**CODE:**

package com.example;

public class PerformanceTester {

public void performTask() {

try {

// Simulate a task that takes 300 ms

Thread.sleep(300);

} catch (InterruptedException e) {

e.printStackTrace();

}

}

}

package com.example;

import org.junit.jupiter.api.Test;

import java.time.Duration;

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

class PerformanceTesterTest {

PerformanceTester tester = new PerformanceTester();

@Test

void testPerformTaskCompletesWithinTimeout() {

// ✅ Timeout: 1 second

assertTimeout(Duration.ofSeconds(1), () -> {

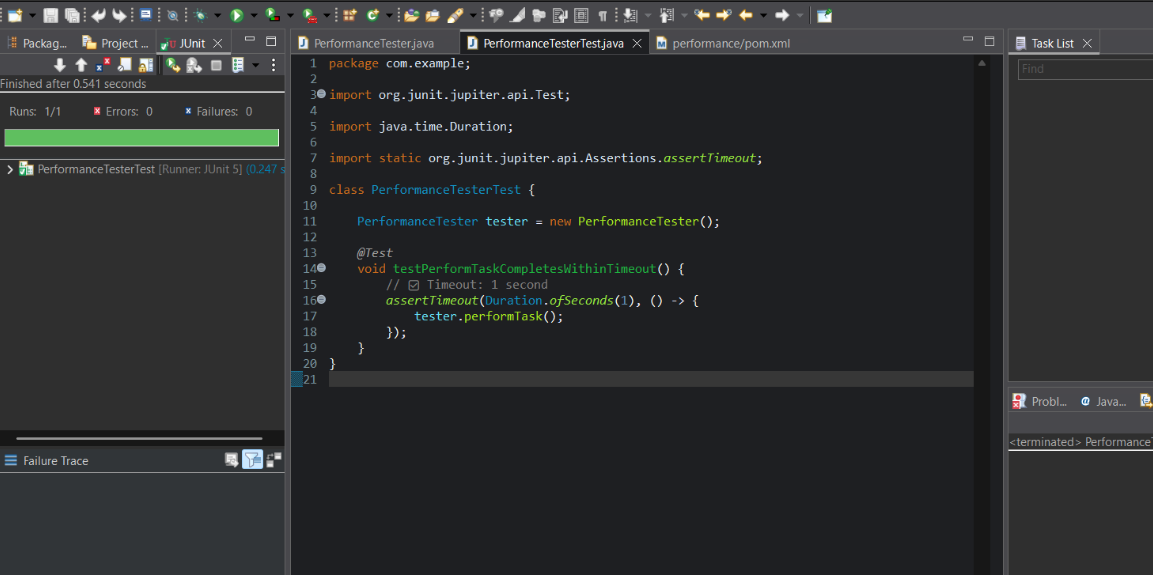
tester.performTask();

});

}

}

**OUTPUT:**

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