

Gagnasafnsfræði Verkefni 8

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1

```
import java.io.*;
import java.sql.*;

public class V8a {
    public static void main(String args[]) throws SQLException {
        String url = "jdbc:sqlite:/home/ragnar/school/data/v8/company.db";
        Connection conn = null;

        try {
            conn = DriverManager.getConnection(url);
            System.out.println("Connection established successfully");
        } catch (SQLException e) {
            e.printStackTrace();
        } finally {
            Statement stmt = conn.createStatement();
            ResultSet rs = stmt.executeQuery("SELECT SUM(Salary) AS Sum FROM EMPLOYEE");
            while (rs.next()) {
                System.out.println("Heildarlaun: " + rs.getDouble("Sum"));
            }
            rs.close();
            try {
                if (conn != null) {
                    conn.close();
                }
            } catch (SQLException ex) {
                ex.printStackTrace();
            }
        }
    }
}
```

```
ragnar@gamer ~/school/data/v8 ◆ java -cp sqlite-jdbc-3.43.0.0.jar: V8a
Connection established successfully
Heildarlaun: 281000.0
```

2

```
import java.io.*;
import java.sql.*;

public class V8b {
    public static void main(String args[]) throws SQLException {
        String url = "jdbc:sqlite:/home/ragnar/school/data/v8/company.db";
        Connection conn = null;

        try {
            conn = DriverManager.getConnection(url);
            System.out.println("Connection established successfully");
        } catch (SQLException e) {
            e.printStackTrace();
        } finally {
            Statement stmt = conn.createStatement();
            stmt.executeUpdate("UPDATE EMPLOYEE SET Salary = Salary * 1.05");
            ResultSet rs = stmt.executeQuery("SELECT Salary FROM EMPLOYEE");
            System.out.println("Laun hækkuð um 5%");
            while (rs.next()) {
                double n = rs.getDouble("Salary");
                System.out.println(n);
            }
            rs.close();
            try {
                if (conn != null) {
                    conn.close();
                }
            } catch (SQLException ex) {
                ex.printStackTrace();
            }
        }
    }
}
```


```
ragnar@gamer ~/school/data/v8 ◆ java -cp sqlite-jdbc-3.43.0.0.jar: V8b
Connection established successfully
Laun hækkuð um 5%
57750.0
42000.0
45150.0
31500.0
26250.0
39900.0
26250.0
26250.0
```

3

```
import java.io.*;
import java.sql.*;

public class V8c {
    public static void main(String args[]) throws SQLException {
        String url = "jdbc:sqlite:/home/ragnar/school/data/v8/company.db";
        Connection conn = null;

        try {
            conn = DriverManager.getConnection(url);
            System.out.println("Connection established successfully");
        } catch (SQLException e) {
            e.printStackTrace();
        } finally {
            Statement stmt = conn.createStatement();
            ResultSet rs = stmt.executeQuery("SELECT Ssn,Salary FROM EMPLOYEE");
            PreparedStatement pstmt = conn.prepareStatement(
                "UPDATE EMPLOYEE SET Salary = Salary + 100 WHERE Ssn = ?");
            while (rs.next()) {
                String ssn = rs.getString("Ssn");
                pstmt.setString(1, ssn);
                pstmt.executeUpdate();
            }
            System.out.println("Salary increased by 100");
            rs = stmt.executeQuery("SELECT Salary FROM EMPLOYEE");
            while (rs.next()) {
                System.out.println(rs.getDouble("Salary"));
            }
            rs.close();
            try {
                if (conn != null) {
                    conn.close();
                }
            } catch (SQLException ex) {
                ex.printStackTrace();
            }
        }
    }
}
```

```
ragnar@gamer ~/school/data/v8  java -cp sqlite-jdbc-3.43.0.0.jar: V8c
Connection established successfully
Salary increased by 100
55100.0
40100.0
43100.0
30100.0
25100.0
38100.0
25100.0
25100.0
ragnar@gamer ~/school/data/v8  
```

```
ragnar@gamer ~/school/data/v8 ◆ java -cp sqlite-jdbc-3.43.0.0.jar: V8b
Connection established successfully
Laun hækkuð um 5%
57750.0
42000.0
45150.0
31500.0
26250.0
39900.0
26250.0
26250.0
ragnar@gamer ~/school/data/v8 ◆ java -cp sqlite-jdbc-3.43.0.0.jar: V8c
Connection established successfully
Salary increased by 100
57850.0
42100.0
45250.0
31600.0
26350.0
40000.0
26350.0
26350.0
ragnar@gamer ~/school/data/v8 ◆ java -cp sqlite-jdbc-3.43.0.0.jar: JDBC1
Enter a Social Security Number: 888665555
Borg 57850.0
ragnar@gamer ~/school/data/v8 ◆ java -cp sqlite-jdbc-3.43.0.0.jar: V8a
Connection established successfully
Heildarlaun: 295850.0
```