

TestNG

TestNG is a popular testing framework used for Java-based projects. It is an open-source automated testing framework that is used for functional, integration, and unit testing. It supports a wide range of annotations, configuration options, and test types, making it a flexible and powerful tool for Java developers.

❖ Installation and Configuration

To use TestNG, you need to have Java installed on your machine. You can download and install the latest version of Java from the official website. Once you have Java installed, you can install TestNG using the following steps:

- Download the TestNG Dependency or jar file from the official website.
- Add the TestNG Dependency or jar file to your classpath.
- Create a new TestNG XML file and configure it.

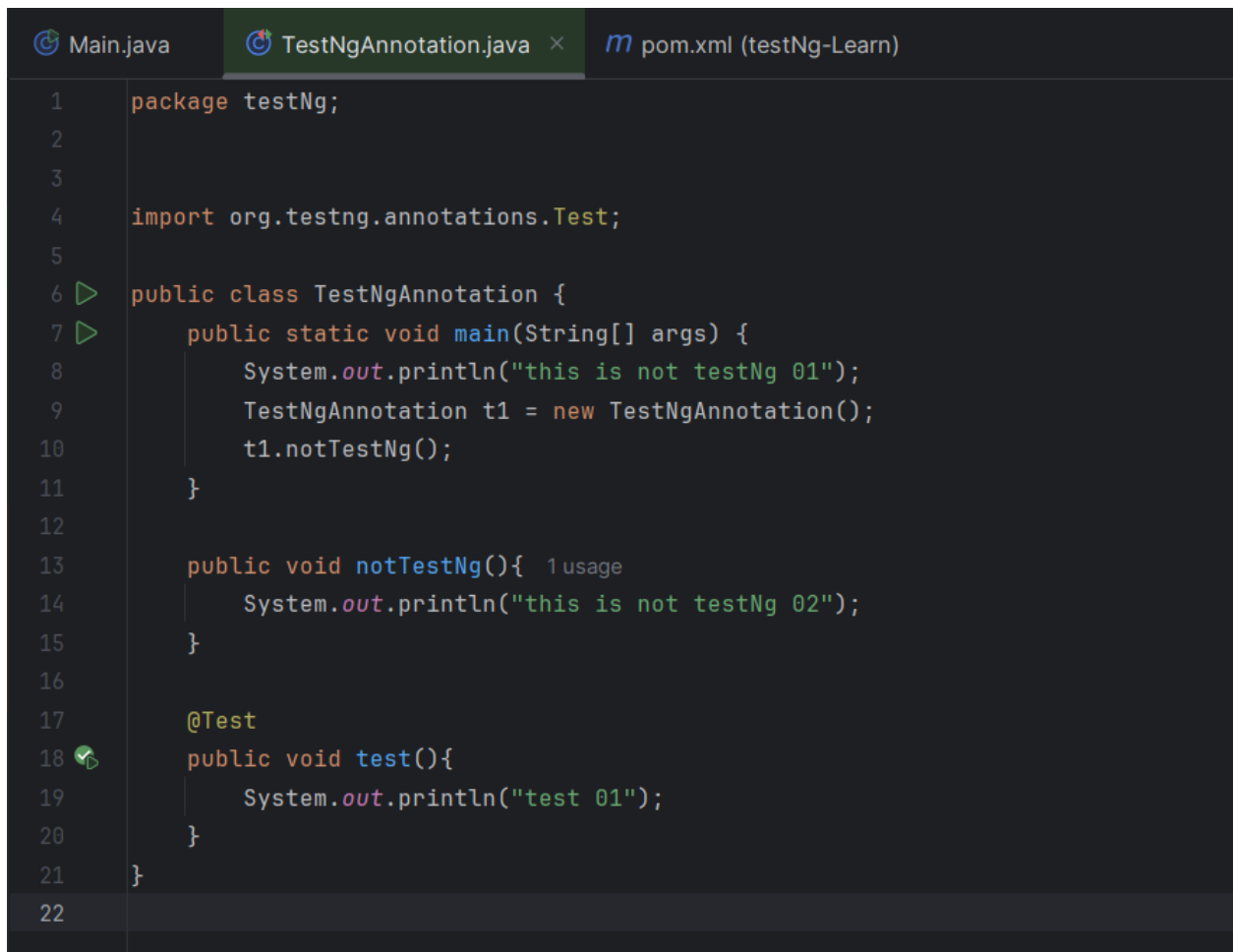
❖ Advantages of Using TestNG

- Annotations for Easy Testing : TestNG offers many annotations that make it simple to write and manage tests.
- Parallel Testing Saves Time : It allows you to run tests in parallel, which can greatly cut down the time needed to complete them.
- Data-Driven Testing : TestNG lets you use different data sets to run the same test case, making your testing more flexible.

- Grouping Tests : You can group test cases together, so it's easier to run specific tests when needed.
- Detailed Reports : TestNG creates detailed reports, helping you easily track how your tests are progressing.

❖ First testNG Code

- Code



```
1 package testNg;
2
3
4 import org.testng.annotations.Test;
5
6 public class TestNgAnnotation {
7     public static void main(String[] args) {
8         System.out.println("this is not testNg 01");
9         TestNgAnnotation t1 = new TestNgAnnotation();
10        t1.notTestNg();
11    }
12
13    public void notTestNg(){ 1 usage
14        System.out.println("this is not testNg 02");
15    }
16
17    @Test
18    public void test(){
19        System.out.println("test 01");
20    }
21 }
22
```

- Output

✓ Default Suite	10ms	✓ Tests passed: 1 of 1 test – 10ms
✓ testNg-Learn	10ms	test 01
✓ TestNgAnnotation	10ms	=====
✓ test	10ms	Default Suite
		Total tests run: 1, Passes: 1, Failures: 0, Skips: 0
		=====
		Process finished with exit code 0