JAVA FUNDAMENTALS COURSE

EXCERCISE

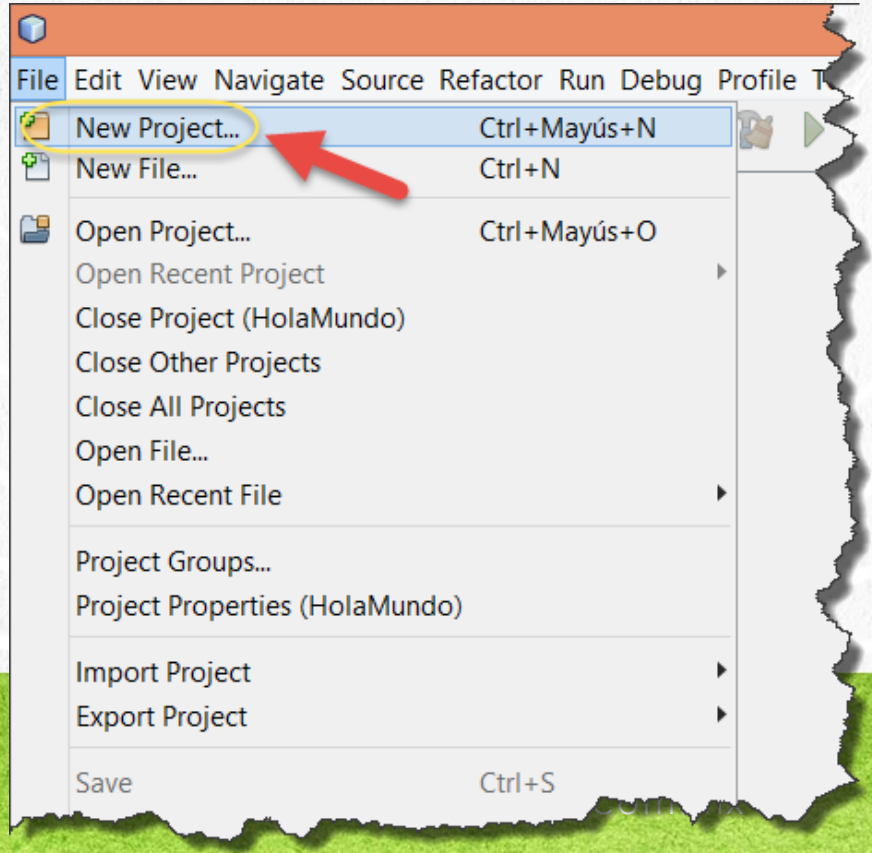
PRECEDENCE OF OPERATORS IN JAVA

EXERCISE OBJECTIVE

Create a program to practice the Precedence of Operators in Java. At the end we should observe the following:

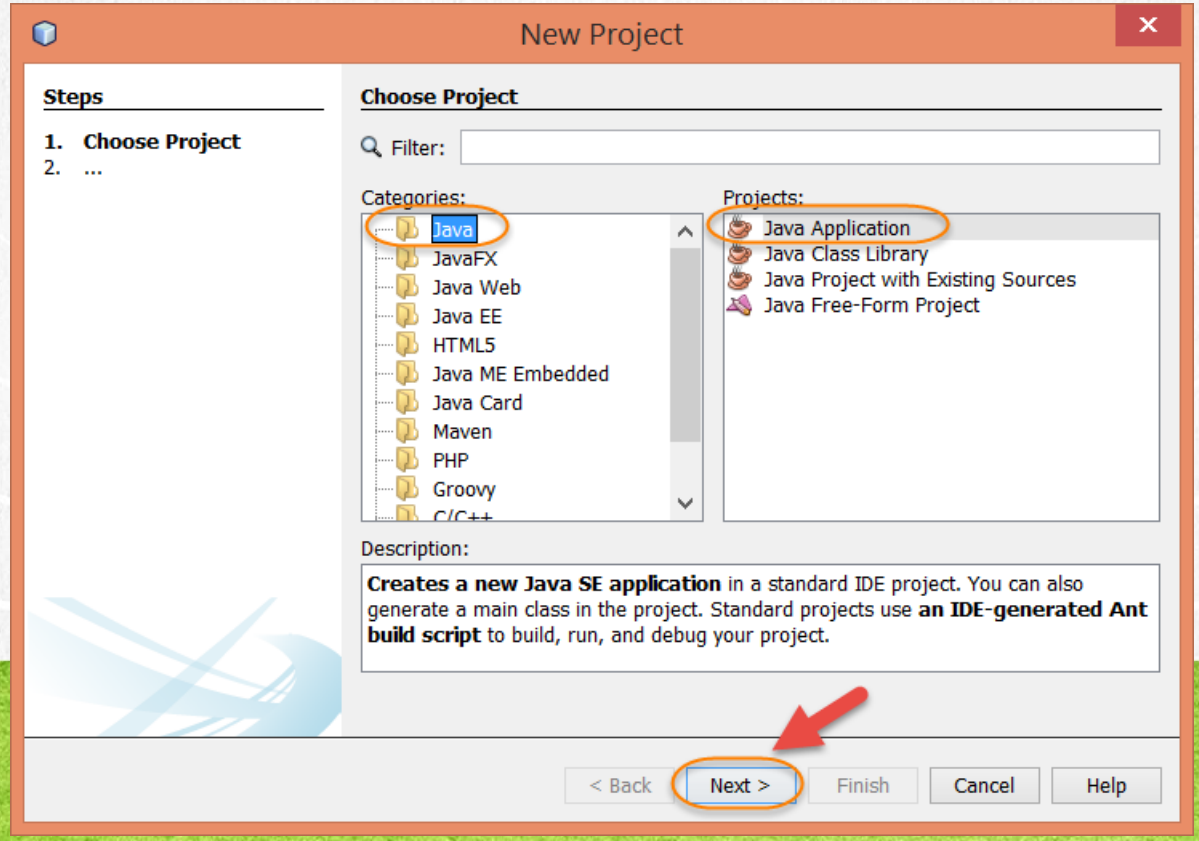
1. CREATE A NEW PROJECT

Create the PrecedenceOfOperators Project:



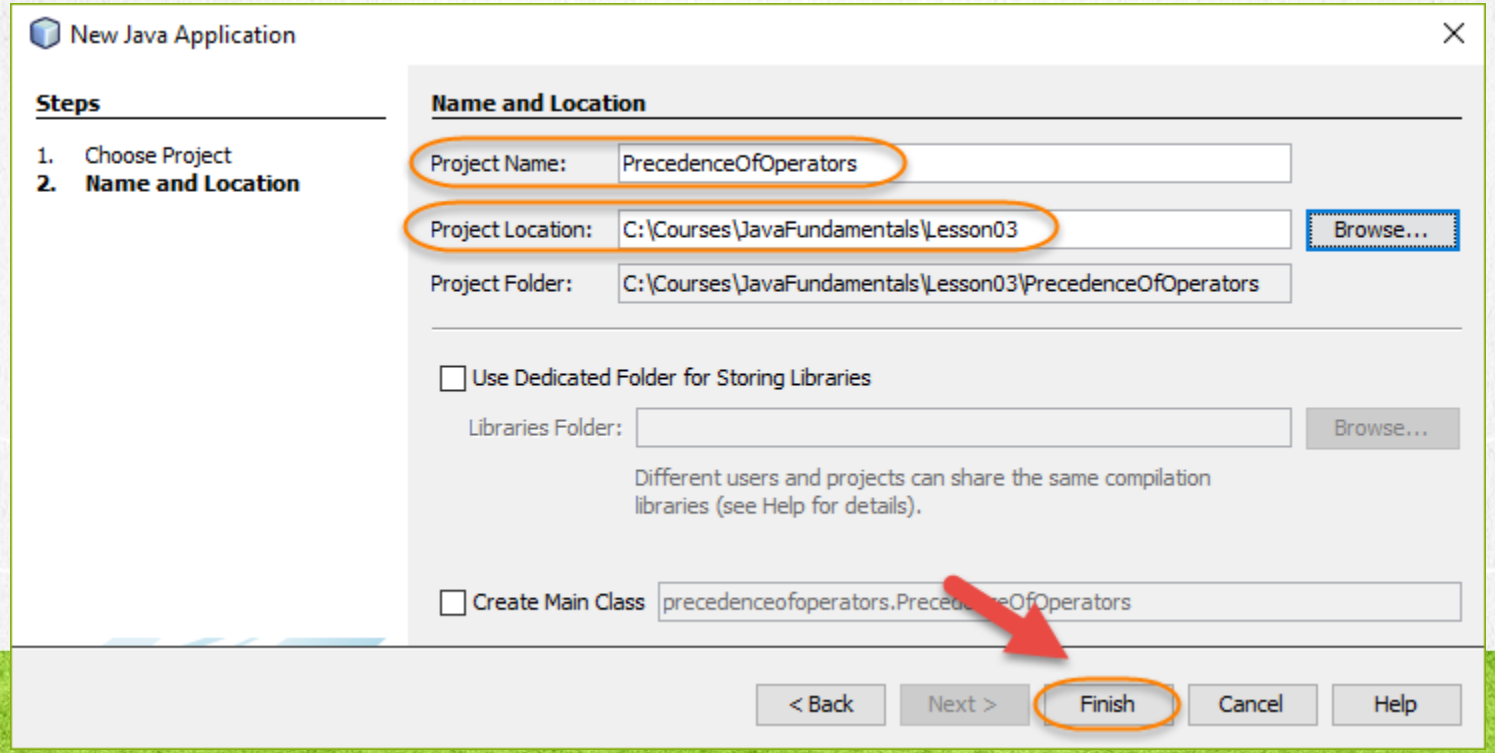
1. CREATE A NEW PROJECT (CONT)

Select Java -> Java Application and click on Next:



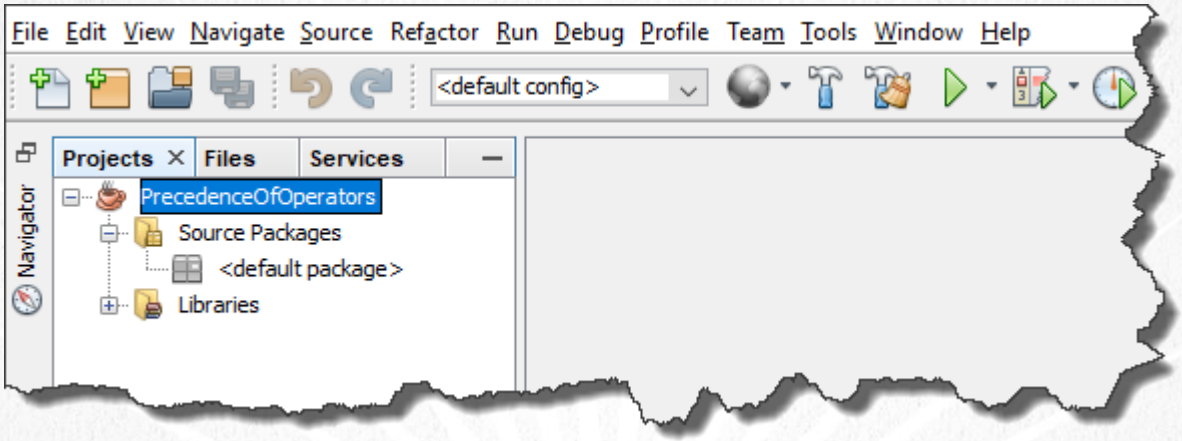
1. CREATE A NEW PROJECT (CONT)

Create the PrecedenceOfOperators Project:



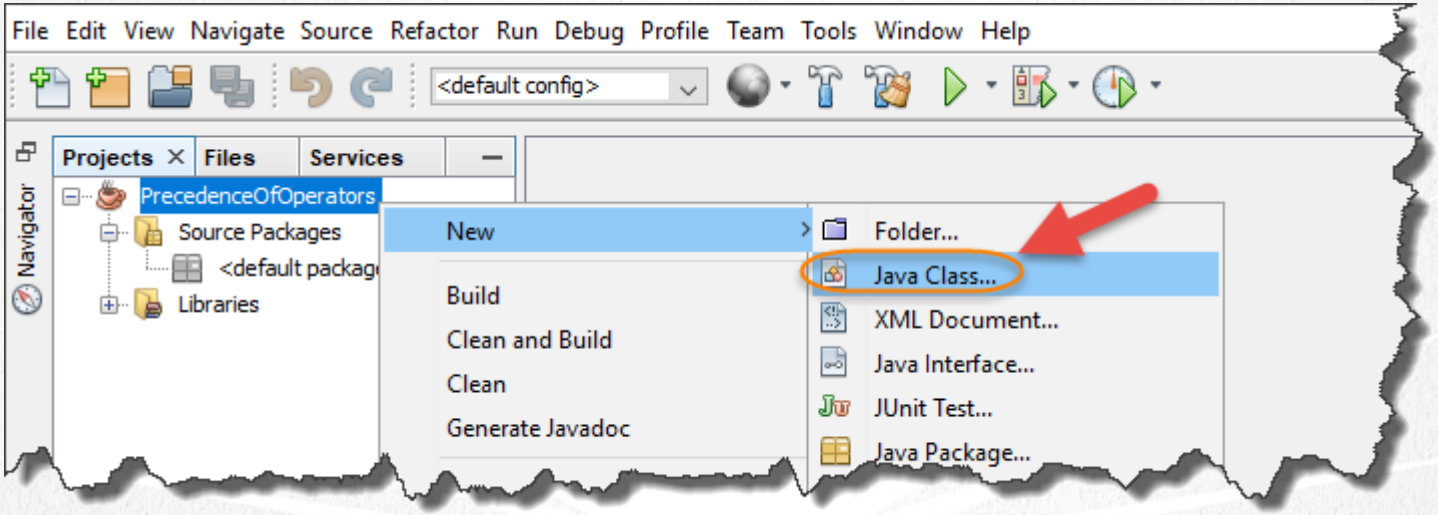
1. CREATE A NEW PROJECT (CONT)

The Project has the desired structure.



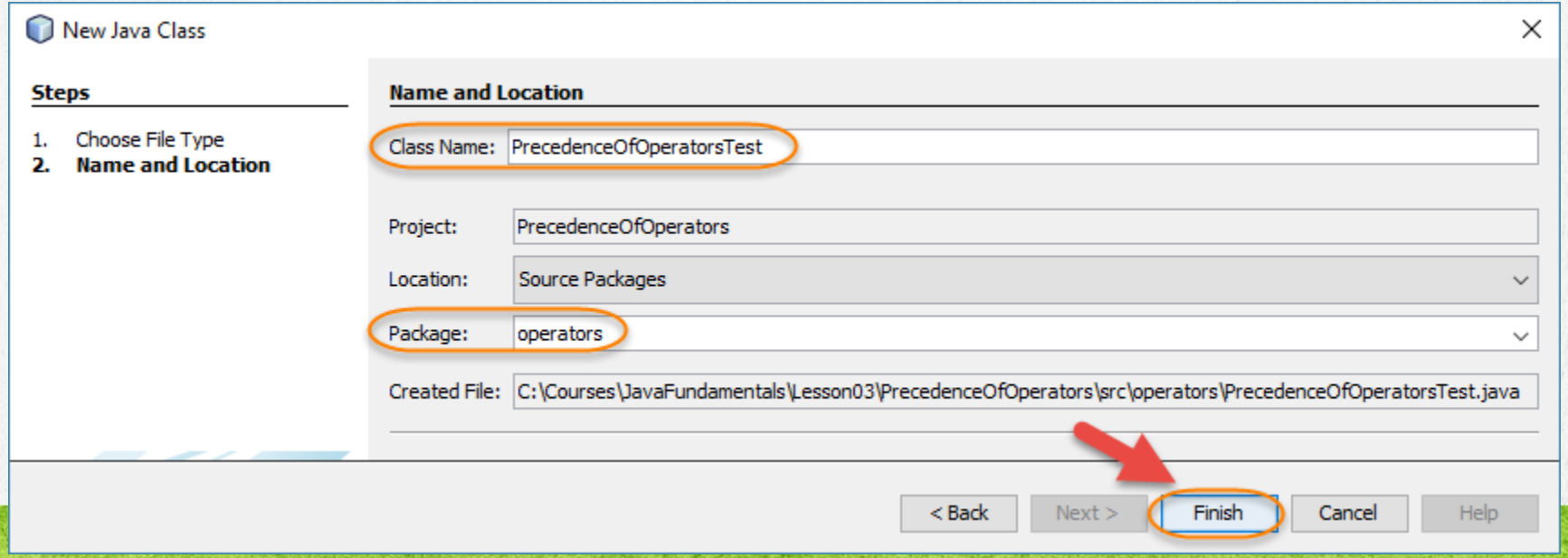
2. CREATE A CLASS

Create the PrecedenceOfOperatorsTest.java class. Right click on PrecedenceOfOperators Project -> New -> Java Class:



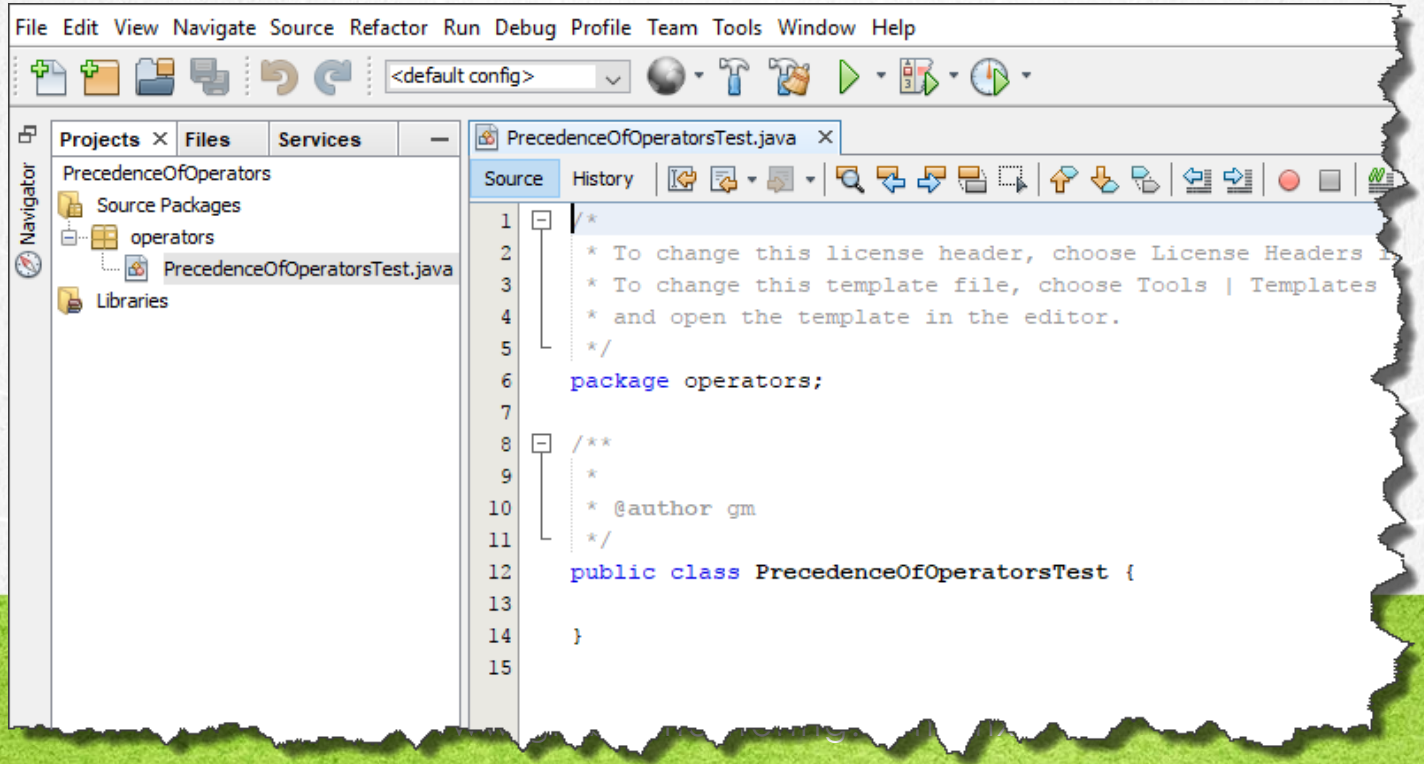
2. CREATE A CLASS (CONT)

Class Name: PrecedenceOfOperatorsTest , package: operators and click on Finish.



2. CREATE A CLASS (CONT)

This is the result of the created Java class. We will sustitute the code with the following:



PASO 3. MODIFY THE CODE

Archivo PrecedenceOperatorsTest.java:

Click to download the code

```
package operators;

public class PrecedenceOfOperatorsTest {

     public static void main(String[] args) {
        System.out.println("First Example Precedence of Operators");
        int x = 5;
        int y = 10;
        int z = ++x * y--;//z=6*10 => z=60

        System.out.println("x = " + x);//prints x=6
        System.out.println("y = " + y);//prints y=9, it was pending the decrease
        System.out.println("z = " + z);//prints 60

        System.out.println("Example of Evaluation");
        System.out.println(4 + 5 * 6 / 3);//4+(5*6)/3 => 4+(30/3) => 4+10 => 14
        System.out.println((4 + 5) * (6 / 3));//9*2=> 18

        System.out.println("Another Evaluation Example");
        System.out.println(1 + 2 - 3 * 4 / 5);//(1+2)-(3*4)/5 => 3-(12/5) => 3-2 => 1
        System.out.println(1 + 2 - (3 * (4 / 5)));//3-(3*0) => 3-0 => 3, the division takes the int part
```

PASO 3. MODIFY THE CODE

Archivo PrecedenceOperatorsTest.java:

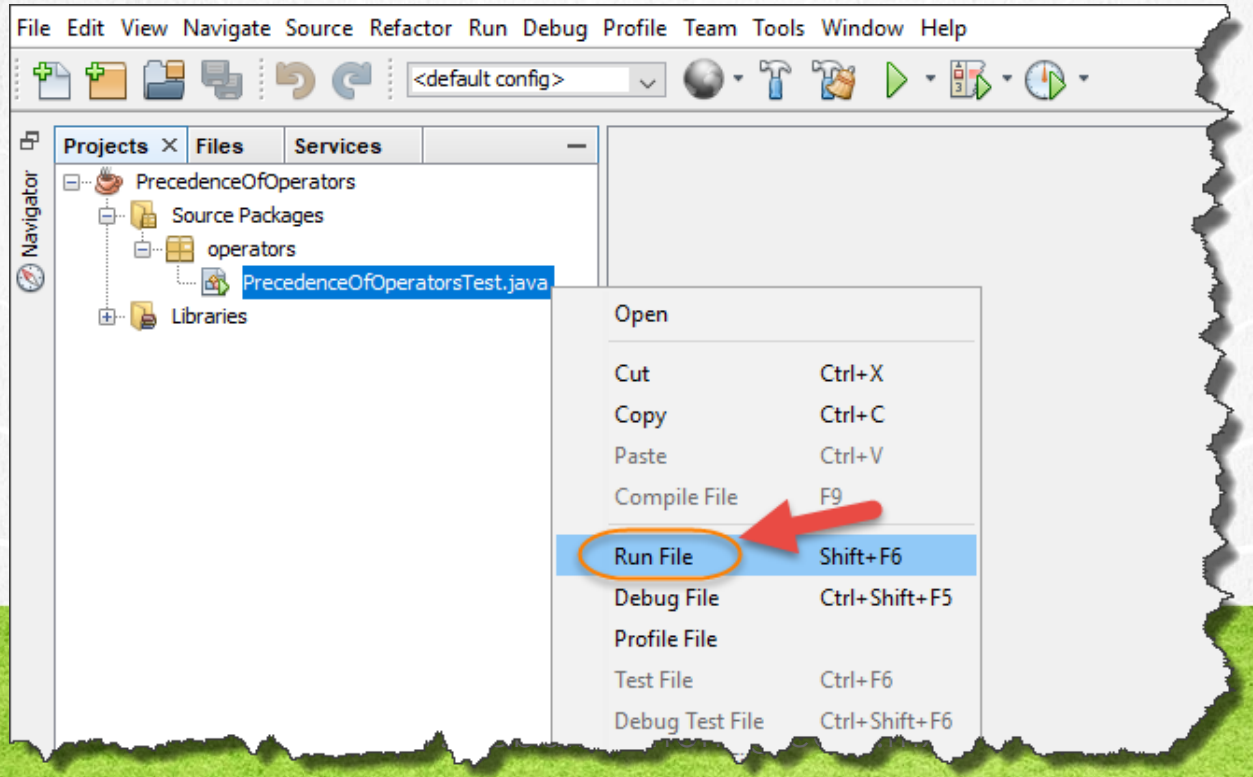
Click to download the code

```
        System.out.println("\nAnother example");
        //If it detects a String, the rest turns it into a String
        System.out.println("1 + 2 = " + 1 + 2);//concatenates, prints 12
        //The parentheses break this rule, as it has the highest priority
        System.out.println("(1 + 2) = " + (1 + 2));//prints 3

        System.out.println("\nAnother example");
        //The + operator is associative to the left
        System.out.println(1 + 2 + "abc");//Detects an operation first, prints 3abc
        System.out.println("abc" + 1 + 2);//Detects a String first, prints abc12
    }
}
```

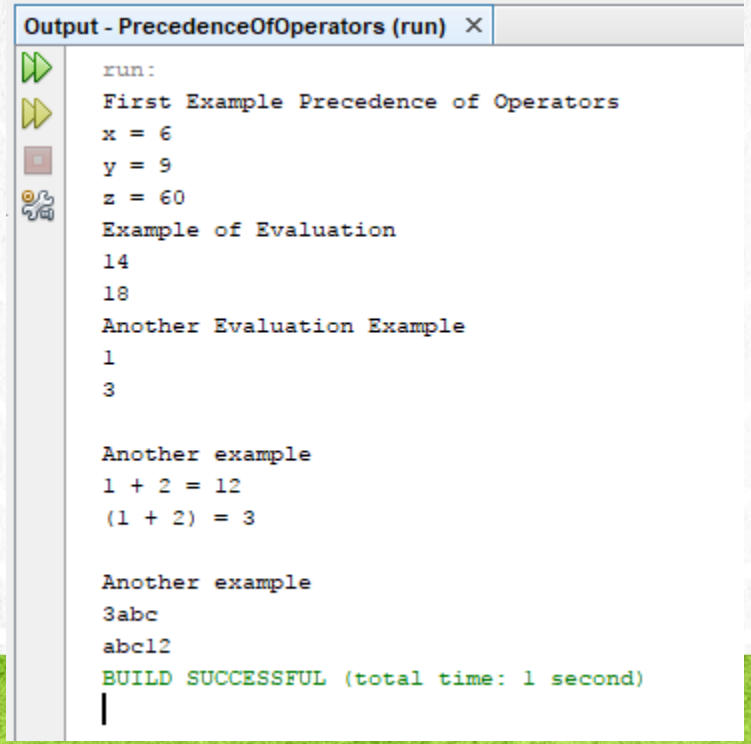
4. EXECUTE THE PROJECT

Execute our project. Right click over the class PrecedenceOfOperatorsTest.javaand click on Run File:



4. EXECUTE THE PROJECT(CONT)

The result is as follows:



EXERCISE CONCLUSION

- With this exercise we have put into practice the precedence of operators in Java.
- For more information about the operators in Java, consult:
- http://docs.oracle.com/javase/tutorial/java/nutsandbolts/operators.html

ONLINE COURSE

JAVA FUNDAMENTALS

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