**Exercise 2.5: Timeout and Performance Testing**

**CODE:**

**PerformanceTester Class: -**

package org.example;  
  
public class PerformanceTester {  
 public void performTask(){  
 try{  
 Thread.*sleep*(200);  
 }  
 catch(InterruptedException e){  
 Thread.*currentThread*().interrupt();  
 }  
 }  
}

**PerformanceTesterTest Class: -**

package org.example;  
  
import org.junit.jupiter.api.Test;  
  
import java.time.Duration;  
  
import static org.junit.jupiter.api.Assertions.\*;  
  
class PerformanceTesterTest {  
 @Test  
 public void performTest(){  
 PerformanceTester performanceTester=new PerformanceTester();  
 *assertTimeout*(Duration.*ofMillis*(300),()->{  
 performanceTester.performTask();  
 });  
 System.*out*.println("The performTask takes 200ms (<300ms)");  
 }  
  
 //if the task takes more than 300ms the below asserTimeoutPreemptively will force stop the code execution  
 @Test  
 void testPerformTaskWithStrictTimeout() {  
 PerformanceTester performanceTester=new PerformanceTester();  
  
 *assertTimeoutPreemptively*(Duration.*ofMillis*(300), () -> {  
 performanceTester.performTask();  
 });  
 }  
  
}

**OUTPUT:**

