**8/28/2019**

<http://www.mysqltutorial.org/mysql-sample-database.aspx>

[select](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) customerNumber from customers where customerNumber [Not](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/logical-operators.html#operator_not) [IN](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/comparison-operators.html#function_in) ([SELECT](http://localhost/phpmyadmin/url.php?url=https://dev.mysql.com/doc/refman/5.5/en/select.html) customerNumber FROM orders)

[**http://www.sqltutorial.org/sql-aggregate-functions/sql-count/**](http://www.sqltutorial.org/sql-aggregate-functions/sql-count/)

Sql cheat sheet

[**https://gist.github.com/rLaurentePn2k19/865d6115c4c20d9f3b0834429697e930**](https://gist.github.com/rLaurentePn2k19/865d6115c4c20d9f3b0834429697e930)

**crosoft Windows [Version 10.0.14393]**

**(c) 2016 Microsoft Corporation. All rights reserved.**

**C:\Users\debuayanri\_sd2082>cd ..**

**C:\Users>cd ..**

**C:\>cd xampp**

**C:\xampp>cd mysql**

**C:\xampp\mysql>cd bin**

**C:\xampp\mysql\bin>mysql -u root -p**

**Enter password:**

**ERROR 2003 (HY000): Can't connect to MySQL server on 'localhost' (10061 "Unknown error")**

**C:\xampp\mysql\bin>**

**C:\xampp\mysql\bin>mysql -u root -p**

**Enter password:**

**ERROR 2003 (HY000): Can't connect to MySQL server on 'localhost' (10061 "Unknown error")**

**C:\xampp\mysql\bin>ipconfig**

**Windows IP Configuration**

**Ethernet adapter Ethernet:**

**Connection-specific DNS Suffix . : ceaccs.net**

**Link-local IPv6 Address . . . . . : fe80::a0b4:bbaa:e30c:d30%15**

**IPv4 Address. . . . . . . . . . . : 172.16.3.38**

**Subnet Mask . . . . . . . . . . . : 255.255.255.192**

**Default Gateway . . . . . . . . . : 172.16.3.59**

**Ethernet adapter Ethernet 2:**

**Connection-specific DNS Suffix . :**

**Link-local IPv6 Address . . . . . : fe80::2d13:1e49:4347:9085%5**

**Autoconfiguration IPv4 Address. . : 169.254.144.133**

**Subnet Mask . . . . . . . . . . . : 255.255.0.0**

**Default Gateway . . . . . . . . . :**

**Tunnel adapter isatap.{3FD644FD-9387-4FCE-A82F-FE3D581A6A65}:**

**Media State . . . . . . . . . . . : Media disconnected**

**Connection-specific DNS Suffix . :**

**Tunnel adapter isatap.ceaccs.net:**

**Media State . . . . . . . . . . . : Media disconnected**

**Connection-specific DNS Suffix . : ceaccs.net**

**C:\xampp\mysql\bin>mysql -u root -p**

**Enter password:**

**Welcome to the MariaDB monitor. Commands end with ; or \g.**

**Your MariaDB connection id is 2**

**Server version: 10.1.13-MariaDB mariadb.org binary distribution**

**Copyright (c) 2000, 2016, Oracle, MariaDB Corporation Ab and others.**

**Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.**

**MariaDB [(none)]> show databases**

**-> Bye**

**Ctrl-C -- exit!**

**C:\xampp\mysql\bin>mysql -u root -p**

**Enter password:**

**Welcome to the MariaDB monitor. Commands end with ; or \g.**

**Your MariaDB connection id is 3**

**Server version: 10.1.13-MariaDB mariadb.org binary distribution**

**Copyright (c) 2000, 2016, Oracle, MariaDB Corporation Ab and others.**

**Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.**

**MariaDB [(none)]> show databases;**

**+--------------------+**

**| Database |**

**+--------------------+**

**| classicmodels |**

**| information\_schema |**

**| mysql |**

**| performance\_schema |**

**| phpmyadmin |**

**| test |**

**+--------------------+**

**6 rows in set (0.03 sec)**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

# **MySQL**

## **Getting started**

* [**http://www.sqlteaching.com/**](http://www.sqlteaching.com/)
* [**https://www.codecademy.com/learn/learn-sql**](https://www.codecademy.com/learn/learn-sql)

### **Related tutorials**

* [**MySQL-CLI**](https://www.youtube.com/playlist?list=PLfdtiltiRHWEw4-kRrh1ZZy_3OcQxTn7P)
* [**Analyzing Business Metrics**](https://www.codecademy.com/learn/sql-analyzing-business-metrics)
* [**SQL joins infografic**](https://www.codeproject.com/Articles/33052/Visual-Representation-of-SQL-Joins)

## **Tools**

* [**TablePlus**](https://tableplus.io/)
* [**DataGrip**](https://www.jetbrains.com/datagrip/)
* [**Sequel Pro**](http://www.sequelpro.com/) **(abandoned)**

## **Commands**

**Access monitor: mysql -u [username] -p; (will prompt for password)**

**Show all databases: show databases;**

**Access database: mysql -u [username] -p [database] (will prompt for password)**

**Create new database: create database [database];**

**Select database: use [database];**

**Determine what database is in use: select database();**

**Show all tables: show tables;**

**Show table structure: describe [table];**

**List all indexes on a table: show index from [table];**

**Create new table with columns: CREATE TABLE [table] ([column] VARCHAR(120), [another-column] DATETIME);**

**Adding a column: ALTER TABLE [table] ADD COLUMN [column] VARCHAR(120);**

**Adding a column with an unique, auto-incrementing ID: ALTER TABLE [table] ADD COLUMN [column] int NOT NULL AUTO\_INCREMENT PRIMARY KEY;**

**Inserting a record: INSERT INTO [table] ([column], [column]) VALUES ('[value]', [value]');**

**MySQL function for datetime input: NOW()**

**Selecting records: SELECT \* FROM [table];**

**Explain records: EXPLAIN SELECT \* FROM [table];**

**Selecting parts of records: SELECT [column], [another-column] FROM [table];**

**Counting records: SELECT COUNT([column]) FROM [table];**

**Counting and selecting grouped records: SELECT \*, (SELECT COUNT([column]) FROM [table]) AS count FROM [table] GROUP BY [column];**

**Selecting specific records: SELECT \* FROM [table] WHERE [column] = [value]; (Selectors: <, >, !=; combine multiple selectors with AND, OR)**

**Select records containing [value]: SELECT \* FROM [table] WHERE [column] LIKE '%[value]%';**

**Select records starting with [value]: SELECT \* FROM [table] WHERE [column] LIKE '[value]%';**

**Select records starting with val and ending with ue: SELECT \* FROM [table] WHERE [column] LIKE '[val\_ue]';**

**Select a range: SELECT \* FROM [table] WHERE [column] BETWEEN [value1] and [value2];**

**Select with custom order and only limit: SELECT \* FROM [table] WHERE [column] ORDER BY [column] ASC LIMIT [value]; (Order: DESC, ASC)**

**Updating records: UPDATE [table] SET [column] = '[updated-value]' WHERE [column] = [value];**

**Deleting records: DELETE FROM [table] WHERE [column] = [value];**

**Delete *all records* from a table (without dropping the table itself): DELETE FROM [table]; (This also resets the incrementing counter for auto generated columns like an id column.)**

**Delete all records in a table: truncate table [table];**

**Removing table columns: ALTER TABLE [table] DROP COLUMN [column];**

**Deleting tables: DROP TABLE [table];**

**Deleting databases: DROP DATABASE [database];**

**Custom column output names: SELECT [column] AS [custom-column] FROM [table];**

**Export a database dump (more info** [**here**](http://stackoverflow.com/a/21091197/1815847)**): mysqldump -u [username] -p [database] > db\_backup.sql**

**Use --lock-tables=false option for locked tables (more info** [**here**](http://stackoverflow.com/a/104628/1815847)**).**

**Import a database dump (more info** [**here**](http://stackoverflow.com/a/21091197/1815847)**): mysql -u [username] -p -h localhost [database] < db\_backup.sql**

**Logout: exit;**

## **Aggregate functions**

**Select but without duplicates: SELECT distinct name, email, acception FROM owners WHERE acception = 1 AND date >= 2015-01-01 00:00:00**

**Calculate total number of records: SELECT SUM([column]) FROM [table];**

**Count total number of [column] and group by [category-column]: SELECT [category-column], SUM([column]) FROM [table] GROUP BY [category-column];**

**Get largest value in [column]: SELECT MAX([column]) FROM [table];**

**Get smallest value: SELECT MIN([column]) FROM [table];**

**Get average value: SELECT AVG([column]) FROM [table];**

**Get rounded average value and group by [category-column]: SELECT [category-column], ROUND(AVG([column]), 2) FROM [table] GROUP BY [category-column];**

## **Multiple tables**

**Select from multiple tables: SELECT [table1].[column], [table1].[another-column], [table2].[column] FROM [table1], [table2];**

**Combine rows from different tables: SELECT \* FROM [table1] INNER JOIN [table2] ON [table1].[column] = [table2].[column];**

**Combine rows from different tables but do not require the join condition: SELECT \* FROM [table1] LEFT OUTER JOIN [table2] ON [table1].[column] = [table2].[column]; (The left table is the first table that appears in the statement.)**

**Rename column or table using an *alias*: SELECT [table1].[column] AS '[value]', [table2].[column] AS '[value]' FROM [table1], [table2];**

## **Users functions**

**List all users: SELECT User,Host FROM mysql.user;**

**Create new user: CREATE USER 'username'@'localhost' IDENTIFIED BY 'password';**

**Grant ALL access to user for \* tables: GRANT ALL ON database.\* TO 'user'@'localhost';**

## **Find out the IP Address of the Mysql Host**

**SHOW VARIABLES WHERE Variable\_name = 'hostname'; (**[**source**](http://serverfault.com/a/129646)**)**