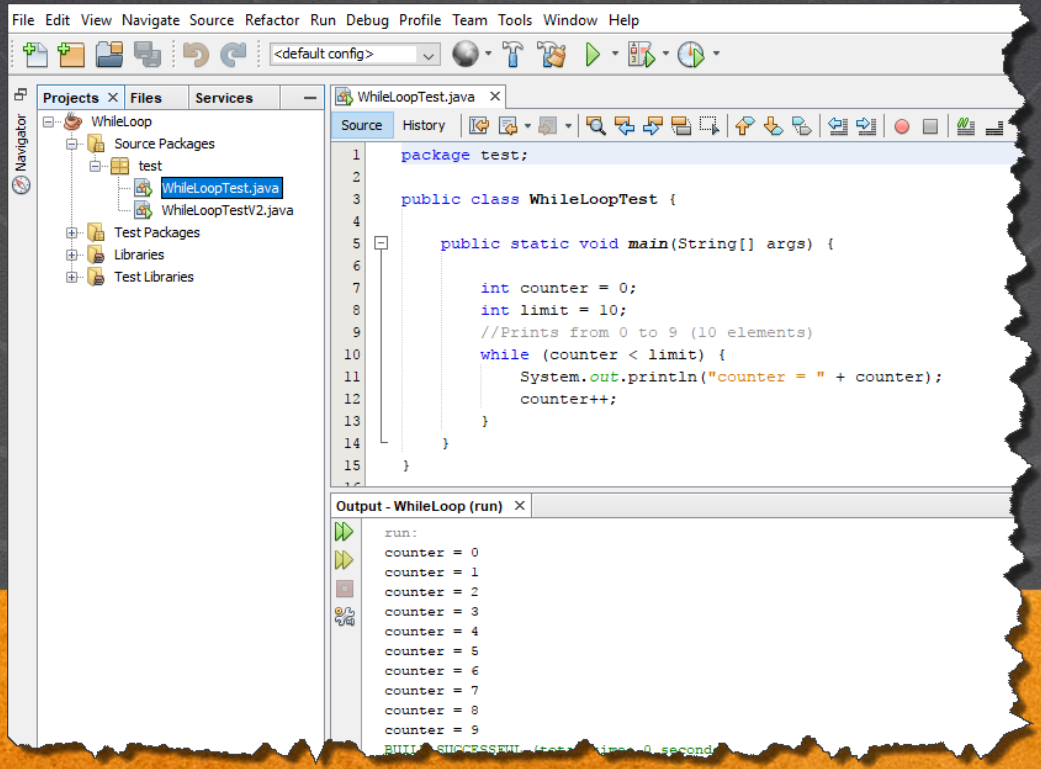
EXERCISE

WHILE LOOP

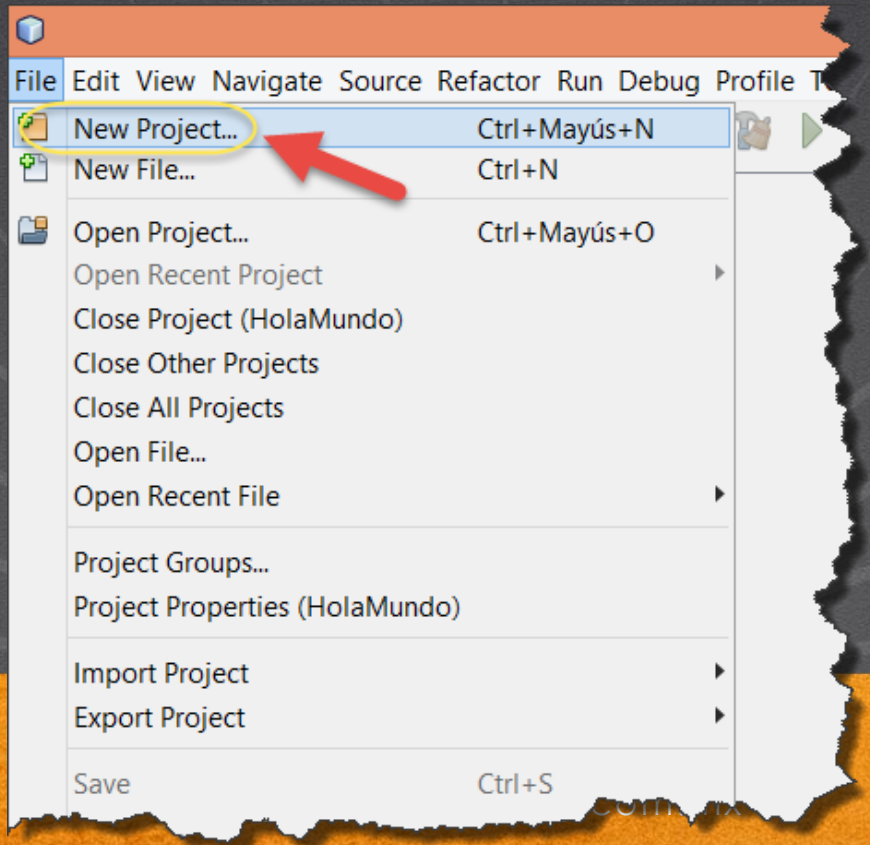
EXERCISE OBJECTIVE

Create an exercise of the while loop. At the end we should observe the following:



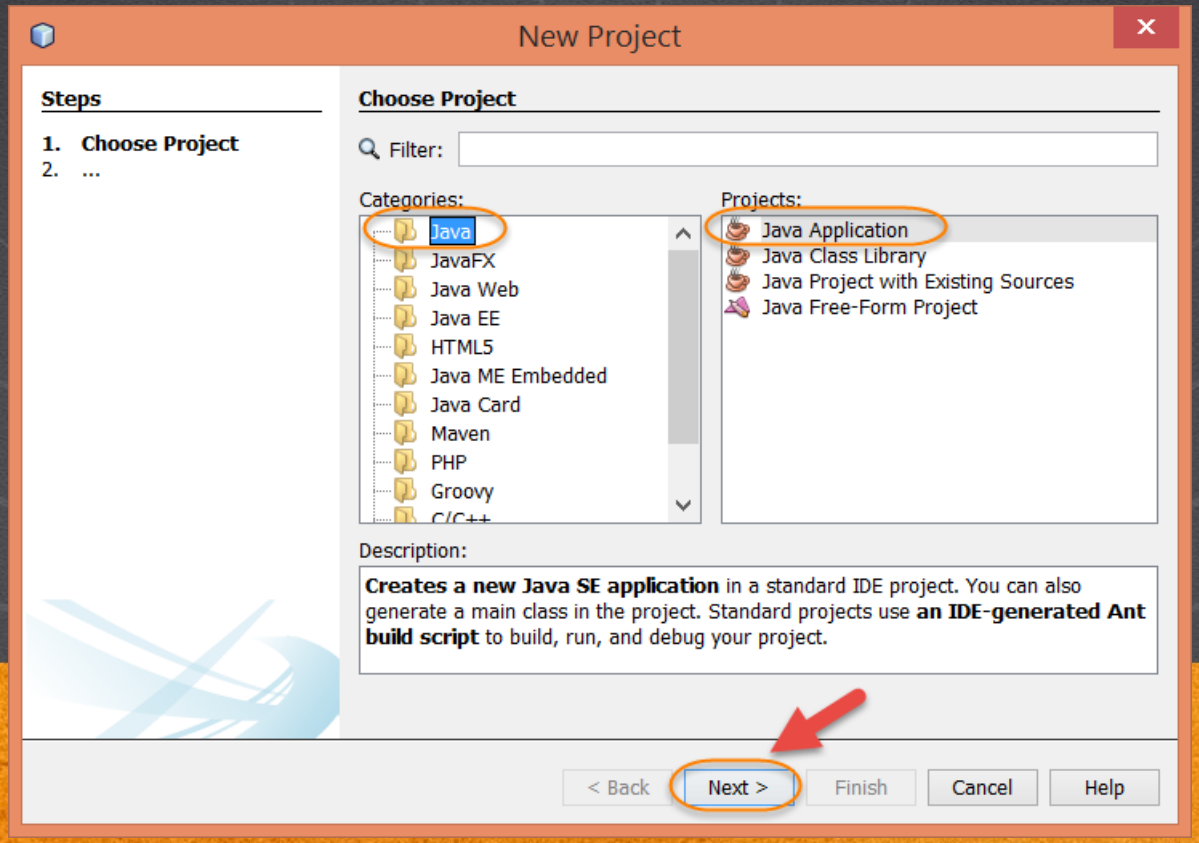
1. CREATE A NEW PROJECT

We are going to create the WhileLoop project:



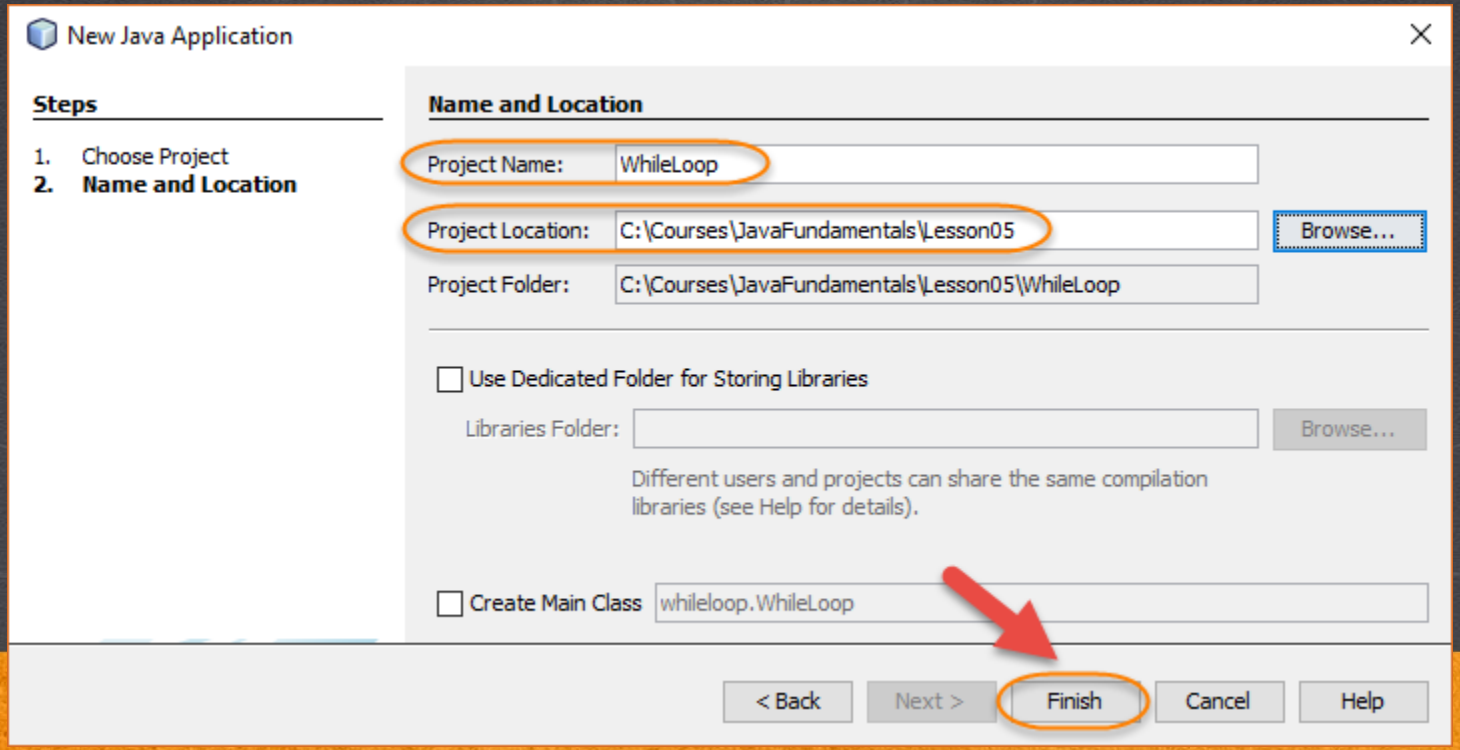
1. CREATE A NEW PROJECT (CONT)

Select Java -> Java Application:



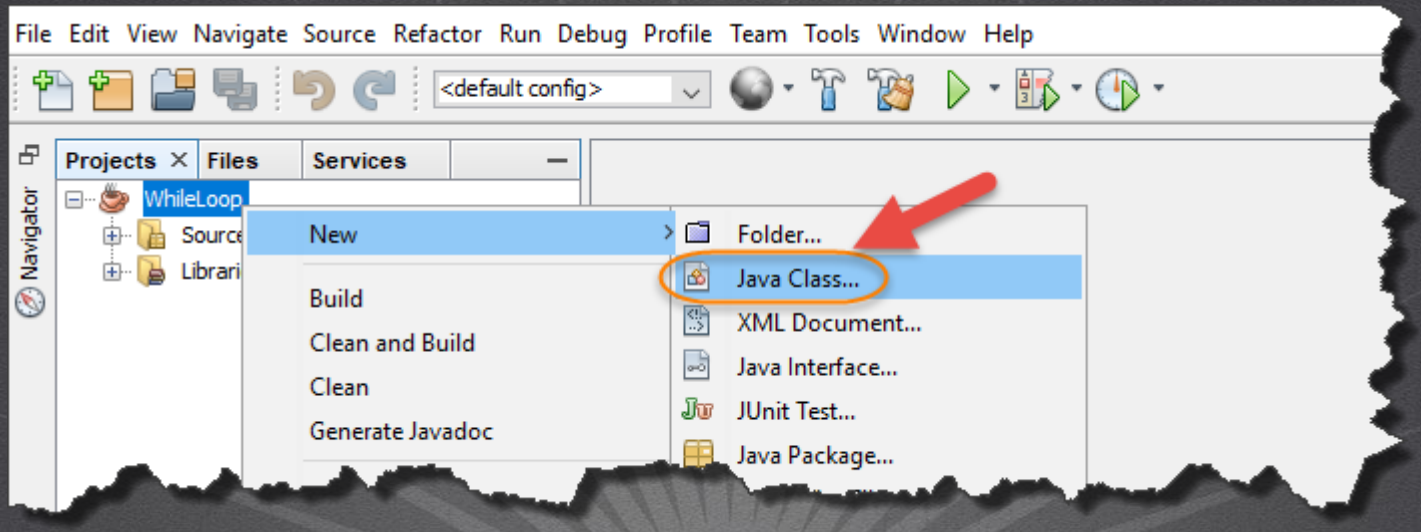
1. CREATE A NEW PROJECT (CONT)

We are going to create the WhileLoop project:



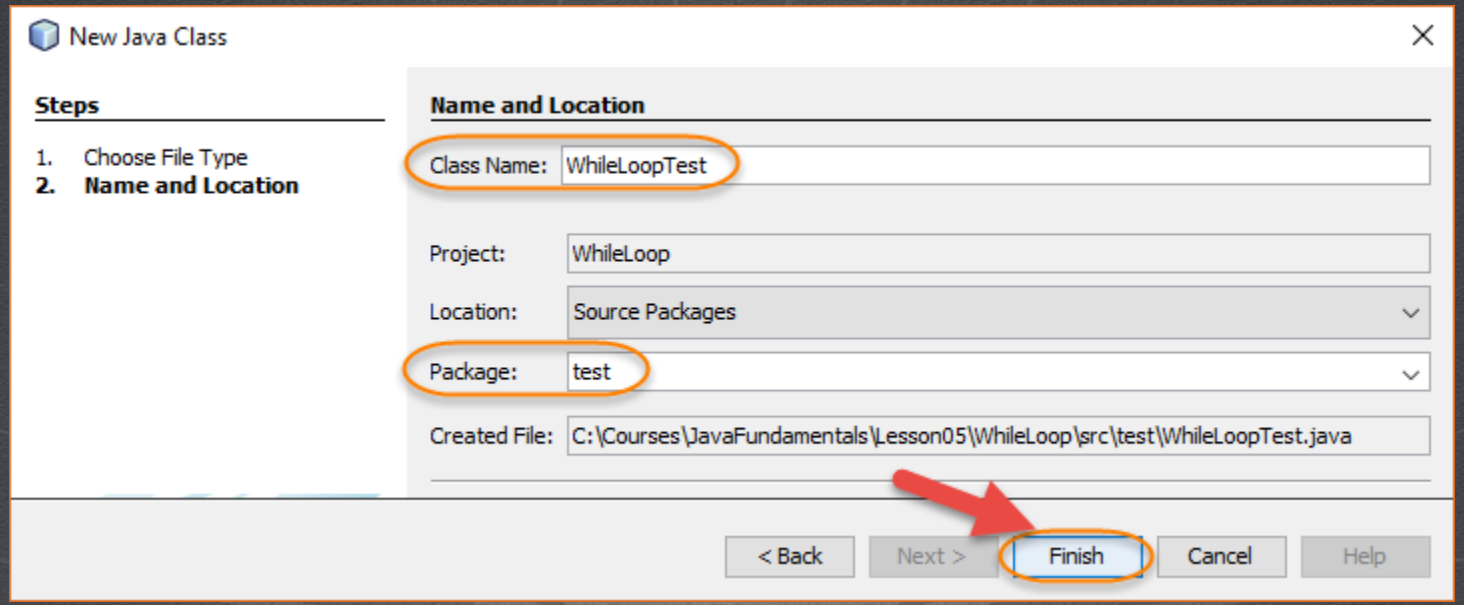
2. CREATE A NEW CLASS

We'll create the WhileLoopTest.java class:



2. CREATE A NEW CLASS

We'll create the WhileLoopTest.java class:



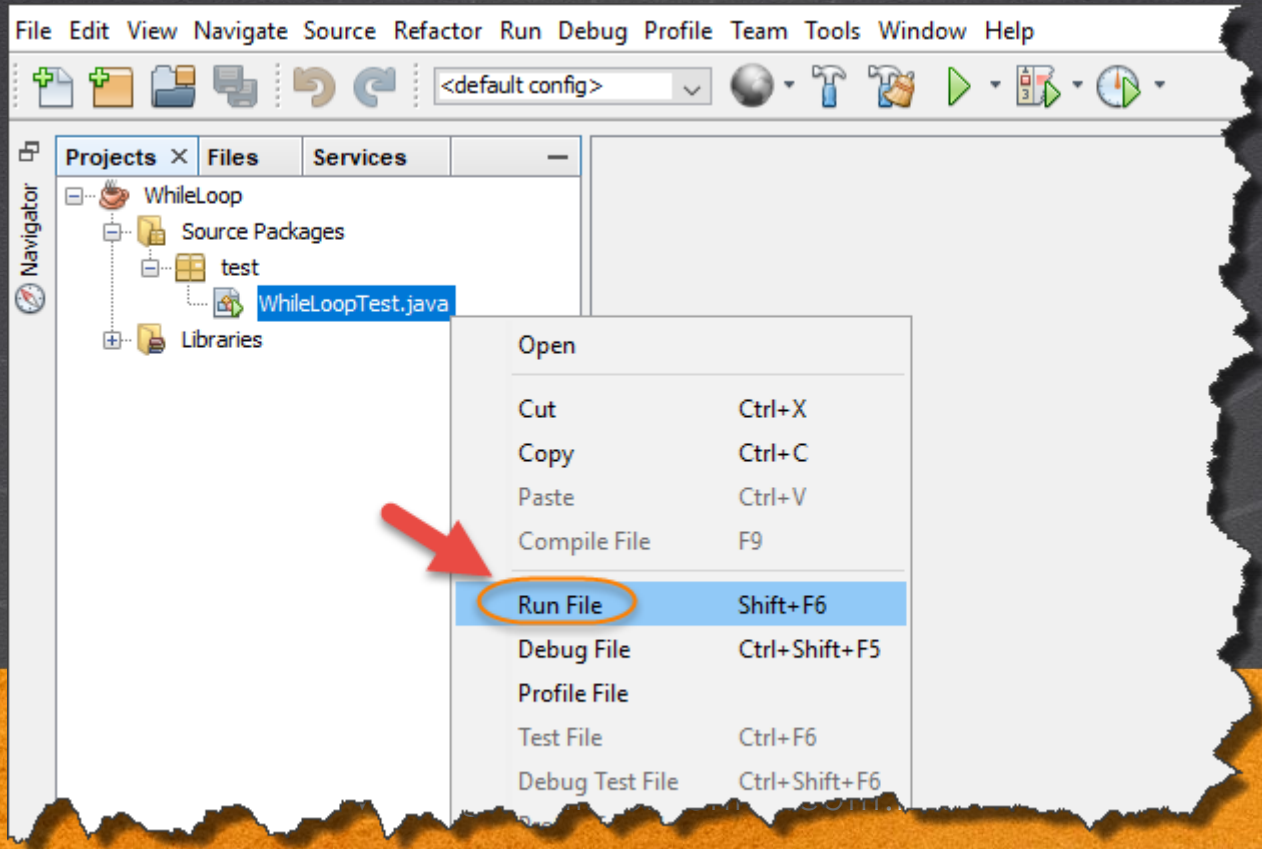
3. MODIFY THE CODE

WhileLoopTest.java:

```
package test;

public class WhileLoopTest {

    public static void main(String[] args) {

        int counter = 0;
        int limit = 10;
        //Prints from 0 to 9 (10 elements)
        while (counter < limit) {
            System.out.println("counter = " + counter);
            counter++;
        }
    }
}
```

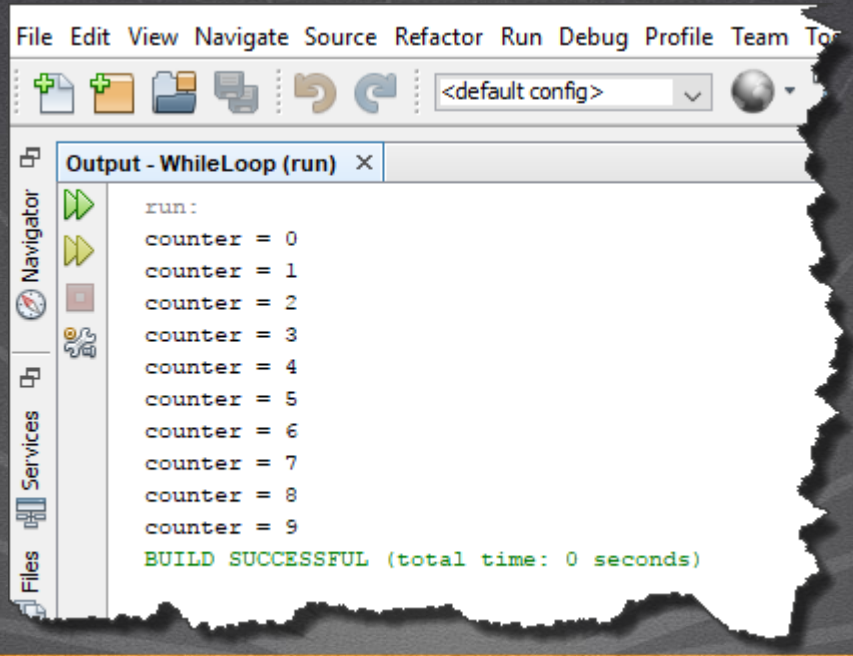
4. EXECUTE THE PROJECT

We execute our project. We give right click -> Run:



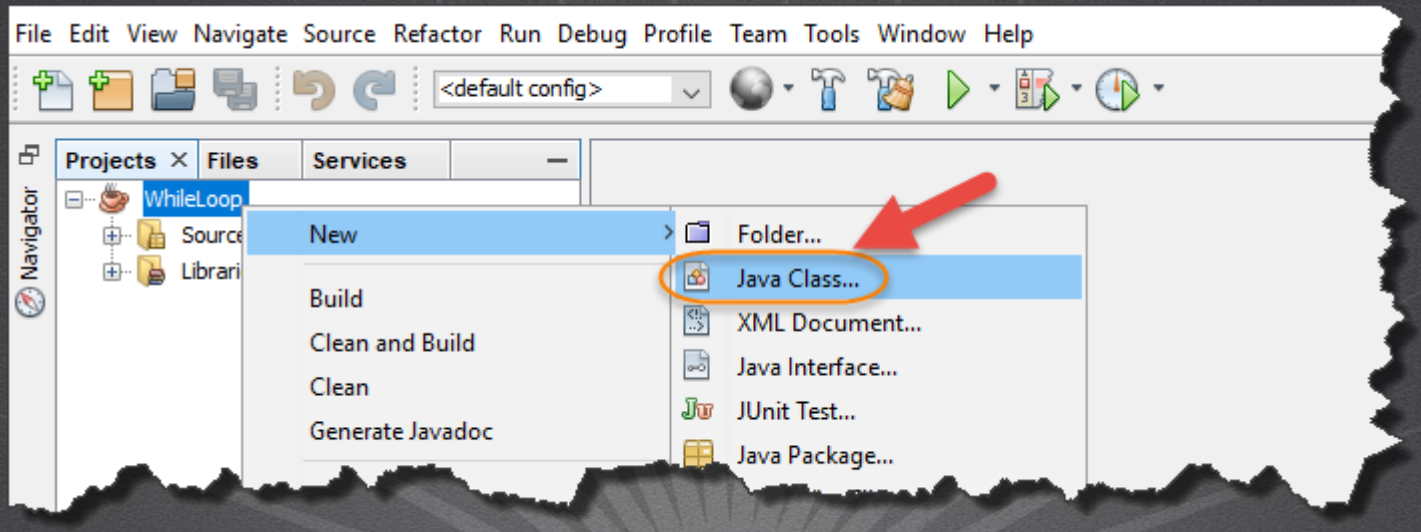
4. EXECUTE THE PROJECT (CONT)

The result is as follows:



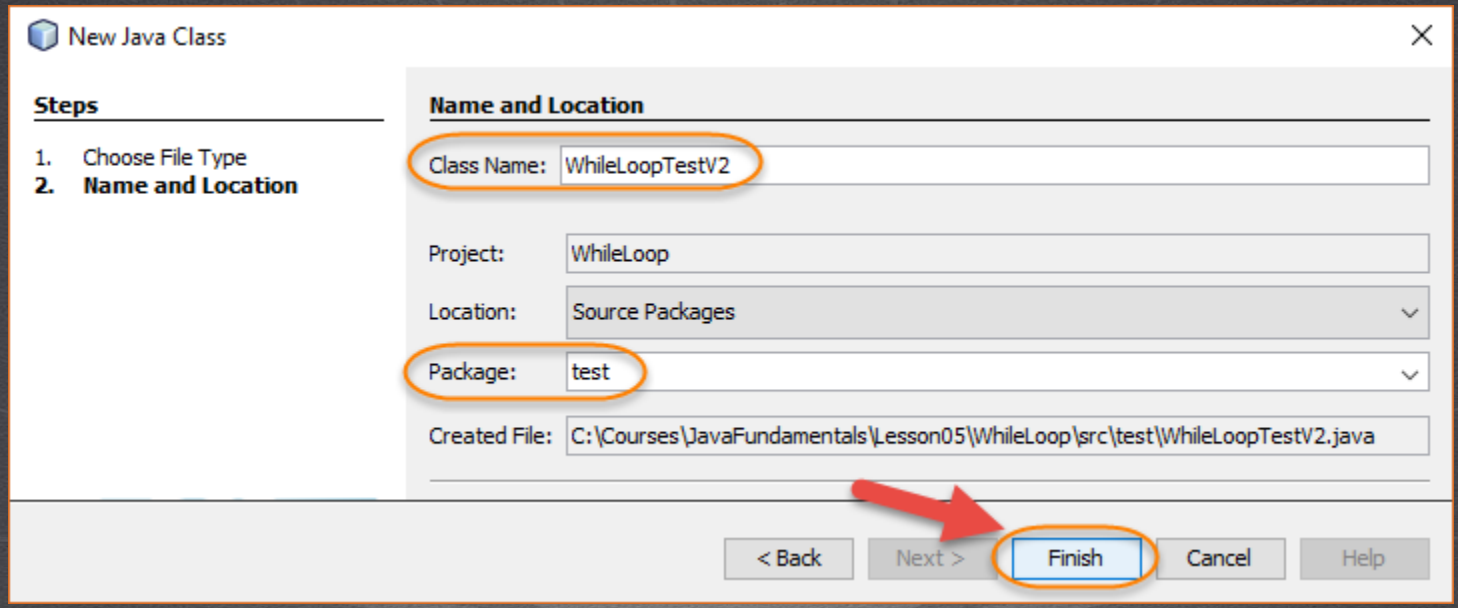
5. WHILE LOOP VERSION 2

We now create a second version of the exercise. Add a new class:



5. WHILE LOOP VERSION 2

The class name is: WhileLoopTestV2.java:



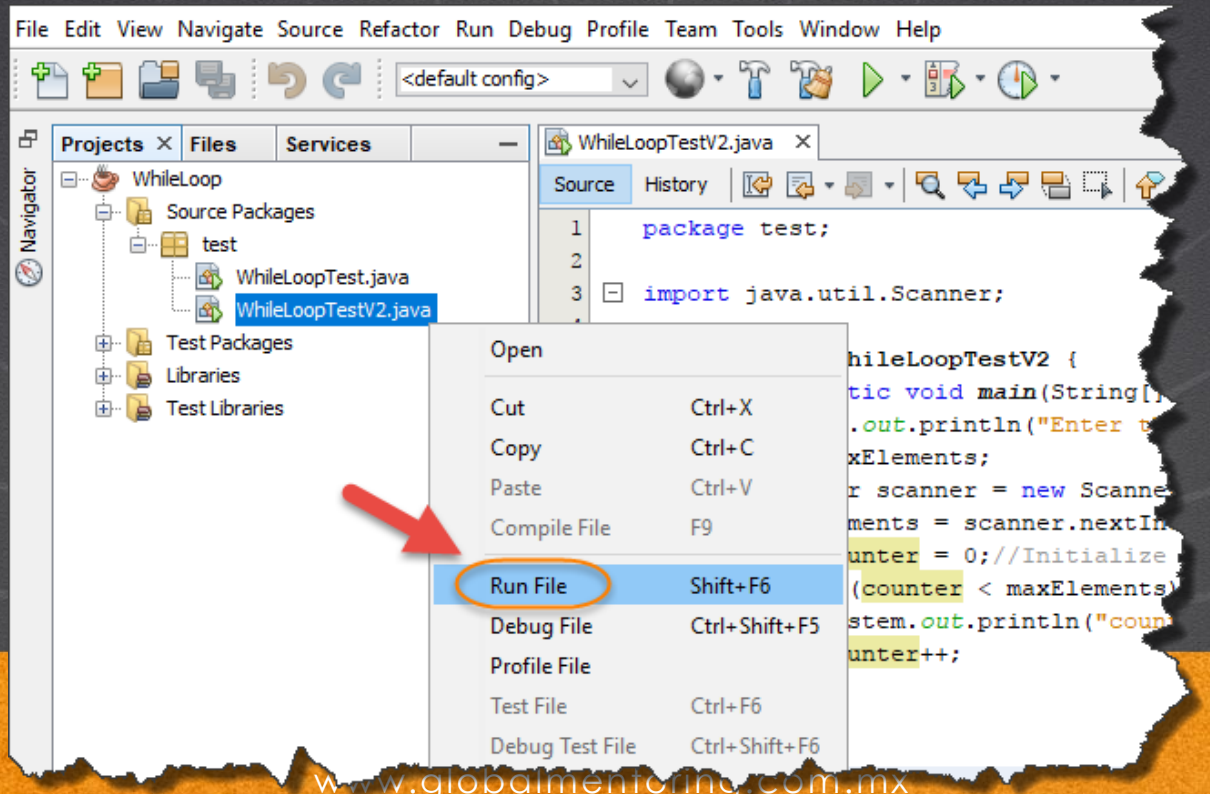
PASO 6. MODIFICAMOS EL CÓDIGO

WhileLoopTestV2.java:

```
package test;

import java.util.Scanner;

public class WhileLoopTestV2 {
    public static void main(String[] args) {
        System.out.println("Enter the number of elements to iterate:");
        int maxElements;
        Scanner scanner = new Scanner(System.in); //Creation of the Scanner object to read data
        maxElements = scanner.nextInt(); //We read the value provided by the user
        int counter = 0;//Initialize the counter
        while (counter < maxElements) {
            System.out.println("counter = " + counter);
            counter++;
        }
    }
}
```

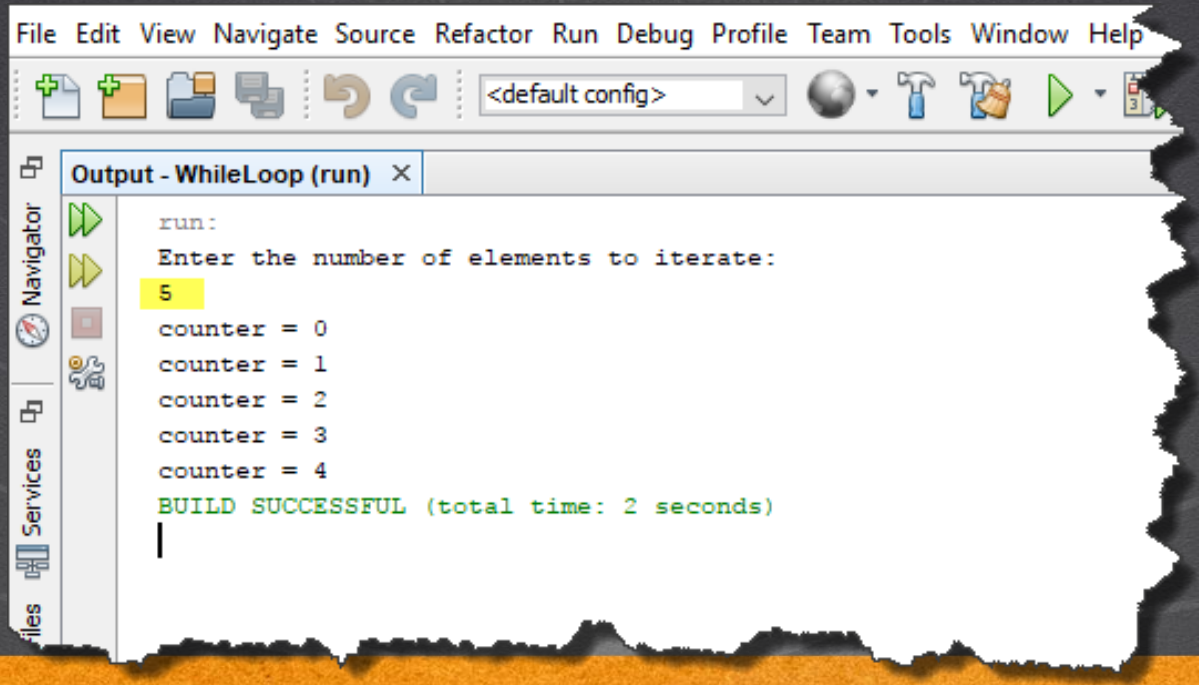
7. EXECUTE THE PROJECT

We execute our project. We give right click -> Run:



7. EXECUTE THE PROJECT (CONT)

The result is as follows:



IN CASE OF PROBLEMS

- Remember to code every line of code, DO NOT copy and paste from the eBooks.

- Only in case of problems you can always use the documentation or the resolved projects that we give you in each exercise to check any problems in your code.

EXERCISE CONCLUSION

- With this exercise we have implemented the handling of the while loop.

- The while loop as we could observe, we can repeat instructions, however we need to have control of the expression to be evaluated, as well as the counter if we are using it, this to avoid infinite loops.

ONLINE COURSE

JAVA FUNDAMENTALS

By: Ing. Ubaldo Acosta