Exercise 3: Assertions in JUnit

Scenario:

You need to use different assertions in JUnit to validate your test results.

Steps:

1. Write tests using various JUnit assertions.

Code:

**Steps:**

1. Create a User class with fields and methods.
2. Write unit tests to check values and conditions using various assertions.

**Java Class: User.java**

package com.example;

public class User {

private String username;

private String email;

public User(String username, String email) {

this.username = username;

this.email = email;

}

public String getUsername() {

return username;

}

public String getEmail() {

return email;

}

public boolean isEmailValid() {

return email != null && email.contains("@");

}

}

**Test Class: UserTest.java**

package com.example;

import static org.junit.Assert.\*;

import org.junit.Test;

public class UserTest {

@Test

public void testUserAssertions() {

User user = new User("harsh\_jaiswal", "harsh@example.com");

assertEquals("harsh\_jaiswal", user.getUsername());

assertTrue(user.isEmailValid());

assertFalse(user.getEmail().isEmpty());

assertNotNull(user.getEmail());

User nullEmailUser = new User("anonymous", null);

assertNull(nullEmailUser.getEmail());

}

}

**Terminal:**

Use the following Maven command to run just UserTest:

mvn -Dtest=UserTest test

**Output:**

