

## Phase-3 Practice Project: Assisted Practice

1. Write a program to demonstrate standard tests.

pom.xml:

```
<project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
https://maven.apache.org/xsd/maven-4.0.0.xsd">
<modelVersion>4.0.0</modelVersion>
<groupId>UsingJUnit</groupId>
<artifactId>UsingJUnit</artifactId>
<version>0.0.1-SNAPSHOT</version>
<dependencies>
<dependency>
<groupId>org.junit.jupiter</groupId>
<artifactId>junit-jupiter-api</artifactId>
<version>5.7.2</version>
<scope>test</scope>
</dependency>
<dependency>
<groupId>org.junit.jupiter</groupId>
<artifactId>junit-jupiter-engine</artifactId>
<version>5.7.2</version>
</dependency>

<dependency>
<groupId>org.junit.platform</groupId>
<artifactId>junit-platform-launcher</artifactId>
<version>1.2.0</version>
</dependency>

</dependencies>
<build>
<plugins>

<plugin>
<groupId>org.apache.maven.plugins</groupId>
<artifactId>maven-compiler-plugin</artifactId>
<version>3.8.1</version>
<configuration>
<source>8</source>
<target>8</target>
</configuration>
</plugin>
</plugins>
```

</build>

</project>

StandardTestClass.java:

```
package com.ecommerce.tests;
```

```
import static org.junit.jupiter.api.Assertions.fail;
import static org.junit.jupiter.api.Assumptions.assumeTrue;
```

```
import org.junit.jupiter.api.AfterEach; import org.junit.jupiter.api.BeforeAll;
import org.junit.jupiter.api.BeforeEach; import org.junit.jupiter.api.Disabled;
import org.junit.jupiter.api.DisplayName; import org.junit.jupiter.api.Test;
```

```
@DisplayName("JUnit 5 Standard Test Class Example") public class StandardTestClass {
```

```
    @BeforeAll
    static void initAll() {
        System.out.println("initAll()");
    }
```

```
    @BeforeEach void init() {
        System.out.println("init()");
```

```
}
```

```
@Test  
void succeedingTest() {  
    System.out.println("succeedingTest()");
```

```
}
```

```
@Test  
void failingTest() {  
  
    System.out.println("failingTest()");
```

```
    fail("a failing test");
```

```
}
```

```
@Test  
@Disabled("for demonstration purposes") void skippedTest() {  
    // not executed  
}
```

```
@Test  
void abortedTest() {  
    System.out.println("abortedTest()");
```

```
    assertTrue("abc".contains("Z")); fail("test should have been aborted");  
}
```

```
@AfterEach  
void tearDown() {  
    System.out.println("tearDown()");
```

```
}}
```

Output:

Failure Trace	
org.opentest4j.AssertionFailedError: a failing test	initAll()
at com.ecommerce.tests.StandardTestClass.failingTest	init()
at java.base/java.util.ArrayList.forEach(ArrayList.java:1511)	succeedingTest()
at java.base/java.util.ArrayList.forEach(ArrayList.java:1511)	tearDown()
	init()
	failingTest()
	tearDown()
	init()
	abortedTest()
	tearDown()