

i2i Academy

Training Document

Topic	RDBMS - Oracle
Document Name	ORACLEDB-EX-03

Document Difficulty Level			
Beginner	Junior	Senior	Expert
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Document History

Date	Author	Ver	Comments
05.03.2025	Mennan Tekbir	1.0	Initial Draft
05.03.2025	Mehmet Erdem Önal	1.1	Revisions

RDBMS – Oracle

Exercise ORACLEDB-EX-04:

Definiton: Create a simple java application that inserts sample 100 records to the BOOK table. NAME and ISBN fields can be random generated.

Hint: <https://stackoverflow.com/questions/8778422/java-oracle-jdbc-select-statement>

Please provide screenshots to show your work.

ORACLEDB-EX-04 Solution:

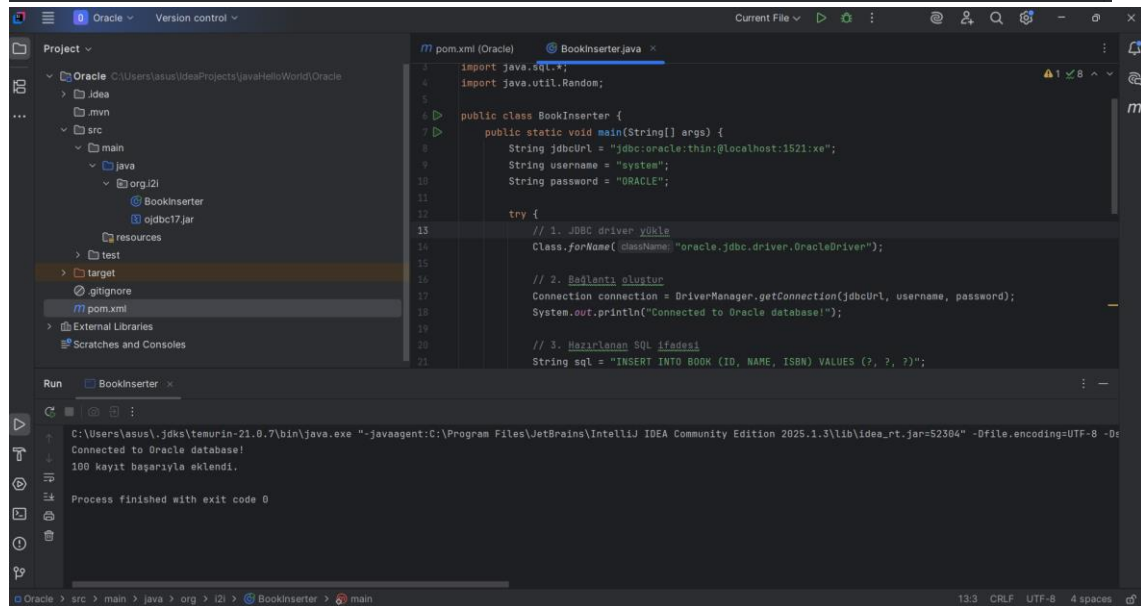
```
m pom.xml (Oracle) x BookInserter.java
1 <?xml version="1.0" encoding="UTF-8"?>
2 <project xmlns="http://maven.apache.org/POM/4.0.0"
3       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4       xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
5   <modelVersion>4.0.0</modelVersion>
6
7   <groupId>org.i2i</groupId>
8   <artifactId>Oracle</artifactId>
9   <version>1.0-SNAPSHOT</version>
10
11   <properties>
12     <maven.compiler.source>21</maven.compiler.source>
13     <maven.compiler.target>21</maven.compiler.target>
14     <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
15   </properties>
16
17   <dependencies>
18     <dependency>
19       <groupId>com.oracle.database.jdbc</groupId>
20       <artifactId>ojdbc8</artifactId>
21       <version>21.9.0</version>
22     </dependency>
23   </dependencies>
24
25
26 </project>
```

```
m pom.xml (Oracle) x BookInserter.java
1 package org.i2i;
2 import java.sql.*;
3 import java.util.Random;
4
5 public class BookInserter {
6     public static void main(String[] args) {
7         String jdbcUrl = "jdbc:oracle:thin:@localhost:1521:xe";
8         String username = "system";
9         String password = "ORACLE";
10
11         try {
12             // 1. JDBC driver yükle
13             Class.forName("oracle.jdbc.driver.OracleDriver");
14
15             // 2. Bağlantı oluştur
16             Connection connection = DriverManager.getConnection(jdbcUrl, username, password);
17             System.out.println("Connected to Oracle database!");
18
19             // 3. Hazırlanan SQL ifadesi
20             String sql = "INSERT INTO BOOK (ID, NAME, ISBN) VALUES (?, ?, ?)";
21             PreparedStatement ps = connection.prepareStatement(sql);
22
23             Random rand = new Random();
24             for (int i = 1; i <= 100; i++) {
25                 ps.setInt(1, i); // ID
26                 ps.setString(2, "Book-" + rand.nextInt(10000)); // NAME
27                 ps.setString(3, "ISBN-" + rand.nextInt(100000000)); // ISBN
28                 ps.executeUpdate();
29             }
30             System.out.println("100 kayıt başarıyla eklendi.");
31             ps.close();
32         } catch (Exception e) {
33             e.printStackTrace();
34         }
35     }
36 }
```

```

pom.xml (Oracle)  BookInsenter.java x
5  public class BookInsenter {
6      public static void main(String[] args) {
7
8          String password = "ORACLE";
9
10         try {
11             // 1. JDBC driver yükle
12             Class.forName( className: "oracle.jdbc.driver.OracleDriver");
13
14             // 2. Bağlantı oluştur
15             Connection connection = DriverManager.getConnection(jdbcUrl, username, password);
16             System.out.println("Connected to Oracle database!");
17
18             // 3. Hazırlanan SQL ifadesi
19             String sql = "INSERT INTO BOOK (ID, NAME, ISBN) VALUES (?, ?, ?)";
20             PreparedStatement ps = connection.prepareStatement(sql);
21
22             Random rand = new Random();
23             for (int i = 1; i <= 100; i++) {
24                 ps.setInt( parameterIndex: 1, i); // ID
25                 ps.setString( parameterIndex: 2, x: "Book_" + rand.nextInt( bound: 10000)); // NAME
26                 ps.setString( parameterIndex: 3, x: "ISBN-" + rand.nextInt( bound: 100000000)); // ISBN
27                 ps.executeUpdate();
28             }
29             System.out.println("100 kayıt başarıyla eklendi.");
30             ps.close();
31             connection.close();
32         } catch (Exception e) {
33             e.printStackTrace();
34         }
35     }
36 }

```



The screenshot shows the IntelliJ IDEA IDE with the following components:

- Project View:** Shows the project structure with folders for 'src', 'main', 'resources', 'test', 'target', and 'externalLibraries'. The 'BookInsenter' class is highlighted in the 'main' folder.
- Code Editor:** Displays the 'BookInsenter.java' file with the same code as shown in the first image.
- Run Console:** Shows the output of the program:


```

C:\Users\sasus\jdk\temurin-21.0.7\bin\java.exe -javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2025.1.3\lib\idea_rt.jar=S2384" -Dfile.encoding=UTF-8 -De
Connected to Oracle database!
100 kayıt başarıyla eklendi.
Process finished with exit code 0
      
```

Oracle SQL Developer : oraclexe

File Edit View Navigate Run Source Team Tools Window Help

Connections x

Oracle Connections
oraclexe
Database Schema Service Connections

Worksheet Query Builder

SELECT * FROM BOOK;

Script Output x Query Result x

SQL Fetched 50 rows in 0,527 seconds

ID	NAME	ISBN	CREATE_DATE
1	Book_293	ISBN-72002307	11/07/2025
2	Book_3247	ISBN-77283603	11/07/2025
3	Book_965	ISBN-7387524	11/07/2025
4	Book_8919	ISBN-7777439	11/07/2025
5	Book_587	ISBN-9761097	11/07/2025
6	Book_8971	ISBN-98800894	11/07/2025
7	Book_1233	ISBN-61219914	11/07/2025
8	Book_5834	ISBN-14417764	11/07/2025
9	Book_3315	ISBN-1408100	11/07/2025
10	Book_5030	ISBN-63390410	11/07/2025
11	Book_2272	ISBN-47404813	11/07/2025
12	Book_52	ISBN-82835095	11/07/2025
13	Book_14	ISBN-73543122	11/07/2025
14	Book_5261	ISBN-5754446	11/07/2025
15	Book_4575	ISBN-40532658	11/07/2025
16	Book_3771	ISBN-79003405	11/07/2025
17	Book_2745	ISBN-11866028	11/07/2025
18	Book_9973	ISBN-8647030	11/07/2025
19	Book_3244	ISBN-65763617	11/07/2025
20	Book_1406	ISBN-26133926	11/07/2025
21	Book_8317	ISBN-1330035	11/07/2025
22	Book_100	ISBN-96070376	11/07/2025

Line 2 Column 1 Insert Modified Windows: CRJ/P

Oracle SQL Developer : oraclexe

File Edit View Navigate Run Source Team Tools Window Help

Connections x

Oracle Connections
oraclexe
Database Schema Service Connections

Worksheet Query Builder

SELECT * FROM BOOK;

Script Output x Query Result x

SQL Fetching next 50 rows in 0,587 seconds

ID	NAME	ISBN	CREATE_DATE
79	Book_6687	ISBN-2044664	11/07/2025
80	Book_7150	ISBN-2912559	11/07/2025
81	Book_7418	ISBN-94193620	11/07/2025
82	Book_4949	ISBN-8321748	11/07/2025
83	Book_3345	ISBN-93339386	11/07/2025
84	Book_3307	ISBN-71525895	11/07/2025
85	Book_2184	ISBN-59172140	11/07/2025
86	Book_9250	ISBN-34198489	11/07/2025
87	Book_1526	ISBN-30993245	11/07/2025
88	Book_5473	ISBN-67617549	11/07/2025
89	Book_1040	ISBN-59437210	11/07/2025
90	Book_7377	ISBN-38753301	11/07/2025
91	Book_5439	ISBN-27951508	11/07/2025
92	Book_9784	ISBN-67114276	11/07/2025
93	Book_179	ISBN-78229066	11/07/2025
94	Book_7251	ISBN-2301426	11/07/2025
95	Book_1186	ISBN-77228119	11/07/2025
96	Book_3179	ISBN-92736780	11/07/2025
97	Book_1689	ISBN-6262485	11/07/2025
98	Book_7562	ISBN-60250068	11/07/2025
99	Book_2339	ISBN-40588013	11/07/2025
100	Book_7352	ISBN-43769116	11/07/2025

Line 2 Column 1 Insert Modified Windows: CRJ/P