

HW to Chapter 13

1) What is JDBC?

JDBC stands for Java Database Connectivity, it is a Java-based API that enables Java applications to interact with relational databases. The JDBC API provides a standard interface for connecting to and interacting with databases, allowing the execution of SQL queries, retrieving results, and updating databases.

2) How to connect your Java program to a database?

Loading the JDBC driver -> Establishing connection -> Creating a statement -> Executing SQL Queries -> Processing results -> Close resources

```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;

public class JDBCExample {
    public static void main(String[] args) {
        String jdbcUrl = "jdbc:mysql://localhost:3306/sampledbs";
        String username = "user";
        String password = "password";

        Connection connection = DriverManager.getConnection(jdbcUrl, username,
password);
        Statement statement = connection.createStatement();
        ResultSet resultSet = statement.executeQuery("SELECT * FROM
employees");

        while (resultSet.next()) {
            int id = resultSet.getInt("id");
            String name = resultSet.getString("name");
            System.out.println("ID: " + id + ", Name: " + name);
        }
    }
}
```