

TESTNG - EXECUTION PROCEDURE

http://www.tutorialspoint.com/testng/testng_execution_procedure.htm

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This chapter explains the execution procedure of methods in TestNG. It explains the order of the methods called. Here is the execution procedure of the TestNG test API methods with an example.

Create a java class file name TestngAnnotation.java in **C:\>TestNG_WORKSPACE** to test annotations.

```
import org.testng.annotations.Test;
import org.testng.annotations.BeforeMethod;
import org.testng.annotations.AfterMethod;
import org.testng.annotations.BeforeClass;
import org.testng.annotations.AfterClass;
import org.testng.annotations.BeforeTest;
import org.testng.annotations.AfterTest;
import org.testng.annotations.BeforeSuite;
import org.testng.annotations.AfterSuite;

public class TestngAnnotation {
    // test case 1
    @Test
    public void testCase1() {
        System.out.println("in test case 1");
    }

    // test case 2
    @Test
    public void testCase2() {
        System.out.println("in test case 2");
    }

    @BeforeMethod
    public void beforeMethod() {
        System.out.println("in beforeMethod");
    }

    @AfterMethod
    public void afterMethod() {
        System.out.println("in afterMethod");
    }

    @BeforeClass
    public void beforeClass() {
        System.out.println("in beforeClass");
    }

    @AfterClass
    public void afterClass() {
        System.out.println("in afterClass");
    }

    @BeforeTest
    public void beforeTest() {
        System.out.println("in beforeTest");
    }

    @AfterTest
    public void afterTest() {
        System.out.println("in afterTest");
    }

    @BeforeSuite
    public void beforeSuite() {
        System.out.println("in beforeSuite");
    }
}
```

```

@AfterSuite
public void afterSuite() {
    System.out.println("in afterSuite");
}
}

```

Next, let's create the file **testng.xml** in **C:\>TestNG_WORKSPACE** to execute annotations.

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd" >

<suite name="Suite1">
    <test name="test1">
        <classes>
            <class name="TestngAnnotation"/>
        </classes>
    </test>
</suite>

```

Compile the Test case class using javac.

```
C:\TestNG_WORKSPACE>javac TestngAnnotation.java
```

Now, run the testng.xml, which will run the test case defined in the provided Test Case class.

```
C:\TestNG_WORKSPACE>java org.testng.TestNG testng.xml
```

Verify the output.

```

in beforeSuite
in beforeTest
in beforeClass
in beforeMethod
in test case 1
in afterMethod
in beforeMethod
in test case 2
in afterMethod
in afterClass
in afterTest
in afterSuite

=====
Suite
Total tests run: 2, Failures: 0, Skips: 0
=====

```

Based on the above output, the execution procedure is as follows:

- First of all, beforeSuite method is executed only once.
- Lastly, the afterSuite method executes only once.
- Even the methods beforeTest, beforeClass, afterClass, and afterTest methods are executed only once.
- beforeMethod method executes for each test case but before executing the test case.
- afterMethod method executes for each test case but after executing the test case.
- In between beforeMethod and afterMethod, each test case executes.