5.Write a program to demonstrate dynamic tests.

DynamicTests.java:

```java
package com.ecommerce.tests;


import java.util.Arrays;
import java.util.Collection;
import static org.junit.jupiter.api.Assertions.assertTrue; import
org.junit.jupiter.api.DisplayName;
import org.junit.jupiter.api.DynamicTest; import org.junit.jupiter.api.TestFactory;
import org.junit.jupiter.api.function.Executable;




@DisplayName("JUnit 5 Dynamic Tests Example")


public class DynamicTests {


@TestFactory
Collection<DynamicTest> dynamicTests() { return Arrays.asList(
DynamicTest.dynamicTest("simple dynamic test", () -> assertTrue(true)),
DynamicTest.dynamicTest("My Executable Class", new MyExecutable()),
DynamicTest.dynamicTest("Exception Executable", () -> {throw new Exception("Exception
Example");}),
DynamicTest.dynamicTest("simple dynamic test-2", () -> assertTrue(true))

);
}


}




class MyExecutable implements Executable {


@Override
public void execute() throws Throwable { System.out.println("Hello World!");
}
```

```
}


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-api</artifactId>
<version>5.7.2</version>
<scope>test</scope>
</dependency>
<dependency>
<groupId>org.junit.jupiter</groupId>
<artifactId>junit-jupiter-engine</artifactId>

<version>5.7.2</version>
</dependency>


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


</dependencies>
<build>
<plugins>
<plugin>
<groupId>org.apache.maven.plugins</groupId>
<artifactId>maven-compiler-plugin</artifactId>
<version>3.8.1</version>
<configuration>
<source>8</source>
<target>8</target>
</configuration>
</plugin>
</plugins>
```

```
</build>


</project>
```

Output:


```java
1  package com.ecommerce.tests;
2
3  import java.util.Arrays;
4  import java.util.Collection;
5  import static org.junit.jupiter.api.Assertions.assert
6  import org.junit.jupiter.api.DisplayName;
7  import org.junit.jupiter.api.DynamicTest;
8  import org.junit.jupiter.api.TestFactory;
9  import org.junit.jupiter.api.function.Executable;
10
11
12  @DisplayName("JUnit 5 Dynamic Tests Example")
13
14  public class DynamicTests {
15
16      @TestFactory
17      Collection<DynamicTest> dynamicTests() {
18          return Arrays.asList(
19              DynamicTest.dynamicTest("simple dynar
20              DynamicTest.dynamicTest("My Executabl
21              DynamicTest.dynamicTest("Exception E
22              DynamicTest.dynamicTest("simple dynar
```

Project Explorer / JUnit

Finished after 0.235 seconds

Runs: 4/4   Errors: 1   Failures: 0

- JUnit 5 Dynamic Tests Example [Runner: JUnit 5]
  - dynamicTests() (0.000 s)
    - simple dynamic test (0.000 s)
    - My Executable Class (0.001 s)
    - Exception Executable (0.002 s)
    - simple dynamic test-2 (0.001 s)

Failure Trace

java.lang.Exception: Exception Example
  at com.ecommerce.tests.DynamicTests.lambda$1(Dy
  at java.base/java.util.Optional.ifPresent(Optional.java
  at java.base/java.util.ArrayList.forEach(ArrayList.java:
  at java.base/java.util.ArrayList.forEach(ArrayList.java:

```
Hello World!
```