MySQL Cheat Sheet

Working with Database

Create a database with a specified name if it is not exists in database server

```
CREATE DATABASE [IF NOT EXISTS] database name
```

Use database or change current database to another database you are working with

```
USE database name
```

Drop a database with specified name permanently. All physical file associated with the database is no longer exists.

```
DROP DATABASE [IF EXISTS] database name
```

Show all available databases in database server

SHOW DATABASES

Working with Table

Lists all tables in a database.

SHOW TABLES

Create table statement defines the structure of table in a database.

```
CREATE [TEMPORARY] TABLE [IF NOT EXISTS] table_name
(create_clause ,...) [table_options]
[[IGNORE|REPLACE] select]
```

Altering table structure

```
ALTER [IGNORE] TABLE table name actions
```

Actions can be one of the following actions:

```
ADD [COLUMN]

Add a new column into a table

DROP [COLUMN]

Drop an existing column in a table
```

```
ADD INDEX [name] (column_name, ...)

Add index with a specific name to a table on a column

DROP INDEX index_name Drop an index from a table

ADD PRIMARY KEY (column_name, ...)

Add primary key into a tables

DROP PRIMARY KEY

Drop primary key from a table
```

Deleting table permanently

```
DROP TABLE [IF EXISTS] table_name [, name2, ...]
[RESTRICT | CASCADE]
```

Give information about the table or column.

```
DESCRIBE table [column_name]
DESC table [column_name]
```

Retrieving Data (Query)

Retrieving complete data in a database table

```
SELECT * FROM table name
```

Retrieving specified data which is shown in the column list from a database table

```
SELECT column_name, column_name2....
FROM table name
```

Retrieving unique records

```
SELECT DISTINCT (column_name)
FROM table name
```

Retrieving records using where clause

```
SELECT column_name, column_name2....
FROM table_name1, table_name2...
WHERE conditions
```

Retrieving data from multiples table using join

```
SELECT *
FROM table_name1
INNER JOIN table_name2 ON conditions
```

```
SELECT *
FROM table_name1
LEFT JOIN table_name2 ON conditions

SELECT *
FROM table_name1
RIGHT JOIN table_name2 ON conditions
```

Counting number of rows in a database table

```
SELECT COUNT (*) FROM table name
```

Other aggregate functions

```
MIN(attribute_name)
MAX(attribute_name)
AVG(attribute_name)
SUM(attribute_name)
```

Sorting ascending or descending retrieved data based on one or more column

```
SELECT column_name, column_name2....
FROM table_name
ORDER BY column name ASC [DESC], column name2 ASC [DESC],
```

Group the retrieved rows data

```
SELECT *
FROM table_name
GROUP BY column_name
```

Matching Data based on a pattern

Matching data using LIKE operator

```
SELECT * FROM table_name
WHERE column name LIKE '%value%'
```

Matching data using regular expression

```
SELECT * FROM table_name
WHERE column_name RLIKE 'regular_expression'
```