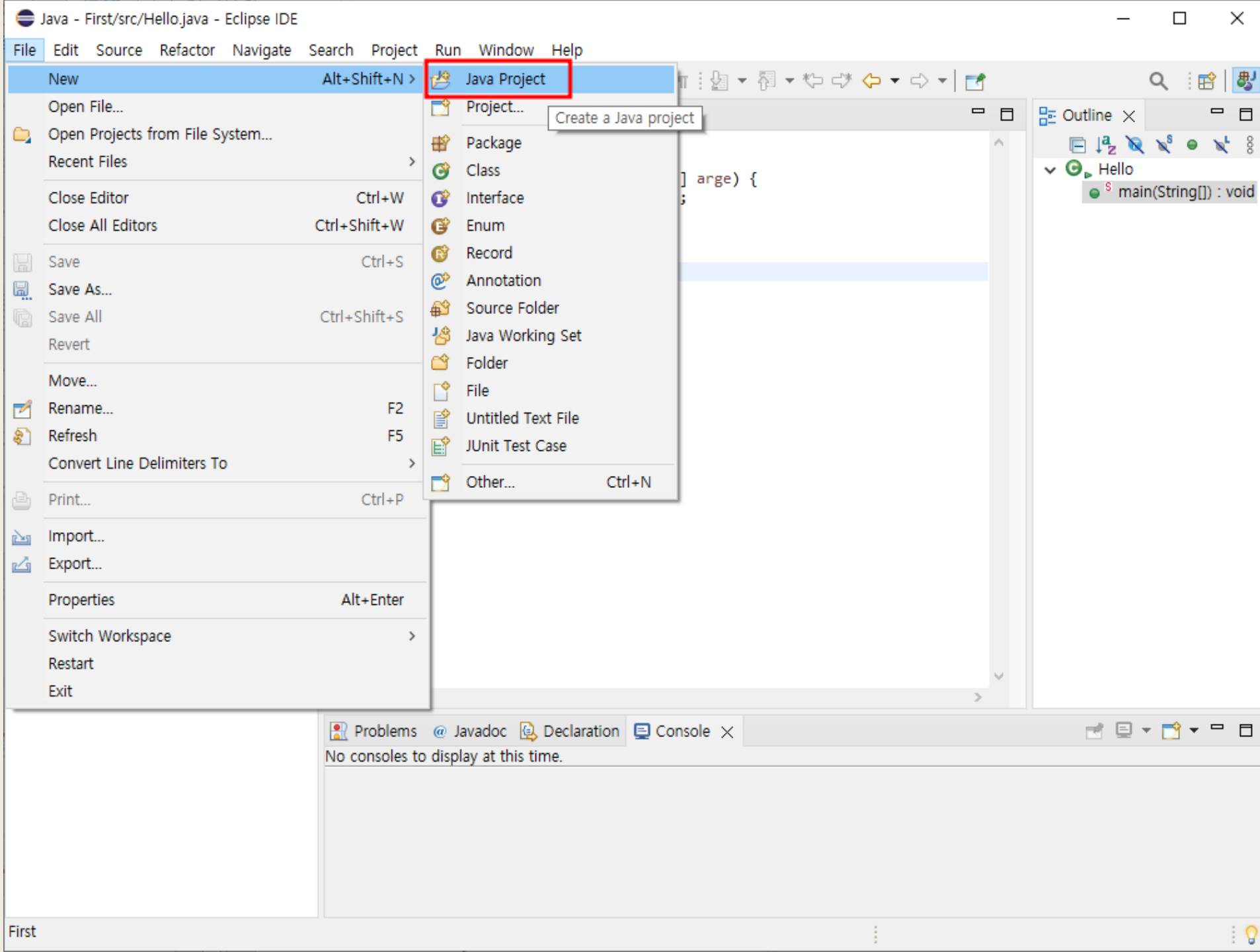


(오라클) 데이터베이스 연동 테스트



Connecting to the Database

Eclipse IDE)



New Java Project

Create a Java Project

Create a Java project in the workspace or in an external location.

Project name:

☒ Use default location

Location: [Browse...](#)

JRE

☒ Use an execution environment JRE:

☐ Use a project specific JRE:

☐ Use default JRE 'jre' and workspace compiler preferences [Configure JREs...](#)

Project layout

☐ Use project folder as root for sources and class files

☒ Create separate folders for sources and class files [Configure default...](#)

Working sets

☐ Add project to working sets [New...](#)

Working sets: [Select...](#)

Module

☐ Create module-info.java file

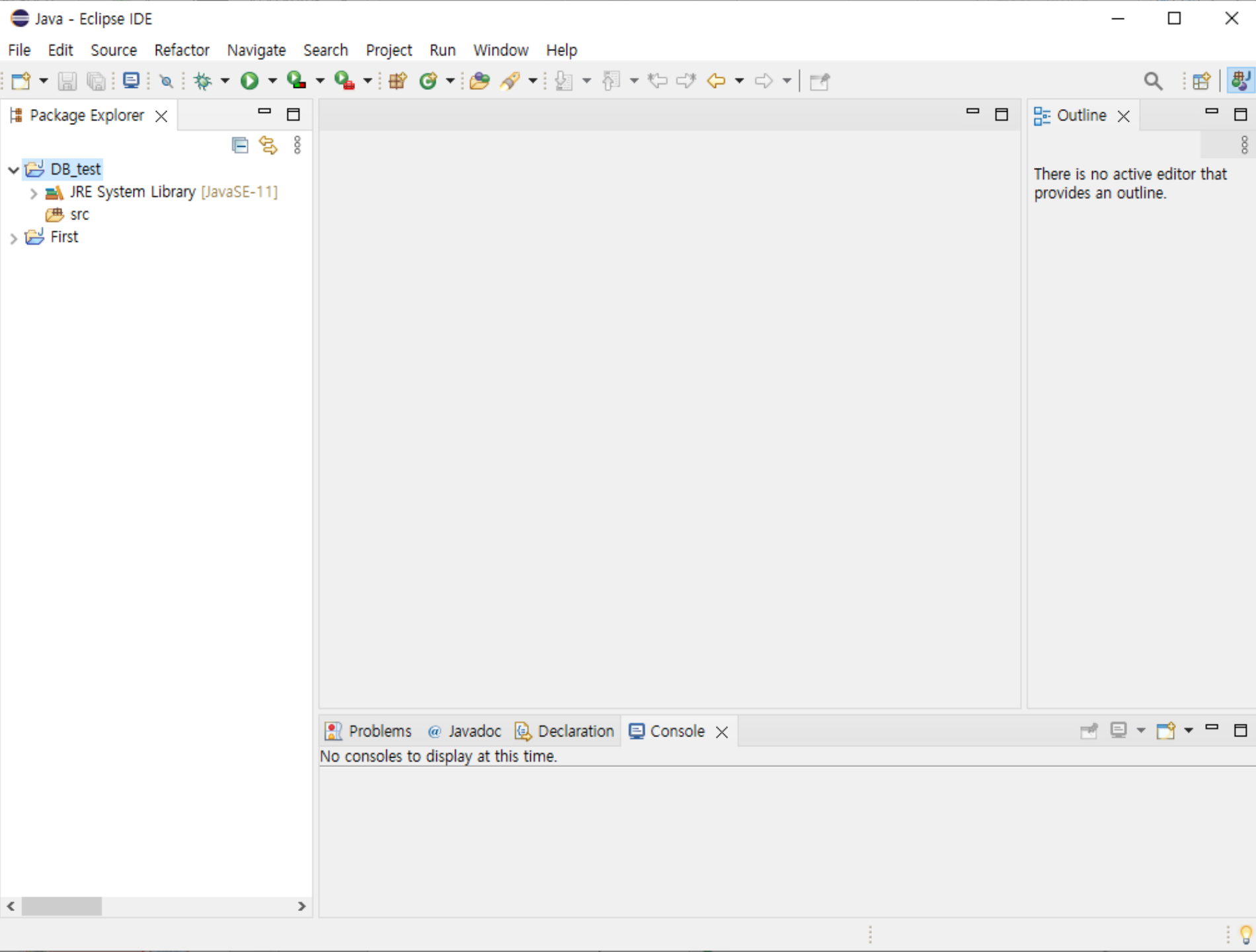
Module name:

☐ Generate comments

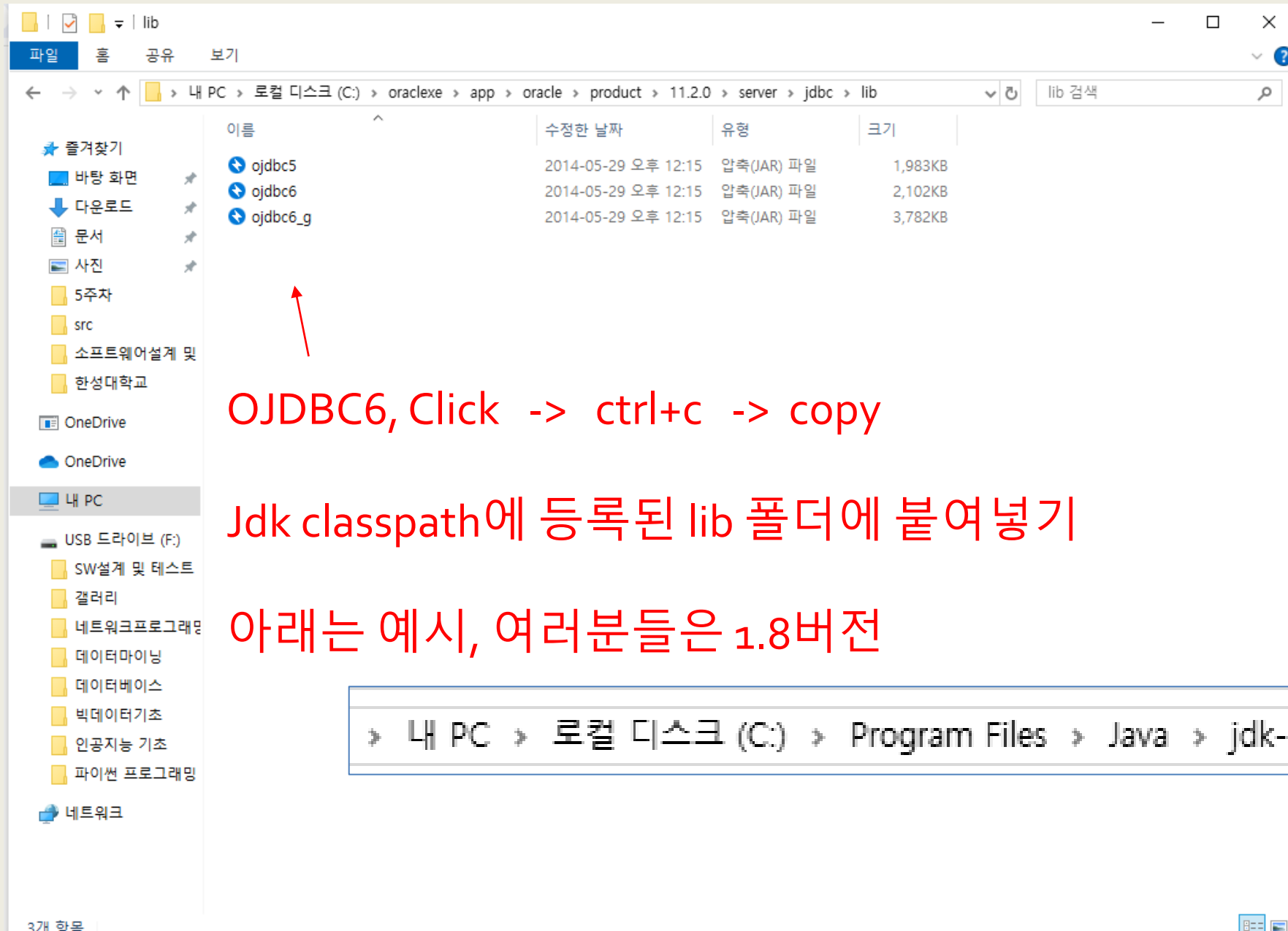
The default compiler compliance level for the current workspace is 17. The new project will use a project specific

[?](#) [< Back](#) [Next >](#) [Finish](#) [Cancel](#)

여러분들은 1.8버전 사용



JDBC Driver

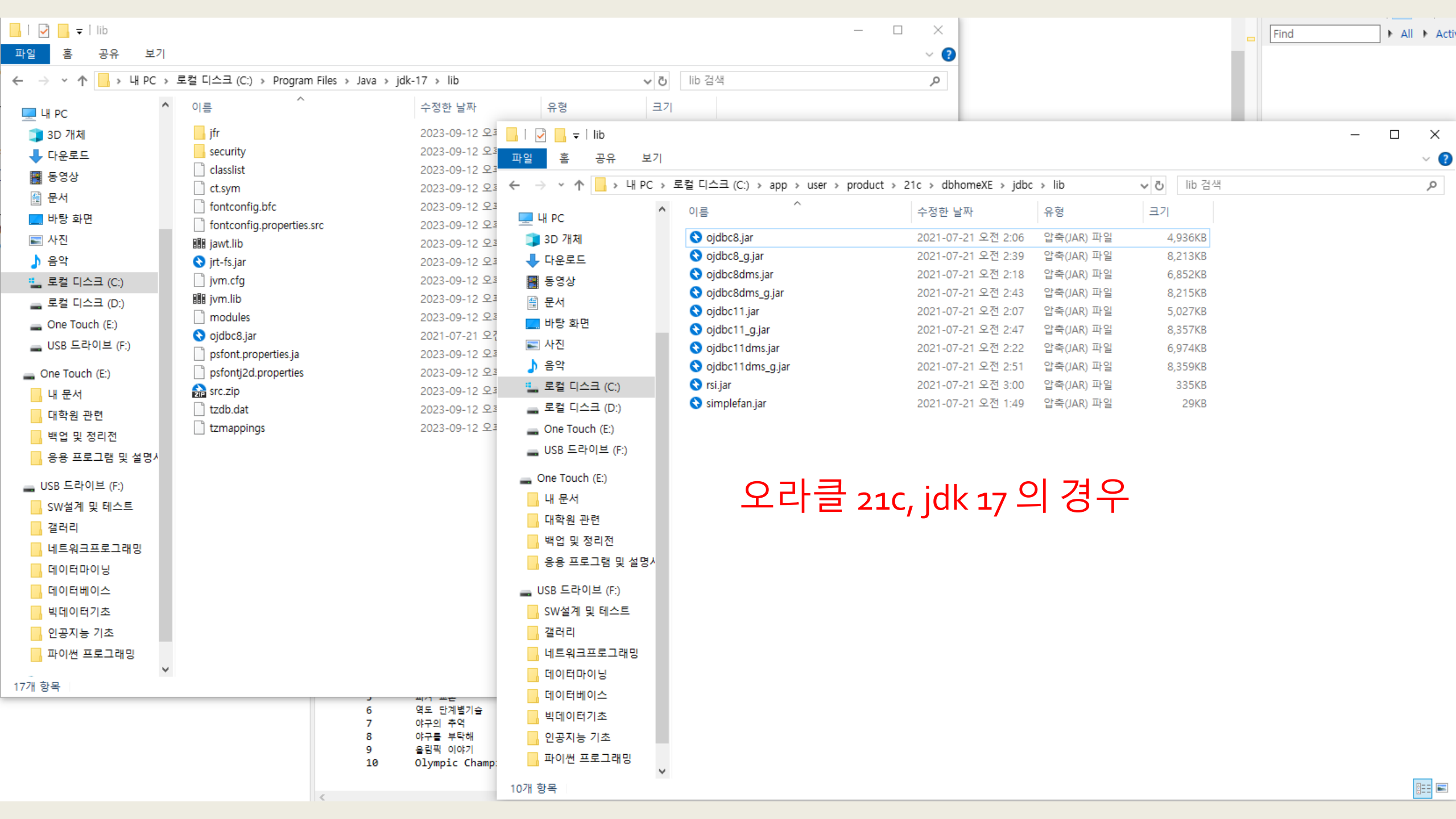


OJDBC6, Click -> ctrl+c -> copy

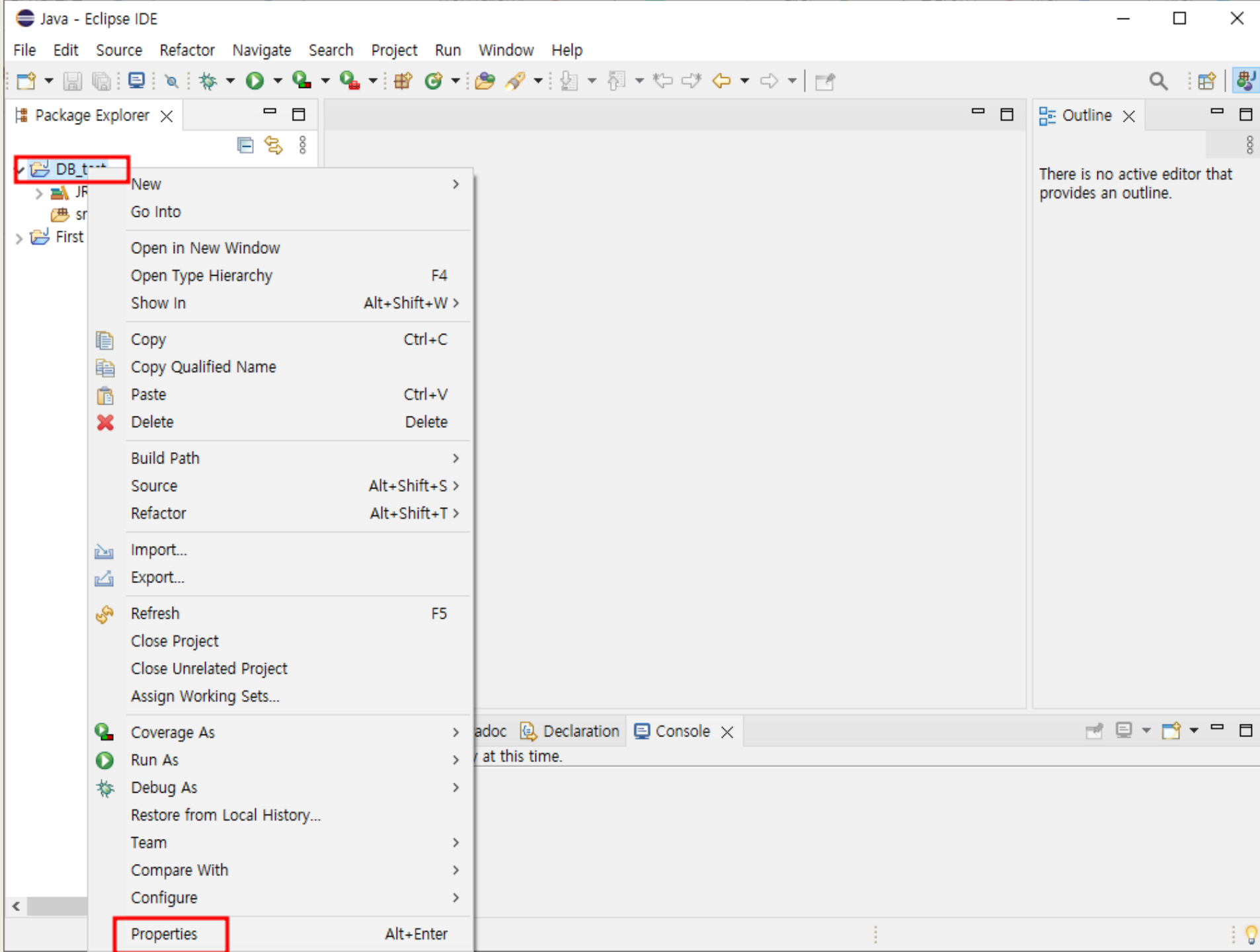
Jdk classpath에 등록된 lib 폴더에 붙여넣기

아래는 예시, 여러분들은 1.8버전

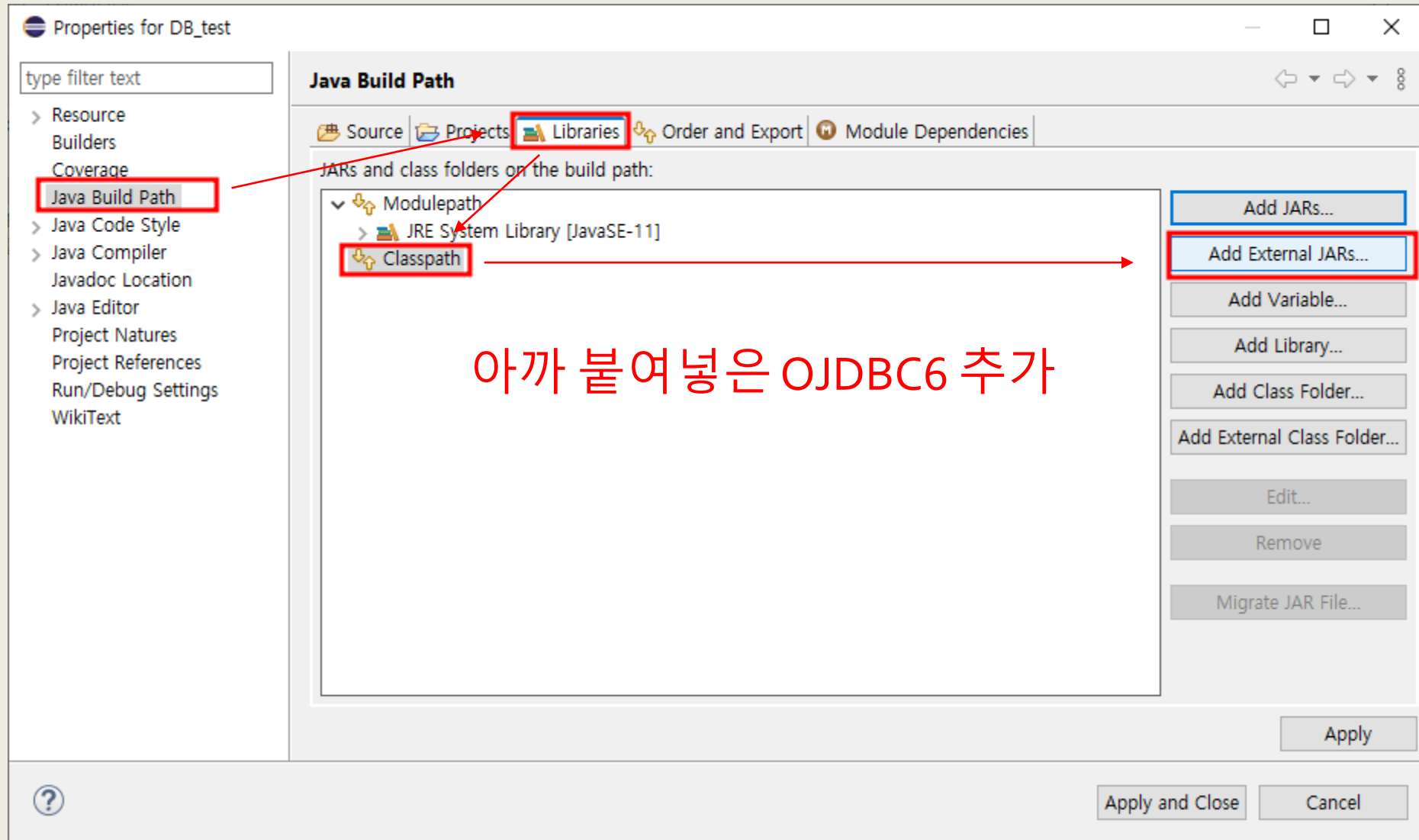
➤ 내 PC ➤ 로컬 디스크 (C:) ➤ Program Files ➤ Java ➤ jdk-17 ➤ lib

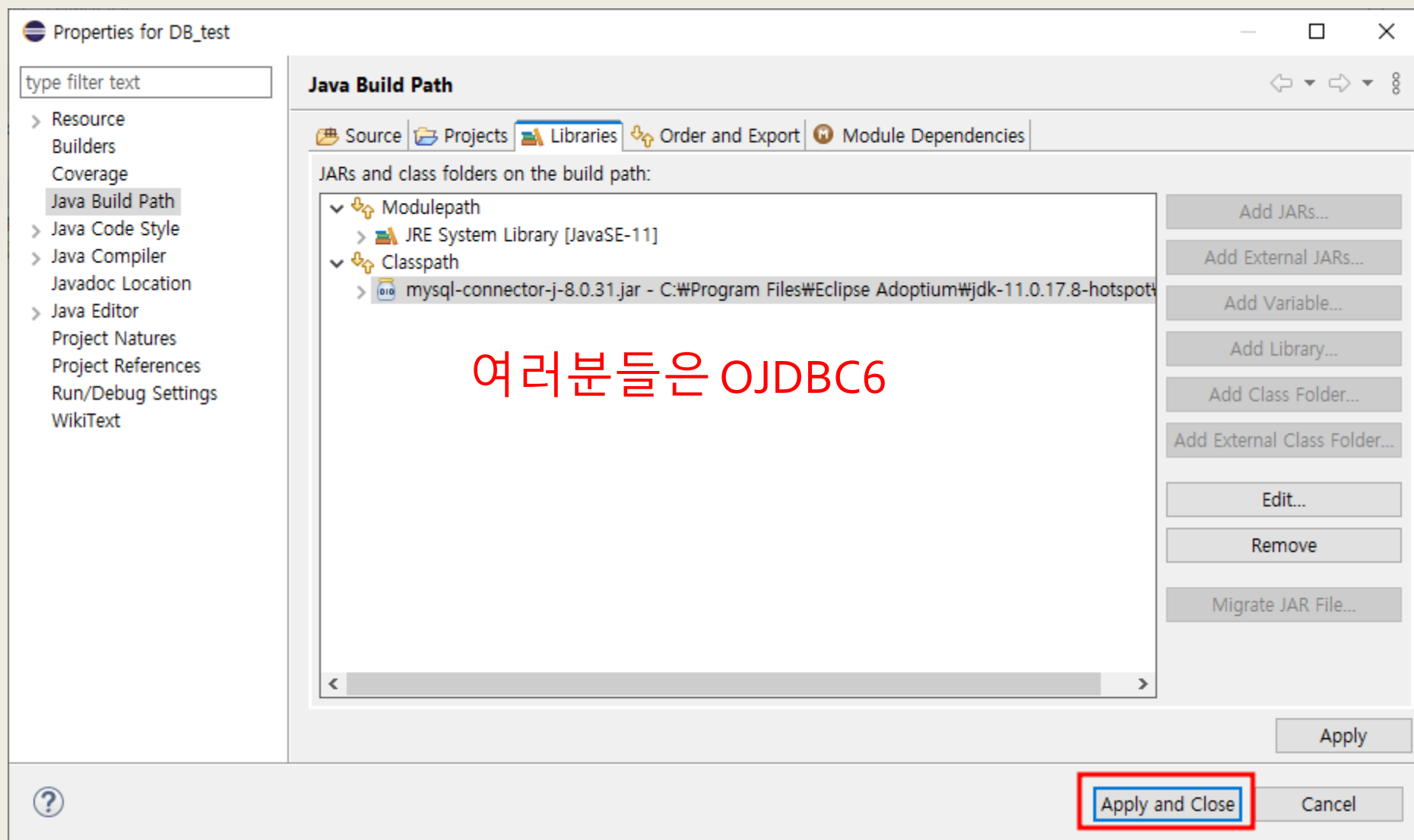


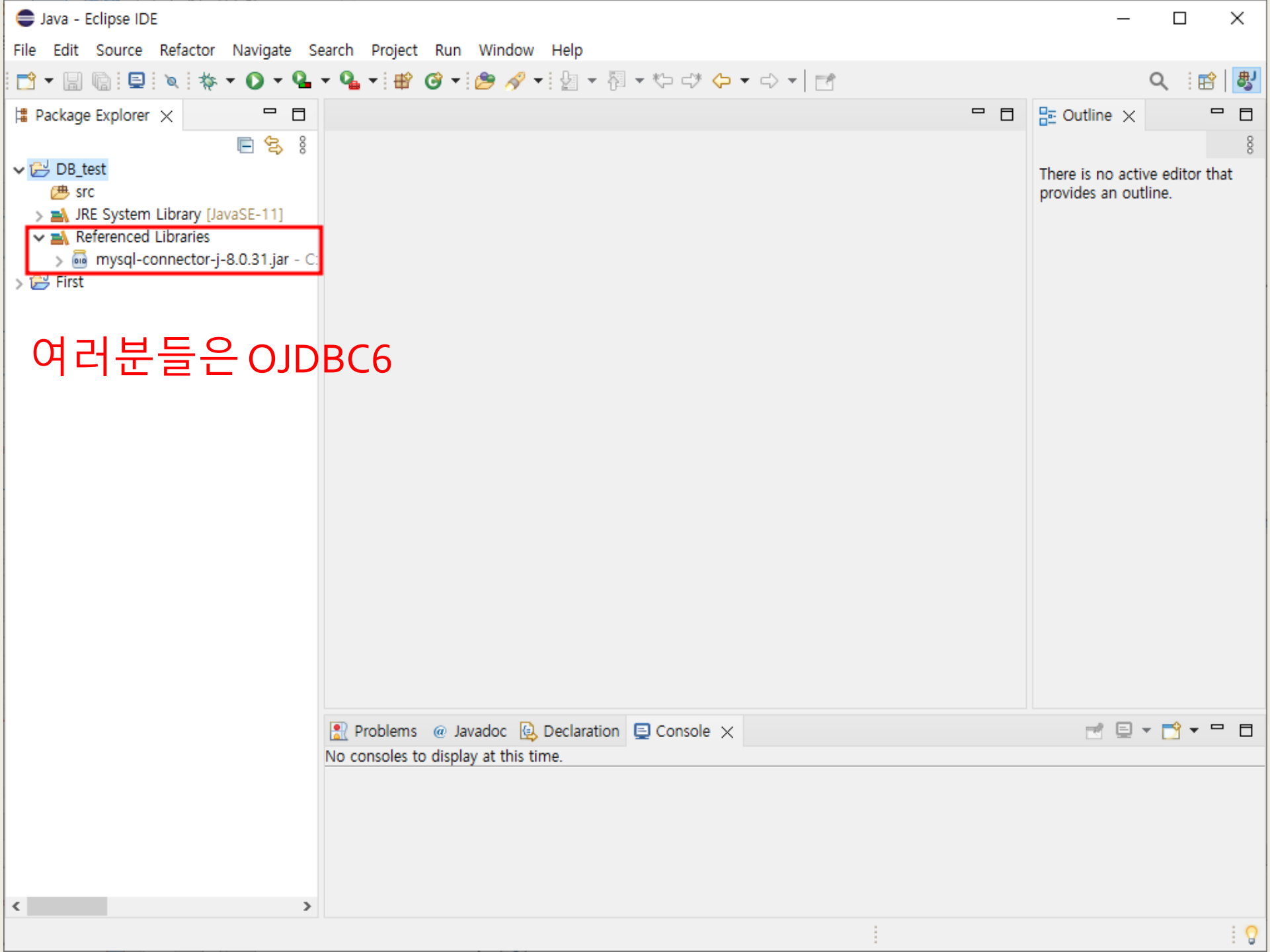
오라클 21c, jdk 17 의 경우



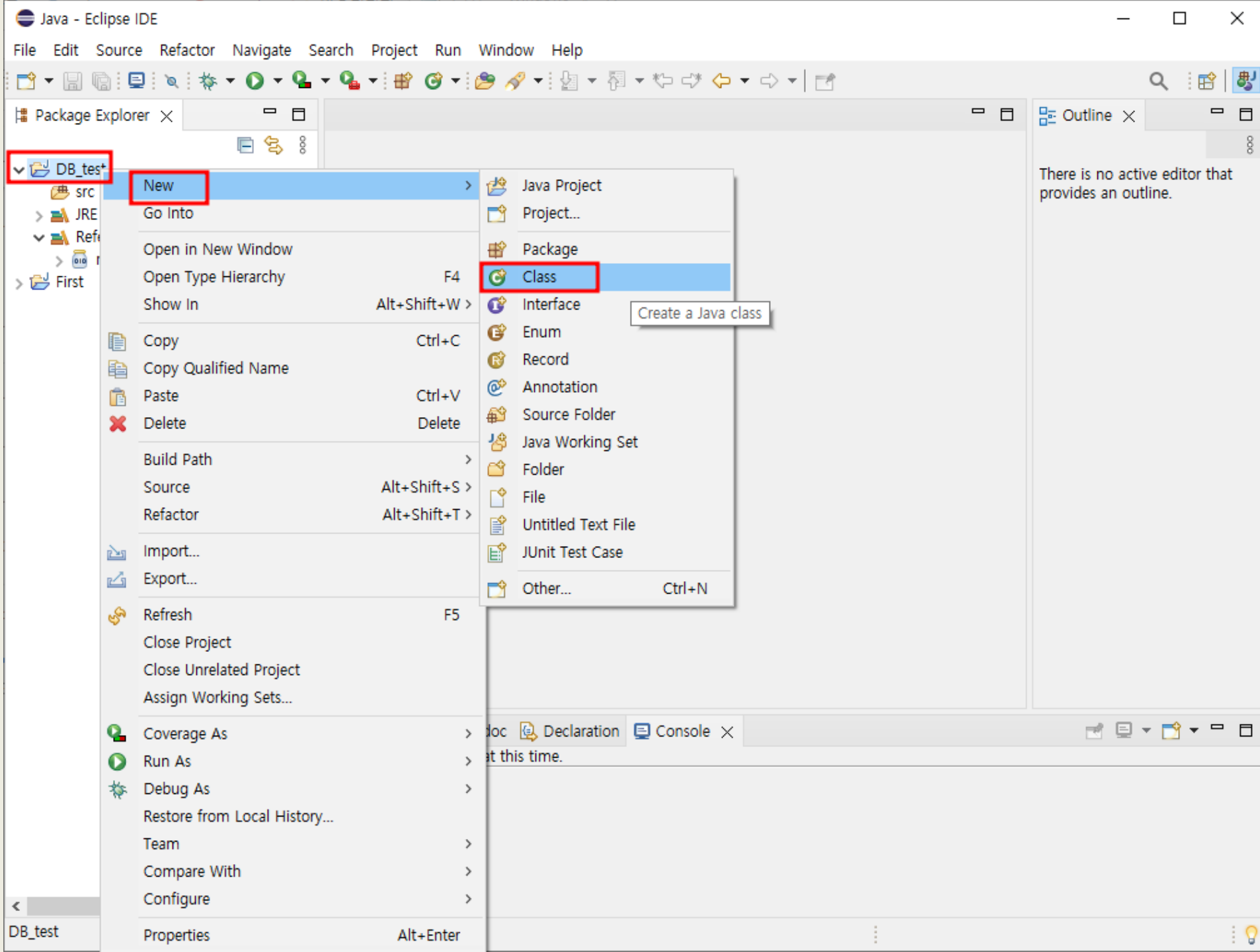
여러분들은 1.8버전, 다를 수 있음








여러분들은 OJDBC6



New Java Class

Java Class

 The use of the default package is discouraged.

Source folder: DB_test/src Browse...

Package: (default) Browse...

☐ Enclosing type: Browse...

Name: **BookList**

Modifiers: ☒ public ☐ package ☐ private ☐ protected
☐ abstract ☐ final ☐ static

Superclass: java.lang.Object Browse...

Interfaces: Add...
Remove

Which method stubs would you like to create?

☐ public static void main(String[] args)
☐ Constructors from superclass
☒ Inherited abstract methods

Do you want to add comments? (Configure templates and default value [here](#))
☐ Generate comments

? **Finish** Cancel



Package Explorer x JUnit

- > aa
- > Bingo test
- > kkutu-client
- > kkutu-server
- > network_termproject_hamham
- > o1
 - > JRE System Library [JavaSE-17]
 - > src
 - > o1
 - > BookList.java
 - > Referenced Libraries
 - > ojdbc8.jar - C:\Program Files\Java\jdk-17\lib
 - > pokemonBattle
 - > PokemonBattle-main
 - > project_MyCreate_final
 - > simpleCalculator
 - > TermProject
 - > Test2
 - > Test3
 - > Test5
 - > TestChat2

BookList.java x

```
1 package o1;
2
3 import java.io.*;
4 import java.sql.*;
5
6 public class BookList {
7
8     Connection con;
9
10    public BookList() {
11        String url="jdbc:oracle:thin:@localhost:1521:xe";
12        String userid="C##HANSUNG";
13        String pwd="hs1234";
14
15        try {
16            con=DriverManager.getConnection(url, userid, pwd);
17            System.out.println("Oracle connection ^O^ \n");
18        } catch (SQLException e) {
19            e.printStackTrace();
20        }
21    }
22
23
24    private void sqlRun() {
25        String query="SELECT * FROM Book";
26        try {
27            Statement stmt=con.createStatement();
28            ResultSet rs=stmt.executeQuery(query);
29            System.out.println(" BOOK NO \tBOOK NAME \t\tPUBLISHER \tPRICE ");
30            while(rs.next()) {
31                System.out.print("\t"+rs.getInt(1));
32                System.out.print("\t"+rs.getString(2));
33                System.out.print("\t\t"+rs.getString(3));
34                System.out.println("\t"+rs.getInt(4));
35            }
36
37            con.close();
38        } catch (SQLException e) {
39            e.printStackTrace();
40        }
41    }
42
43    public static void main(String args[]) {
44        BookList s=new BookList();
```

```
Problems @ Javadoc Declaration Console X
<terminated> BookList [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (
Oracle connection ^O^

BOOK NO      BOOK NAME      PUBLISHER      PRICE
    1      축구의 역사      굿스포츠      7000
    2      축구하는 여자      나무수      13000
    3      축구의 이해      대한미디어      22000
    4      골프 바이블      대한미디어      35000
    5      피겨 교본      굿스포츠      8000
    6      역도 단계별기술      굿스포츠      6000
    7      야구의 추억      이상미디어      20000
    8      야구들 부탁해      이상미디어      13000
    9      올림픽 이야기      삼성당      7500
   10      Olympic Champions      Pearson      13000
```

JUnit 라이브러리 추가 후 연결 테스트 코드 작성

eclipse-workspace - o1/src/o1/BookListTest.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer x JUnit

- aa
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 - JRE System Library [JavaSE-17]
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 - ojdbc8.jar - C:\Program Files\Java\jdk-17\lib
 - JUnit 5
 - pokemonBattle
 - PokemonBattle-main
 - project_MyCreate_final
 - simpleCalculator
 - TermProject
 - Test2
 - Test3
 - Test5
 - TestChat2

BookList.java BookListTest.java x

```
1 package o1;
2
3 import static org.junit.jupiter.api.Assertions.assertNotNull;
4
5 import java.sql.SQLException;
6
7 import org.junit.jupiter.api.AfterAll;
8 import org.junit.jupiter.api.BeforeAll;
9 import org.junit.jupiter.api.Test;
10
11 public class BookListTest {
12
13     private static BookList bookList;
14
15     @BeforeAll
16     public static void setUp() {
17         bookList = new BookList();
18         System.out.println("Database connection setup for testing.");
19     }
20
21     @AfterAll
22     public static void tearDown() throws SQLException {
23         if (bookList.con != null) {
24             bookList.con.close();
25             System.out.println("Database connection closed.");
26         }
27     }
28
29     @Test
30     public void testConnection() {
31         assertNotNull(bookList.con, "Database connection is null");
32     }
33
34 }
35
```

Package Explorer JUnit x

Finished after 0.502 seconds

Runs: 1/1 Errors: 0 Failures: 0

BookListTest [Runner: JUnit 5] (0.000 s)