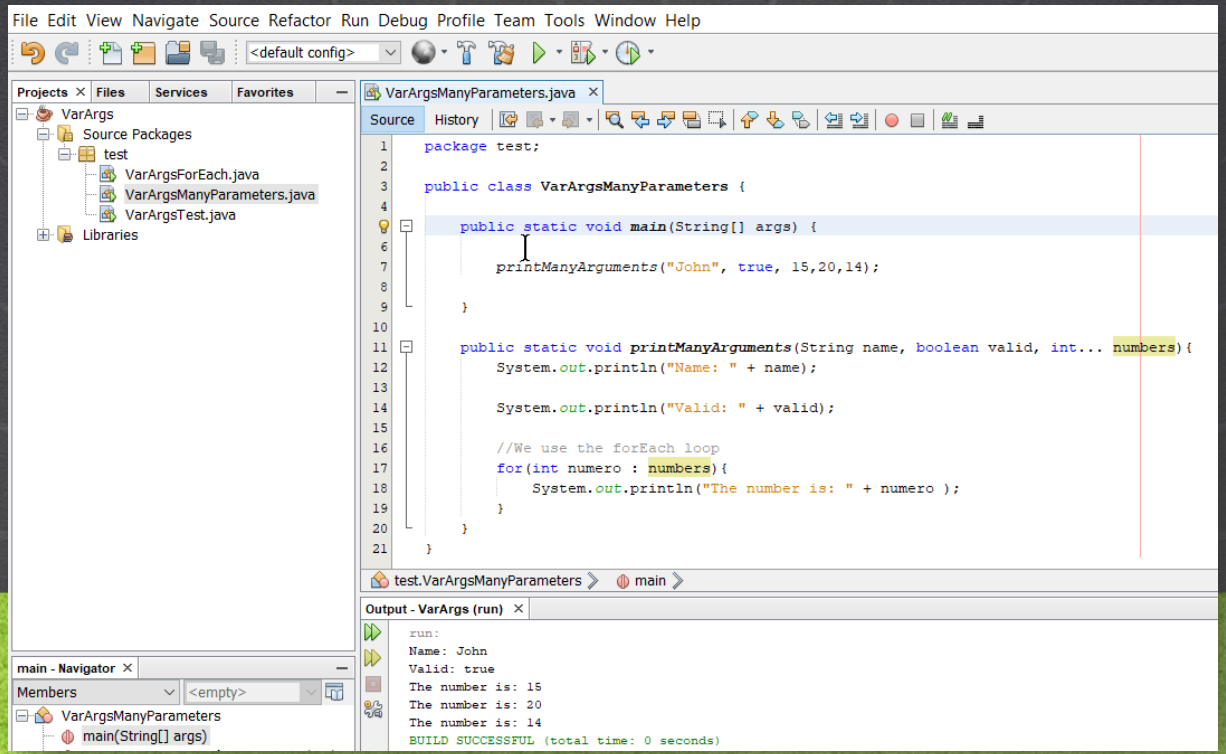
EXERCISE

VARARGS IN JAVA

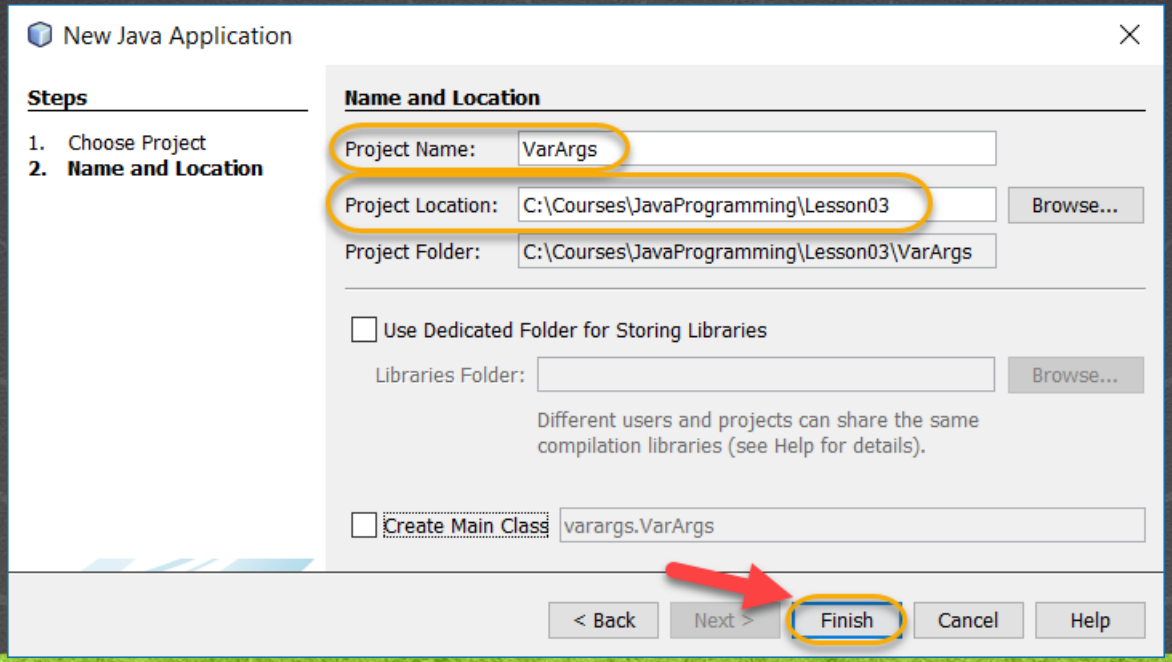
EXERCISE OBJECTIVE

Create a program to implement the use of variable arguments in Java (varargs). At the end we should observe the following:



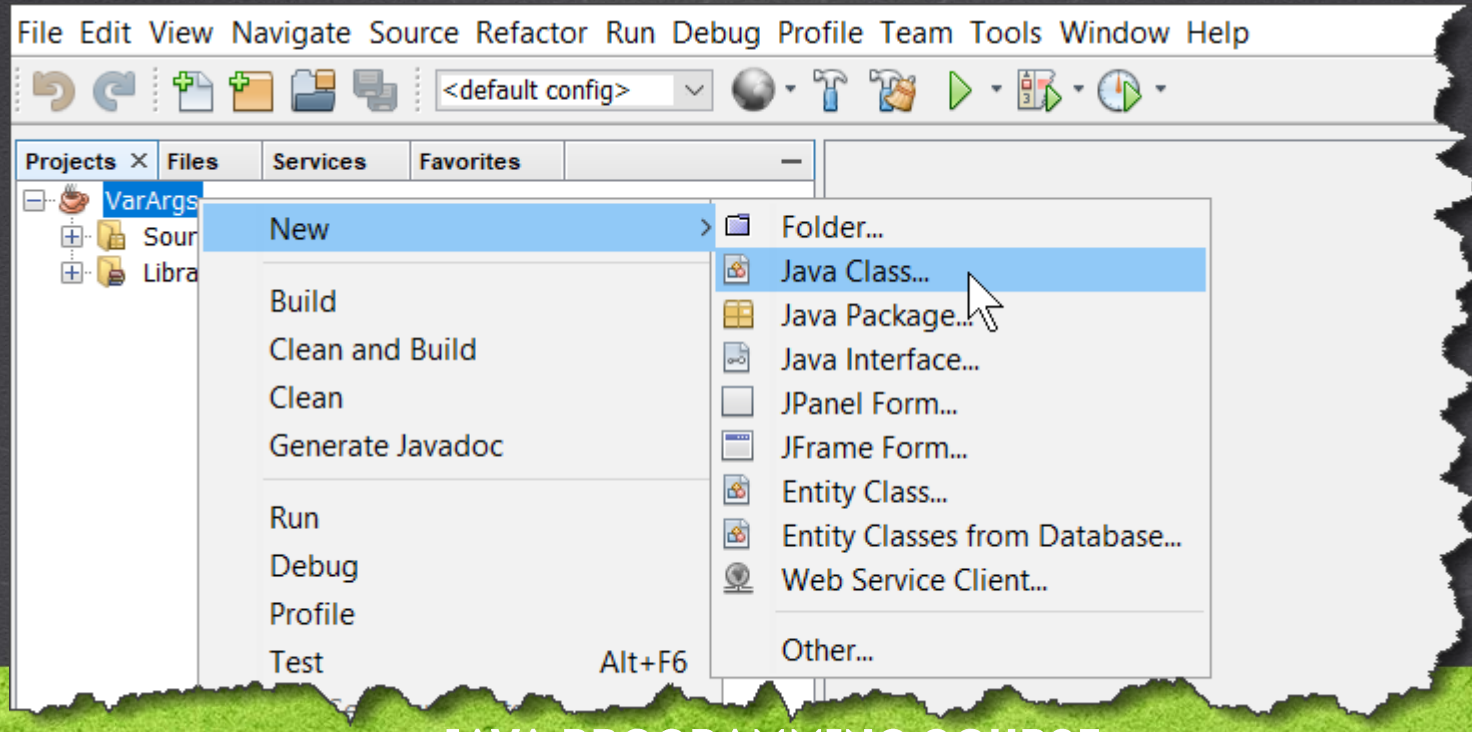
1. CREATE A NEW PROJECT

Create a new project:



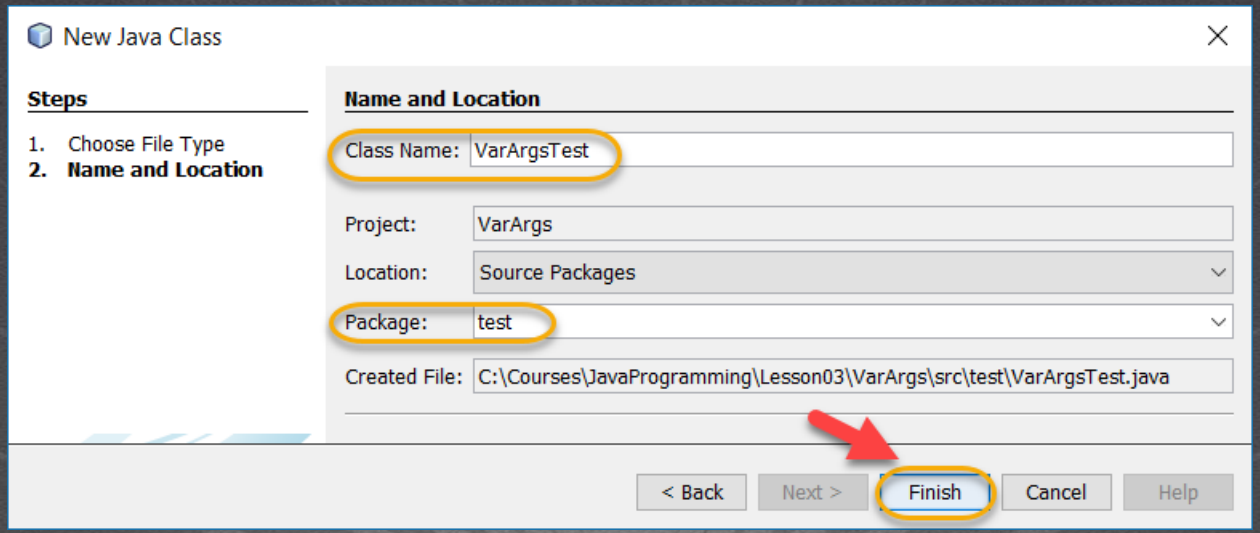
2. CREATE A NEW CLASS

Create a new Java class:



2. CREATE A NEW CLASS

Create a new Java class:



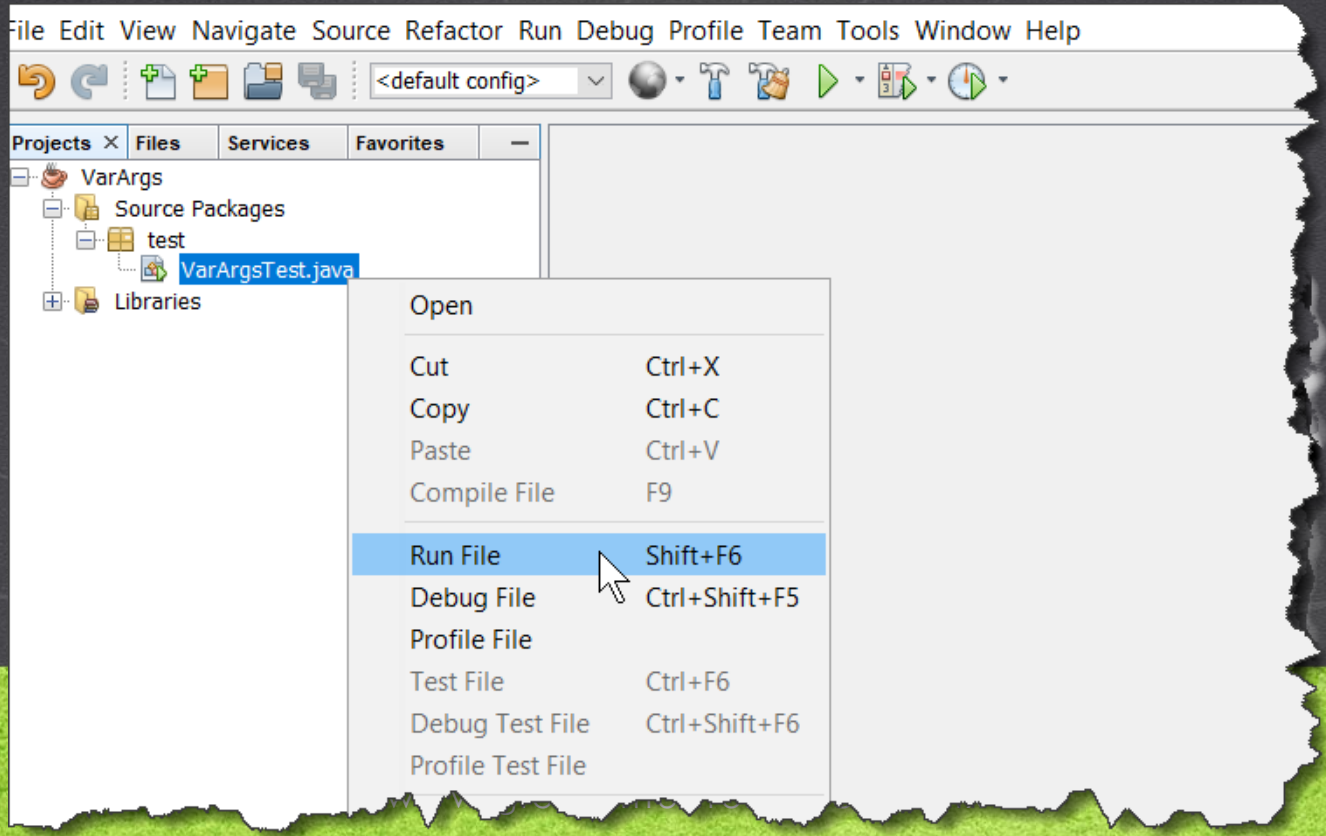
3. MODIFY THE CODE

VarArgsTest.java:

```
package test;

public class VarArgsTest {

    public static void main(String[] args) {
        //Print several numbers
        printNumbers(15,20,3,61,75,18,10);
    }

    public static void printNumbers(int... numbers){
        //We go through each element of the array
        int element;
        System.out.println("Number of elements:" + numbers.length);
        for(int i=0; i < numbers.length; i++){
            element = numbers[i];
            System.out.println("Element: " + element);
        }
    }
}
```

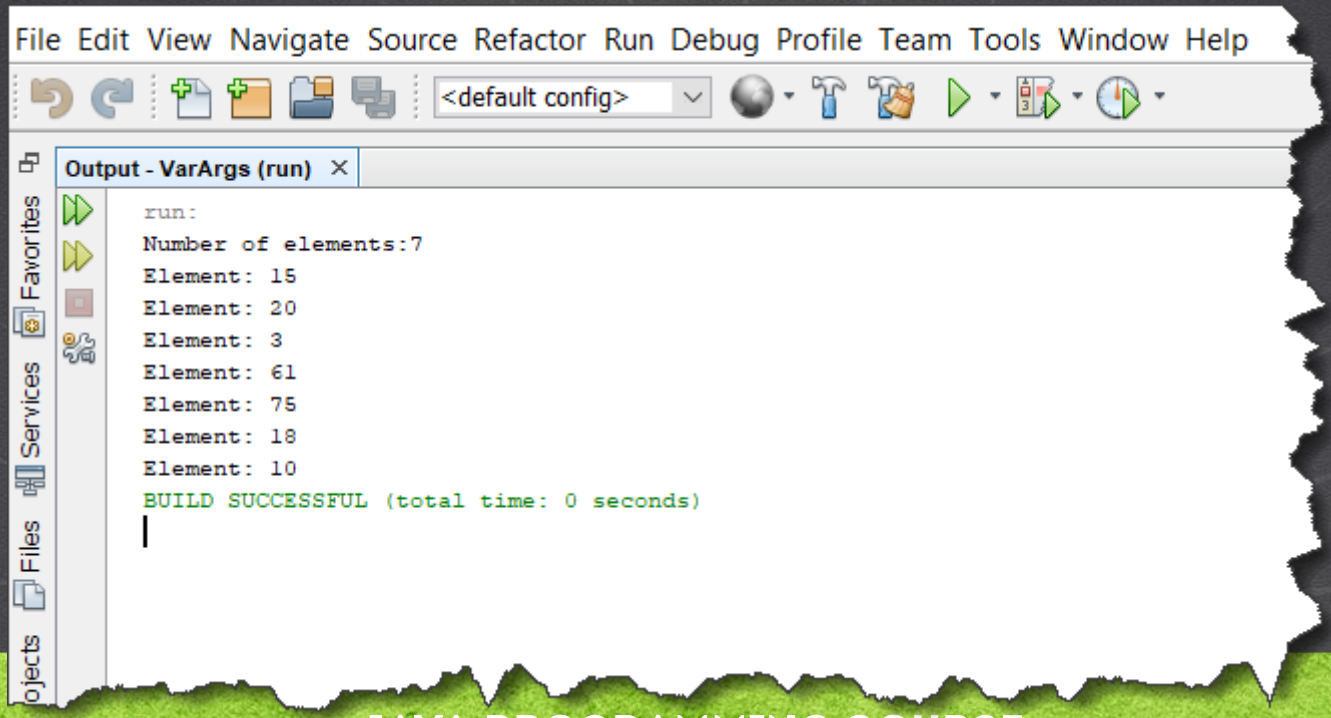
4. EXECUTE THE CLASS

Execute the class:



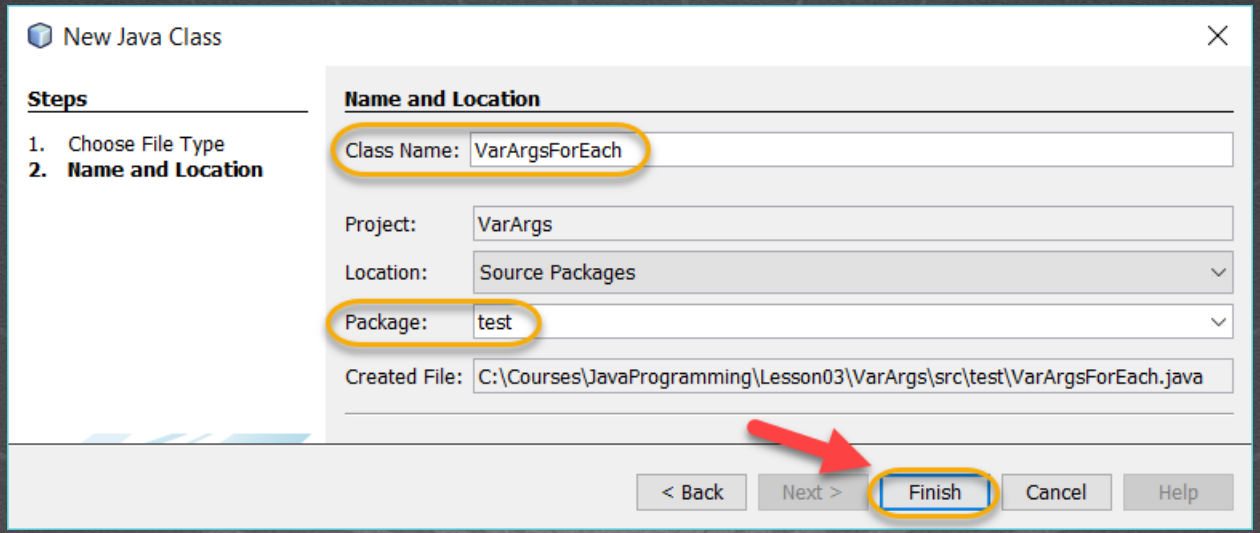
4. EXECUTE THE CLASS (CONT)

The result is as follows:



5. CREATE A NEW CLASS

Create a new Java class:



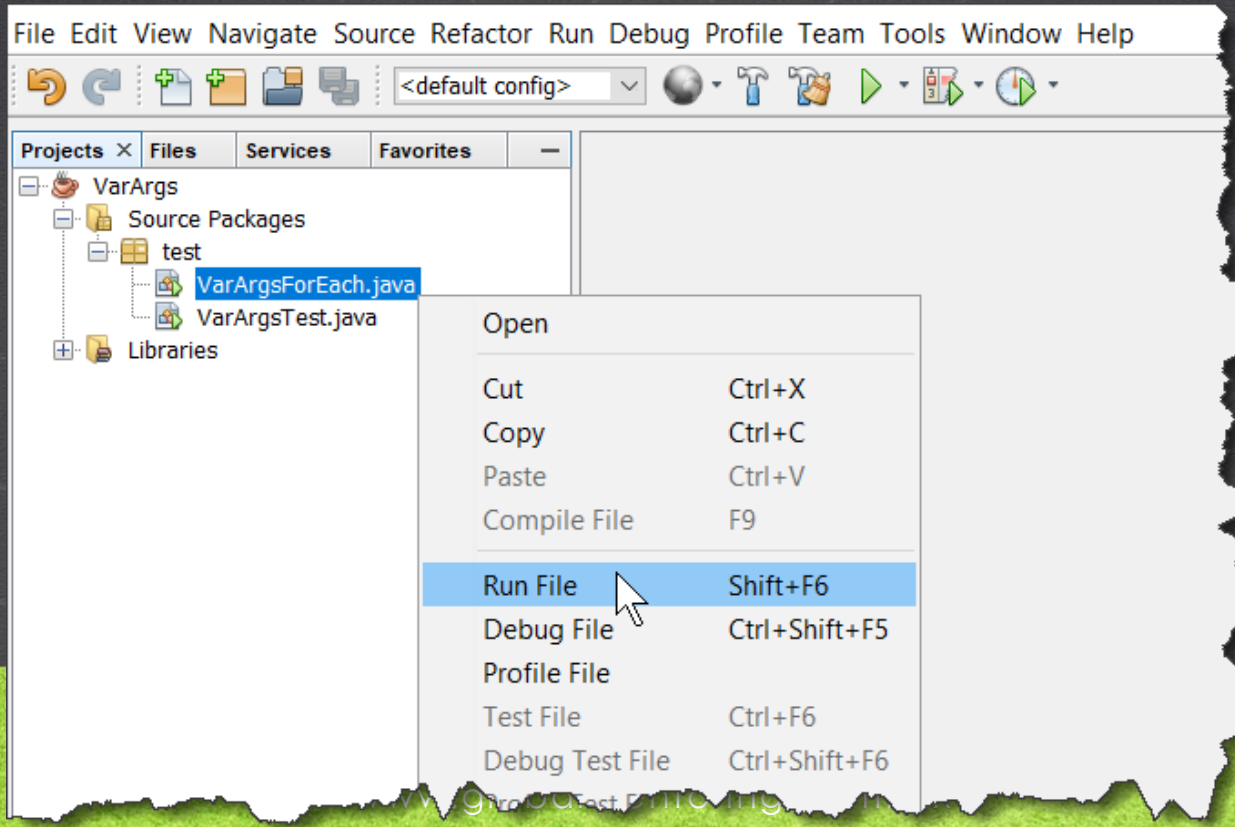
6. MODIFY THE CODE

VarArgsForEach.java:

```
package test;

public class VarArgsForEach {

    public static void main(String[] args) {

        printNumbersForEach(15,20,3,61,75,18,10);

    }

    public static void printNumbersForEach(int... numbers){
        System.out.println("Number of elements: " + numbers.length);
        //We will use a forEach loop instead of a normal for loop
        for(int number:  numbers){
            System.out.println("The number is:" + number );
        }
    }
}
```

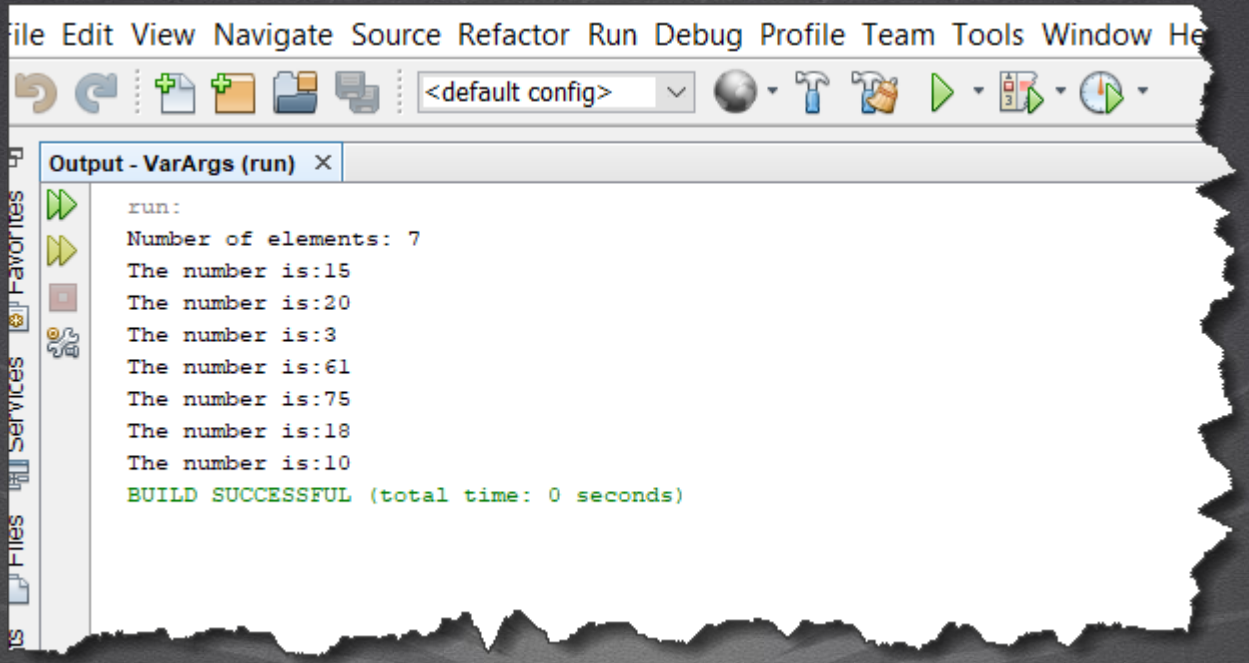
7. EXECUTE THE CLASS

Execute the class:



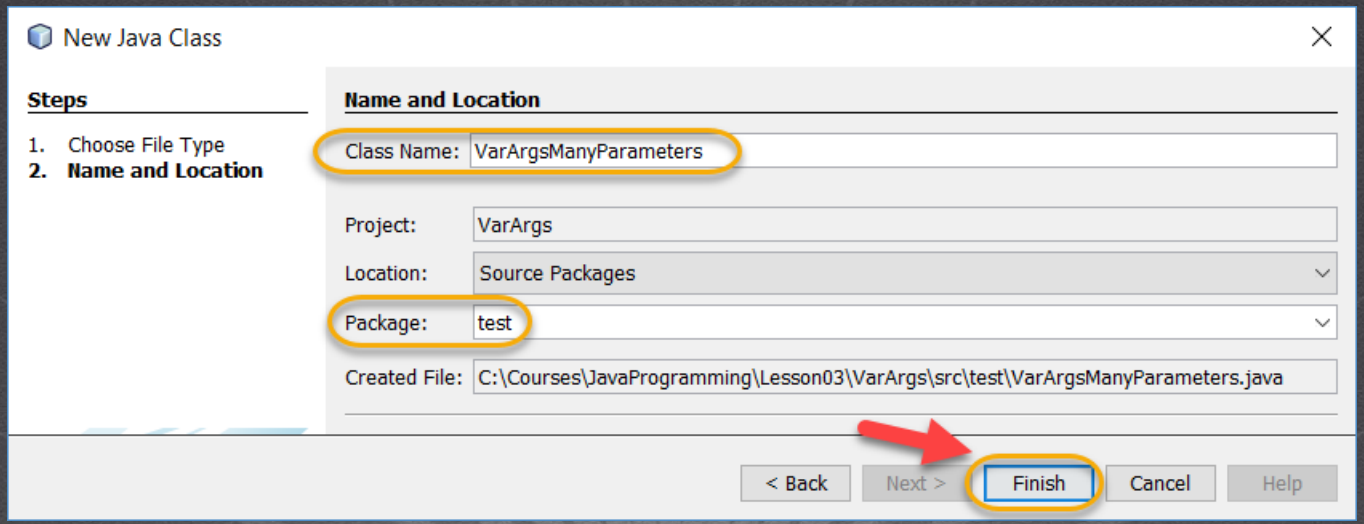
7. EXECUTE THE CLASS (CONT)

The result is as follows:



8. CREATE A NEW CLASS

Create a new Java class:



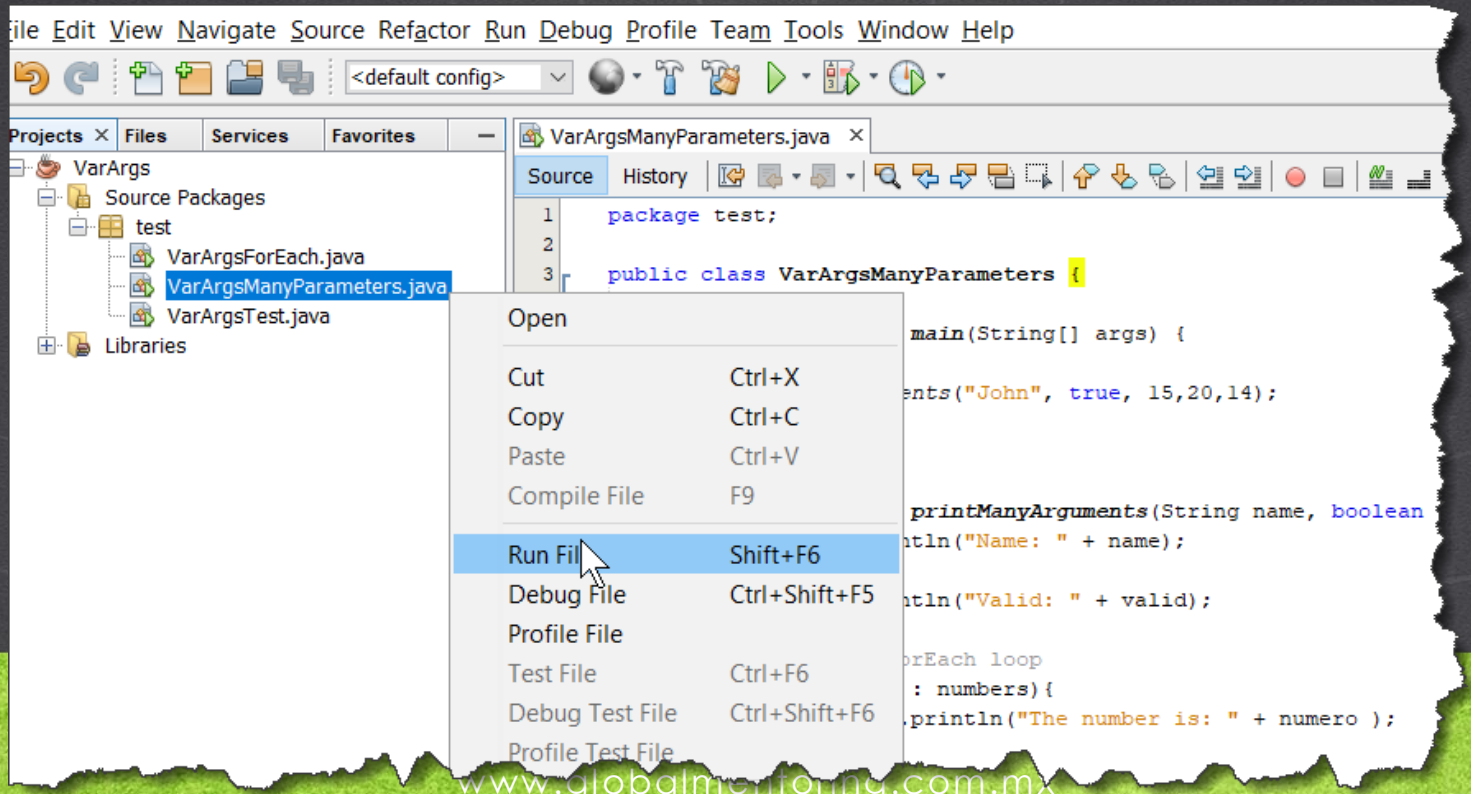
9. MODIFY THE CODE

VarArgsManyParameters.java:

```
package test;

public class VarArgsManyParameters {

    public static void main(String[] args) {

        printManyArguments("John", true, 15,20,14);

    }

    public static void printManyArguments(String name, boolean valid, int... numbers){
        System.out.println("Name: " + name);

        System.out.println("Valid: " + valid);

        //We use the forEach loop
        for(int number : numbers){
            System.out.println("The number is: " + number);
        }
    }
}
```

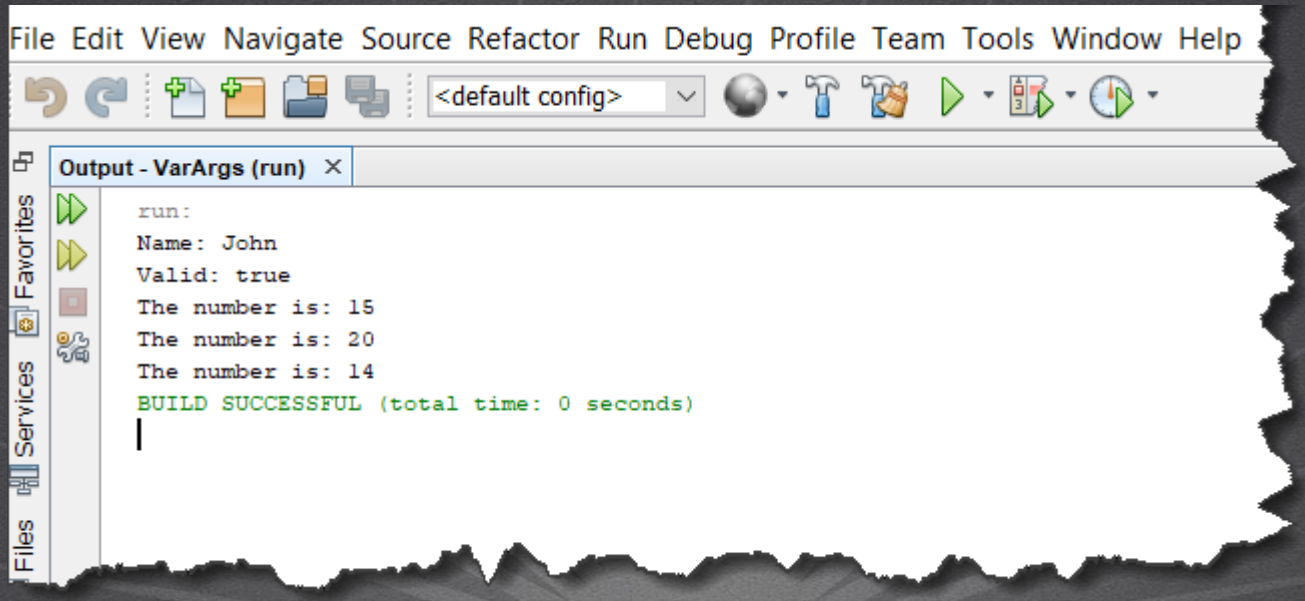
10. EXECUTE THE CLASS

Execute the class:



10. EXECUTE THE CLASS (CONT)

The result is as follows:



EXERCISE CONCLUSION

- With this exercise we have put into practice the concept of variable arguments (varargs) in Java.

- We have seen that in addition to the use of variable arguments, we can combine it with the concept of forEach to go through each of the arguments of the created vararg array.

ONLINE COURSE

JAVA PROGRAMMING

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