**Exercise 3: Argument Matching**

**Scenario**: You need to verify that a method is called with specific arguments.

**UserService :-**

package org.example1;  
  
public interface UserService {  
 void createUser(String username, int age);  
}

**UserServiceTest.java :-**

package org.example1;  
  
import org.junit.jupiter.api.Test;  
import org.mockito.ArgumentMatchers;  
  
import static org.mockito.Mockito.\*;  
  
public class UserServiceTest {  
  
 @Test  
 void testCreateUserCalledWithSpecificArguments() {  
 // Step 1: Create a mock  
 UserService mockUserService = *mock*(UserService.class);  
  
 // Step 2: Call method with specific arguments  
 mockUserService.createUser("naresh", 21);  
  
 // Step 3: Verify the interaction using argument matchers  
 *verify*(mockUserService).createUser(*eq*("naresh"), *eq*(21));  
 }  
  
 @org.junit.Test  
 public void testCreateUserWithAnyStringAndAge() {  
 UserService mockUserService = *mock*(UserService.class);  
 mockUserService.createUser("john", 30);  
  
 // Match any String and specific age  
 *verify*(mockUserService).createUser(*anyString*(), *eq*(30));  
 }  
}

**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  
 http://maven.apache.org/xsd/maven-4.0.0.xsd">  
 <modelVersion>4.0.0</modelVersion>  
 <groupId>org.example1</groupId>  
 <artifactId>argument-matching</artifactId>  
 <version>1.0-SNAPSHOT</version>  
  
 <dependencies>  
 <!-- JUnit 5 -->  
 <dependency>  
 <groupId>org.junit.jupiter</groupId>  
 <artifactId>junit-jupiter</artifactId>  
 <version>5.10.0</version>  
 <scope>test</scope>  
 </dependency>  
  
 <!-- Mockito Core -->  
 <dependency>  
 <groupId>org.mockito</groupId>  
 <artifactId>mockito-core</artifactId>  
 <version>5.11.0</version>  
 <scope>test</scope>  
 </dependency>  
 <dependency>  
 <groupId>junit</groupId>  
 <artifactId>junit</artifactId>  
 <version>4.13.2</version>  
 <scope>test</scope>  
 </dependency>  
 </dependencies>  
  
 <build>  
 <plugins>  
 <!-- Plugin to run tests -->  
 <plugin>  
 <groupId>org.apache.maven.plugins</groupId>  
 <artifactId>maven-surefire-plugin</artifactId>  
 <version>3.1.2</version>  
 </plugin>  
 </plugins>  
 </build>  
</project>

**Output :-**

