

Steps for Writing a JDBC Program

Step-1: Register the driver or loading the driver

- To load or register the driver we can use any one of the following methods.

Syntax:

```
Class.forName("url");
```

```
DriverManager.registerDriver("url");
```

```
System.setProperty("url");
```

Step-2: Establishing the connection to a database

- In this step we establish a connection with a specific database. The connection establishment can be done by **Connection** Interface.

Syntax:

```
Connection con=DriverManager.getConnection("url");
```

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Step-3: Preparing SQL statement

- In this step we should create SQL statement in our java program using any one of the interface like Statement or PreparedStatement or CallableStatement.

Syntax:

```
Statement st=con.createStatement();
```

```
PreparedStatement ps=con.prepareStatement("sql query");
```

Step-4: Executing the SQL statement

- For this purpose we use execute(), executeQuery() and executeUpdate() methods of **Statement** interface.

Syntax:

```
Boolean b=st.execute("sql query");
```

```
int i=st.executeUpdate("insert or delete or update query");
```

```
ResultSet rs=st.executeQuery("select query");
```

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Step-5: Retrieving the Results

- The results obtained by executing the sql statement can be stored in an object with the help of **ResultSet** interface.

Syntax:

```
ResultSet rs=st.executeQuery("select * from table name");
```

- ResultSet object maintains a cursor.
- When ResultSet object is first created, then the cursor is pointed before the first row of table.
- In order to move the cursor to next row we need to use next() method.

Step-6: Close the Connection

- To close the connection between java program and database we use one method close() of **Connection** interface.

Syntax:

```
con.close();
```