MySQL Cheat Sheet

MySQL cheat sheet provides you with the most commonly used MySQL commands and statements that help you work with MySQL more effectively.

MySQL Commands

Access MySQL server from the mysql client using a username and password (MySQL will prompt for a password):

```
mysql -u [username] -p;
```

Access a specific database using a username and password:

```
mysql -u [username] -p [database];
```

Exit

```
exit;
```

Export data using mysqldump tool

```
mysqldump -u [username] -p [database] > data_backup.sql;
```

To clear MySQL screen console window on Linux, you use the following command:

```
mysql> system clear;
```

Currently, there is no command available on Windows OS for clearing MySQL screen console window.

Working with Database

```
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 the MySQL database server

```
show databases;
```

Working with Table

Lists all tables in a current database.

```
show tables;
```

Create a new table or a temporary table

```
CREATE [TEMPORARY] TABLE [IF NOT EXISTS] table(
   key type(size) NOT NULL PRIMARY KEY AUTO_INCREMENT,
   c1 type(size) NOT NULL,
   c2 type(size) NULL,
   ...
);
```

Altering table structure

There are many actions that you can use with the ALTER TABLE statement as follows:

Add a new column into a table

```
ALTER TABLE table ADD [COLUMN];
```

```
ALTER TABLE table ADD INDEX [name](column, ...);
```

Add primary key into a table.

```
ALTER TABLE table ADD PRIMARY KEY (column,...)
```

Remove primary key from a table.

```
ALTER TABLE table DROP PRIMARY KEY
```

Deleting table structure and data permanently.

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

Get information about th table or a column.

```
DESCRIBE table [column]
```

Working with Index

Creating an index with the specified name on a table

```
CREATE [UNIQUE|FULLTEXT] INDEX index_name
ON table (column,...)
```

Removing a specified index from table

```
DROP INDEX index_name
```

Querying Data

```
SELECT column, column2….
FROM table;
```

Query unique records

```
SELECT DISTINCT (column)
FROM table;
```

Query data with a filter using a WHERE clause.

```
SELECT *
FROM table
WHERE condition;
```

Change the output of the column name using column alias.

```
SELECT column_1 AS new_column_1, ...
FROM table
```

Query data from multiple tables using inner join or left join

```
SELECT *
FROM table_1
INNER JOIN table_2 ON conditions
```

```
SELECT *
FROM table1
LEFT JOIN table2 ON conditions
```

Counting rows in a table.

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

Group rows using GROUP BY clause.

```
SELECT *
FROM table
GROUP BY column_1, column_2, ...;
```

Filter group of rows using both GROUP BY and HAVING clauses.

```
SELECT *
FROM table
GROUP BY column_1
HAVING condition;
```

Modifying Data

Insert a new row into a table

```
INSERT INTO table(column1,column2,...)
VALUES(value_1,value_2,...);
```

Insert multiple rows into a table

```
INSERT INTO table(column1,column2,...)
VALUES(value_1,value_2,...),
      (value_1,value_2,...),
      (value_1,value_2,...)...
```

Update data for all rows

```
UPDATE table
SET column_1 = value_1,
    ...
```

Update data for a set of rows specified by a condition in WHERE clause.

```
UPDATE table_1, table_2
INNER JOIN table_1 ON table_1.column_1 = table_2.column_1
SET column_1 = value_1,
WHERE condition
```

Delete all rows in a table

```
DELETE FROM table;
```

Delete rows specified by a condition

```
DELETE FROM table
WHERE condition;
```

Delete with join

```
DELETE table_1, table2
FROM table_1
INNER JOIN table_2 ON table_1.column_1 = table_2.column_2
WHERE condition;
```

Search

Search for data using LIKE operator:

```
SELECT * FROM table
WHERE column LIKE '%value%'
```

Text search using a regular expression with `RLIKE` operator.

```
SELECT * FROM table
WHERE column RLIKE 'regular_expression'
```