-- Why MySQL Workbench? other tools e.g. SQL Navigator, SQL Assistant, Toad

-- In MySQL Workbench remove Safe mode: Edit - Preferences - Sql editor - Safe Updates - uncheck the box

select \* from classicmodels.customers;

-- MySQL Workbench layout - three boxes in the right upper corner, play with them

-- MySQL Workbench has Results Grid and Auction Output windows

-- SHEMAS (on the left). Sys schema (do not touch!)

-- SHEMAS Check out databases, tables, columns, relationship structure

-- SHEMAS Right click options (create table, create schema)

-- SHEMAS If you don't see the changes after your action - right click on a white space - Refresh All

-- File. SQL files have extention .sql

-- File. To open a new query: File - New Query Tab.

-- File. To open a script: File - Open Sql Script.

-- File. To save a query: File - Save Script as xxxxxx.

**/\*Run a sql statement:**

highlight statement - Query - Execute (All or Selection) or click on 'yellow lightning' as a shortcuts \*/

-- Action Output. Error messages - read them!

-- Writing SQL Notes, 2 ways: -- text OR /\*text\*/

-- SQL reserved words are in green; to use them as regular words, quote them with ~ tilde/`grave accent mark e.g.`database`

-- EER Diagram: Database - Reverse Engineer - Next - Next - Choose the Database - Next - Next - Excecute - Finish

-- EER or ER or ERD Diagram (Enhanced Entry Relationship)

-- Database - Reverse Engineer - Next - Enter Password - Next - Choose Databae - Next - Next - Execute - Finish

**-- To restrict number of returned records in Result Grid:**

select \* from classicmodels.customers

limit 3;

/\*

MySQL: limit 3

SQL Server: top 4

Oracle: rownum = 3

\*/

**-- SQL statement syntax**

**-- how to retrieve infromation from a table?**

**select column**

**from database.table;**

-- upper or lower case in sql statements - no difference (case-insensetive)

-- reserved words (blue)

-- commit ;

**-- \* (means all columns)**

select \* from classicmodels.customers;-- 122

select \* from classicmodels.employees; -- 23

select \* from classicmodels.offices; -- 7

select \* from classicmodels.orderdetails; -- 2996

select \* from classicmodels.orders; -- 326

select \* from classicmodels.payments; -- 273

select \* from classicmodels.productlines; -- 7

select \* from classicmodels.products; -- 110

**-- Why count records?**

/\*

3 ways to count records:

1.select \* and check the message

2.hover over a table click on i to see info on that table

3.count(\*)

\*/

select count(\*) from classicmodels.customers; -- 122

select count(\*) from classicmodels.employees; -- 23

select count(\*) from classicmodels.offices; -- 7

select count(\*) from classicmodels.orderdetails; -- 2996

select count(\*) from classicmodels.orders; -- 326

select count(\*) from classicmodels.payments; -- 273

select count(\*) from classicmodels.productlines; -- 7

select count(\*) from classicmodels.products; -- 110

**-- SQL shortcuts**

-- use database

use classicmodels;

select \* from customers;

show tables;

**-- SQL statement sructure with where clause**

-- single quotes for text, no quotes for numbers

-- order by (asc and desc order)

select column

from table

where column = 'xxx'

order by column;

**-- SQL mnemonic device for select statement: Single Cats Fly to West Cost**

**/\* SQL Operators in Where Clause/Condition**

+, -, \*, /, %, &, |, ^, =, >, >, >=, <=, <>, AND, ALL, ANY, BETWEEN, EXISTS, IN, LIKE, NOT, OR, SOME \*/

**-- Information schema (database metadata about all tables, columns, keys, etc.)**

**-- to see primary and foreign keys (constraints)**

SELECT \*

FROM INFORMATION\_SCHEMA.KEY\_COLUMN\_USAGE

WHERE TABLE\_SCHEMA = 'classicmodels'

AND TABLE\_NAME = 'customers';

**-- to see all tables in database**

SELECT \*

FROM INFORMATION\_SCHEMA.tables

WHERE TABLE\_SCHEMA = 'classicmodels';

**-- to see all columns in database**

SELECT \*

FROM INFORMATION\_SCHEMA.columns

WHERE TABLE\_SCHEMA = 'classicmodels';

**-- to see structure of one table (columns, datatypes, keys)**

desc classicmodels.customers;

/\* ---------------------- SQL Queries ------------------------ \*/

-- show all customers in Norway

select \* from classicmodels.customers

where country = 'Norway';

-- show all customers in Nevada

select \* from classicmodels.customers

where state = 'NV';

-- show all customers with Credit Limit between 50k and 60k

select \* from classicmodels.customers

where creditLimit>=50000 and creditLimit<=60000;

select \* from classicmodels.customers

where creditLimit between 50000 and 60000;

-- show the name of all VPs

select \* from classicmodels.employees

where jobTitle like '%VP%';

-- show the phone number of offices in San Francisco and Boston

select city, phone from classicmodels.offices

where city in ('San Francisco', 'Boston');

select city, phone from classicmodels.offices

where city = 'San Francisco' or city = 'Boston';

-- show city with a null state

select \* from classicmodels.offices

where state is null;

-- show order numbers in the order of higest quantity ordered

select orderNumber, quantityOrdered from classicmodels.orderdetails

order by quantityOrdered desc;

-- show orders > $200

select \* from classicmodels.orderdetails

where priceEach >=200;

-- what kind of statuses exist in orders

select distinct `status` from classicmodels.orders;

-- show payments >2005

select \* from classicmodels.payments

where paymentDate >= '2005-01-01';

-- show descriiption of productLines for Ships and Trains

select \* from classicmodels.productlines

where productLine in ('Ships','Trains');

-- show distinct product lines in ascending order

select distinct ProductLine from classicmodels.products

order by ProductLine;

-- what kind of product lines exist for BMW

select productName, productLine from classicmodels.products

where productName like '%BMW%';