

# MySQL cheatsheet



## Implement Auth in Any

Application in Just Five Minutes.

ads via Carbon

## Browsing

```
SHOW DATABASES;
SHOW TABLES;
SHOW FIELDS FROM table / DESCRIBE table;
SHOW CREATE TABLE table;
SHOW PROCESSLIST;
KILL process_number;
```

## Select

```
SELECT * FROM table;
SELECT * FROM table1, table2;
SELECT field1, field2 FROM table1, t
SELECT ... FROM ... WHERE condition
SELECT ... FROM ... WHERE condition
SELECT ... FROM ... WHERE condition
SELECT ... FROM ... WHERE condition
SELECT ... FROM ... WHERE condition
SELECT ... FROM ... WHERE condition
SELECT DISTINCT field1 FROM ...
```

## Select - Join

```
SELECT ... FROM t1 JOIN t2 ON t1.id1 = t2.id2 WHERE condition;
SELECT ... FROM t1 LEFT JOIN t2 ON t1.id1 = t2.id2 WHERE condition;
SELECT ... FROM t1 JOIN (t2 JOIN t3 ON ...) ON ...
```

## Conditions

```
field1 = value1
field1 <> value1
```

## Create / Open / Delete Database

```
CREATE DATABASE DatabaseName;
CREATE DATABASE DatabaseName CHARACTER SET utf8;
USE DatabaseName;
DROP DATABASE DatabaseName;
ALTER DATABASE DatabaseName CHARACTER SET utf8;
```

## Backup Database to SQL File

```
mysqldump -u Username -p dbNameYouWant > databasename_backup.sql
```

## Restore from backup SQL File

```
mysql -u Username -p dbNameYouWant
```

## Repair Tables After Unclean Shutdown

```
mysqlcheck --all-databases;
mysqlcheck --all-databases --fast;
```

## Insert

```
INSERT INTO table1 (field1, field2)
```

## Delete

```
DELETE FROM table1 / TRUNCATE table1
DELETE FROM table1 WHERE condition
DELETE FROM table1, table2 FROM table1, table2 WHERE ta
table2.id2 AND condition
```

## Update

```
UPDATE table1 SET field1=new_value1
UPDATE table1, table2 SET field1=new
table1.id1 = table2.id2 AND condit
```

## Keys

## Create / Delete / Modify Table

```
CREATE TABLE table (... , PRIMARY KEY (field1, field2))
CREATE TABLE table (... , FOREIGN KEY (field1, field2) REFERENCES table2
(t2_field1, t2_field2))
```

```
CREATE TABLE table (field1 type1, fi
```

## Users and Privileges

```
CREATE USER 'user'@'localhost';
GRANT ALL PRIVILEGES ON base.* TO 'user'@'localhost' IDENTIFIED BY 'password';
GRANT SELECT, INSERT, DELETE ON base.* TO 'user'@'localhost' IDENTIFIED BY 'password';
REVOKE ALL PRIVILEGES ON base.* FROM 'user'@'host'; -- one permission only
REVOKE ALL PRIVILEGES, GRANT OPTION FROM 'user'@'host'; -- all permissions
FLUSH PRIVILEGES;
```

```
SET PASSWORD = PASSWORD('new_pass');
SET PASSWORD FOR 'user'@'host' = PASSWORD('new_pass');
SET PASSWORD = OLD_PASSWORD('new_pass');
```

```
DROP USER 'user'@'host';
```

Host '%' indicates any host.

## Main Data Types

### Alter

```
TINYINT (10: -217+128)
SMALLINT (20: +-65 000)
MEDIUMINT (30: +-16 000 000)
```

INT (40: +- 2 000 000 000)

BIGINT (80: +-9.10<sup>18</sup>)

Precise interval:  $-(2^{(8*N-1)}) \rightarrow (2^{8*N})-1$

⚠ INT(2) = "2 digits displayed" – NOT "number with 2 digits max"

FLOAT(M,D)

DOUBLE(M,D)

FLOAT(D=0->53)

⚠ 8,3 -> 12345,678 – NOT 12345678,123!

TIME (HH:MM)

YEAR (AAAA)

DATE (AAAA-MM-JJ)

DATETIME (AAAA-MM-JJ HH:MM; années 1000->9999)

TIMESTAMP (like DATETIME, but 1970->2038, compatible with

VARCHAR (single-line; explicit size)

TEXT (multi-lines; max size=65535)

BLOB (binary; max size=65535)

Variants for TEXT&BLOB: TINY (max=255), MEDIUM (max=~16000)

VARCHAR(32), TINYTEXT, LONGBLOB, MEDIUMTEXT

ENUM ('value1', 'value2', ...) -- (default NULL, or '' if not specified)

## Reset Root Password

```
$ /etc/init.d/mysql stop
```

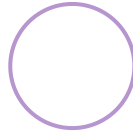
```
$ mysqld_safe --skip-grant-tables
```

```
$ mysql # on another terminal
mysql> UPDATE mysql.user SET password=PASSWORD('new_password');
```

```
## Switch back to the mysqld_safe to start
$ /etc/init.d/mysql start
```

Your commands may vary depending on your system.

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