

Chapter 12 Introduction to Java Database Programming

1. A JDBC application loads an appropriate driver using the Driver interface, connects to the database using the Connection interface, creates and executes SQL statements using the Statement interface, and processes the result using the ResultSet interface if the statements return results.
2. Use the `Class.forName(driverName)` method to load the driver with its full name.
3. To expose properties whose get and set methods do not follow standard naming patterns, create a new `BeanInfo` class that extends the `SimpleBeanInfo` class and implement the `getPropertyDescriptors` method. To create a JDBC connection, use `DriverManager.getConnection(url)`, or `DriverManager.getConnection(url, username, password)`. The syntax for a JDBC URL is `jdbc:<subprotocol>:<datasource>`.
4. To create an instance of Statement, use `connection.createStatement()`. To execute a statement, use the methods `executeQuery(...)` and `executeUpdate(...)`. `executeQuery(...)` returns a result set, but `executeUpdate(...)` does not return a result set.
5. To retrieve values in a ResultSet, use the `getXxx(number)` or `getXxx(columnName)` method.
6. The four types of JDBC drivers are Type 1: JDBC-ODBC Bridge, Type 2: Native-API, Type 3: Middle-tier, and Type 4: Native-protocol. Type 2 drivers require the DBMS client library? Type 3 and 4 drivers can be downloaded and maintained on the server side.