



```
1 package com.oracle.hospital_db_add_foreign_keys;
2 import java.sql.Connection;
3 import java.sql.DriverManager;
4 import java.sql.SQLException;
5 import java.sql.Statement;
6
7 public class Java_Hospital_DB_Add_Foreign_Keys {
8
9     public static void main(String[] args) throws SQLException {
10
11         Connection conn = null;
12         Statement stmt = null;
13
14         try {
15
16             Class.forName("oracle.jdbc.driver.OracleDriver");
17             conn = DriverManager.getConnection("jdbc:oracle:thin:@//localhost:1521/PLSQL", "scott", "tiger");
18             System.out.println("Connected to Oracle 19c | PL/SQL database successfully.");
19             stmt = conn.createStatement();
20
21             String query_1 = "ALTER TABLE doctors ADD CONSTRAINT hosp_id_fk_1 FOREIGN KEY (hosp_id) REFERENCES hospitals (hosp_id)";
22             String query_2 = "ALTER TABLE diagnoses ADD CONSTRAINT doc_id_fk_1 FOREIGN KEY (doc_id) REFERENCES doctors (doc_id)";
23             String query_3 = "ALTER TABLE transactions ADD CONSTRAINT hosp_id_fk_2 FOREIGN KEY (hosp_id) REFERENCES hospitals (hosp_id)";
24             String query_4 = "ALTER TABLE transactions ADD CONSTRAINT prod_id_fk_1 FOREIGN KEY (prod_id) REFERENCES products (prod_id)";
25             String query_5 = "ALTER TABLE transactions ADD CONSTRAINT diag_id_fk_1 FOREIGN KEY (diag_id) REFERENCES diagnoses (diag_id)";
26             String query_6 = "ALTER TABLE transactions ADD CONSTRAINT doc_id_fk_2 FOREIGN KEY (doc_id) REFERENCES doctors (doc_id)";
27             String query_7 = "ALTER TABLE transactions ADD CONSTRAINT pat_id_fk_1 FOREIGN KEY (pat_id) REFERENCES patients (pat_id)";
28             String query_8 = "ALTER TABLE transactions ADD CONSTRAINT prod_id_fk_2 FOREIGN KEY (prod_id) REFERENCES products (prod_id)";
29             String query_9 = "ALTER TABLE transactions ADD CONSTRAINT hosp_id_fk_3 FOREIGN KEY (hosp_id) REFERENCES hospitals (hosp_id)";
30             String query_10 = "ALTER TABLE invoices ADD CONSTRAINT doc_id_fk_3 FOREIGN KEY (doc_id) REFERENCES doctors (doc_id)";
31             String query_11 = "ALTER TABLE invoices ADD CONSTRAINT diag_id_fk_2 FOREIGN KEY (diag_id) REFERENCES diagnoses (diag_id)";
32             String query_12 = "ALTER TABLE invoices ADD CONSTRAINT pat_id_fk_2 FOREIGN KEY (pat_id) REFERENCES patients (pat_id)";
33             String query_13 = "ALTER TABLE invoices ADD CONSTRAINT prod_id_fk_2 FOREIGN KEY (prod_id) REFERENCES products (prod_id)";
34             String query_14 = "ALTER TABLE invoices ADD CONSTRAINT trans_id_fk_1 FOREIGN KEY (trans_id) REFERENCES transactions (trans_id)";
35
36             stmt.executeUpdate(query_1);
37             stmt.executeUpdate(query_2);
38             stmt.executeUpdate(query_3);
39             stmt.executeUpdate(query_4);
40             stmt.executeUpdate(query_5);
41             stmt.executeUpdate(query_6);
42             stmt.executeUpdate(query_7);
43             stmt.executeUpdate(query_8);
44             stmt.executeUpdate(query_9);
45             stmt.executeUpdate(query_10);
46             stmt.executeUpdate(query_11);
47             stmt.executeUpdate(query_12);
48             stmt.executeUpdate(query_13);
49             stmt.executeUpdate(query_14);
50             System.out.println("Foreign Keys added successfully.");
51
52         } catch (ClassNotFoundException cnfe) {
53             cnfe.printStackTrace();
54         } catch (SQLException sqle) {
55             sqle.printStackTrace();
56         } catch (Exception ex) {
57             ex.printStackTrace();
58         }
59
60         finally {
61             try {
62                 if (stmt != null) {
63                     stmt.close();
64                 }
65             } catch (SQLException sqle) {
66                 sqle.printStackTrace();
67             }
68             try {
69                 if (conn != null) {
70                     conn.close();
71                 }
72             } catch (SQLException sqle) {
73                 sqle.printStackTrace();
74             }
75         }
76     }
77 }
```

Problems | Javadoc | Declaration | Console

<terminated> Java_Hospital_DB_Add_Foreign_Keys [Java Application] C:\Program Files\Java\jdk-15.0.1\bin\javaw.exe (Jul 18, 2021, 6:59:04 PM - 6:59:05 PM)
Connected to Oracle 19c | PL/SQL database successfully.
Foreign Keys added successfully.