

Steps in creating jdbc connection:

Prerequisites:

1. identify the mysql version that being used and get the respective mysql connector jar file from net.
2. If other DB is used, like oracle, then ojdbc.jar file need to be used to connect .
3. In our case its mysql 5.7.* version. So I have downloaded **mysql-connector-java-5.1.49.jar**.
4. This jar file will have the classes or api that's facilitates the connection from JVM to Mysql database.

Program Steps:

1. Register the driver using the class.forName. This class will be inside the jar file. So we are registering to this program which will have the logic to connect to DB.
Ref: `Class.forName ("com.mySQL.jdbc.Driver").newInstance ();`

2. So , we need to provide DB credentials like hostname,username,pwd, port so this driver will use these details to connect . Its just like user connecting to DB via sqlworkbench or any other tool.
Ref: `DriverManager.getConnection (url, userName, password);`
`url="jdbc:mysql://localhost:3306/provider";`

3. The above step will give the connection reference if all goes fine.
4. From the Connection reference get the Statement /PreparedStatement to execute queries
`PreparedStatement ps=conn.prepareStatement("SQL query");`
`ps.executeQuery();`

Note: Statement is not advised to use as it causes SQL Injection issue. Research more

5. The results of the executed query will be availble in the **ResultSet**. Imagine this is like a handle to table data.

```
rs=ps.executeQuery();
while(rs.next()){
    rs.getString("TABLE_COLUMN_NAME")
}
```

6. Closing the resources is VERY important thing that a programmer needs to develop this practice .

Result Set Data Interpretation:

Query=`SELECT * FROM USER`

`RS=WILL HOLD THIS ENTIRE TABLE .SO LOOP IT ROW BY ROW AND GET THE DATA`

USERID	PASSWORD	ROLE_TYPE
ADMIN	SECRET	2000
JOSH	Josh	2000
USER1	TEST	2001