

Phase – 3 Practice Project: Assisted Practice

12. Write a program to demonstrate assertions.

- **Code**

- ✓ **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-engine</artifactId>
            <version>5.4.2</version>
        </dependency>

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

- ✓ **Assertions.java**

```
package com.ecommerce.tests;

import static org.junit.jupiter.api.Assertions.assertArrayEquals;

import static org.junit.jupiter.api.Assertions.assertEquals;
import static org.junit.jupiter.api.Assertions.assertFalse;
import static org.junit.jupiter.api.Assertions.assertNotEquals;
import static org.junit.jupiter.api.Assertions.assertNotNull;
import static org.junit.jupiter.api.Assertions.assertNotSame;
import static org.junit.jupiter.api.Assertions.assertNull;
import static org.junit.jupiter.api.Assertions.assertSame;
import static org.junit.jupiter.api.Assertions.assertThrows;
import static org.junit.jupiter.api.Assertions.assertTrue;

import org.junit.jupiter.api.*;
import org.junit.jupiter.api.condition.DisabledIf;
import org.junit.jupiter.api.condition.EnabledOnOs;
import org.junit.jupiter.api.condition.OS;
import org.junit.platform.runner.JUnitPlatform;
import org.junit.runner.RunWith;
```

```

@DisplayName("JUnit 5 Assertions Example")
@RunWith(JUnitPlatform.class)
public class Assertions {

    @Test
    @DisplayName("assert Examples")
    public void assertTests() {
        String str = null;
        String str2 = "some value";

        String[] a1 = { "A", "B" };
        String[] a2 = { "A", "B" };

        assertTrue(4 > 0);
        assertFalse(5 < 1);
        assertNull(str);
        assertNotNull(str2);

        assertSame(str, str);
        assertNotSame(str, str2);

        assertEquals(5, 5);
        assertNotEquals(5, 6);

        assertEquals(a1, a2);

        assertThrows(RuntimeException.class, () -> {
            throw new RuntimeException();
        });
    }
}

```

• Output

The screenshot shows the JUnit runner interface in an IDE. The top bar includes tabs for Markers, Console, Servers, Internal Web Br..., Terminal, JUnit, Properties, Snippets, and Progress. Below the tabs, it states "Finished after 0.113 seconds". A summary bar shows "Runs: 1/1", "Errors: 0", and "Failures: 0", accompanied by a green progress bar. The main area displays the test run: "> JUnit 5 Assertions Example [Runner: JUnit 5] (0.013 s)". To the right, there is a "Failure Trace" section which is currently empty.