#Create / Delete Database

CREATE DATABASE dbNameYouWant

CREATE DATABASE dbNameYouWant CHARACTER SET utf8

DROP DATABASE dbNameYouWant

ALTER DATABASE dbNameYouWant CHARACTER SET utf8

#Repair Tables After Unclean Shutdown

mysqlcheck --all-databases

mysqlcheck --all-databases --fast

#Select

SELECT * FROM table

SELECT * FROM table1, table2, ...

SELECT field1, field2, ... FROM table1, table2, ...

SELECT ... FROM ... WHERE condition

SELECT ... FROM ... WHERE condition GROUPBY field

SELECT ... FROM ... WHERE condition GROUPBY field HAVING condition2

SELECT ... FROM ... WHERE condition ORDER BY field1, field2

SELECT ... FROM ... WHERE condition ORDER BY field1, field2 DESC

SELECT ... FROM ... WHERE condition LIMIT 10

SELECT DISTINCT field1 FROM ...

SELECT DISTINCT field1, field2 FROM ...

#Insert

INSERT INTO table1 (field1, field2, ...) VALUES (value1, value2, ...)

#Delete

DELETE FROM table1 / TRUNCATE table1

DELETE FROM table1 WHERE condition

DELETE FROM table1, table2 FROM table1, table2 WHERE table1.id1 =

    table2.id2 AND condition

#Create / Delete / Modify Table

#Create

CREATE TABLE table (field1 type1, field2 type2, ...)

CREATE TABLE table (field1 type1, field2 type2, ..., INDEX (field))

CREATE TABLE table (field1 type1, field2 type2, ..., PRIMARY KEY (field1))

CREATE TABLE table (field1 type1, field2 type2, ..., PRIMARY KEY (field1,

field2))

CREATE TABLE table1 (fk_field1 type1, field2 type2, ...,

    FOREIGN KEY (fk_field1) REFERENCES table2 (t2_fieldA))

        [ON UPDATE|ON DELETE] [CASCADE|SET NULL]

CREATE TABLE table1 (fk_field1 type1, fk_field2 type2, ...,

  FOREIGN KEY (fk_field1, fk_field2) REFERENCES table2 (t2_fieldA, t2_fieldB))

  CREATE TABLE table IF NOT EXISTS (...)

CREATE TEMPORARY TABLE table (...)

Drop

DROP TABLE table

DROP TABLE IF EXISTS table

DROP TABLE table1, table2, ...

Alter

ALTER TABLE table MODIFY field1 type1

ALTER TABLE table MODIFY field1 type1 NOT NULL ...

ALTER TABLE table CHANGE old_name_field1 new_name_field1 type1

ALTER TABLE table CHANGE old_name_field1 new_name_field1 type1 NOT NULL ...

ALTER TABLE table ALTER field1 SET DEFAULT ...

ALTER TABLE table ALTER field1 DROP DEFAULT

ALTER TABLE table ADD new_name_field1 type1

ALTER TABLE table ADD new_name_field1 type1 FIRST

ALTER TABLE table ADD new_name_field1 type1 AFTER another_field

ALTER TABLE table DROP field1

ALTER TABLE table ADD INDEX (field);

Change field order

ALTER TABLE table MODIFY field1 type1 FIRST

ALTER TABLE table MODIFY field1 type1 AFTER another_field

ALTER TABLE table CHANGE old_name_field1 new_name_field1 type1 FIRST

ALTER TABLE table CHANGE old_name_field1 new_name_field1 type1 AFTER

   another_field

#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_pass') WHERE user='root';

Switch back to the mysqld_safe terminal and kill the process using Control + \

$ /etc/init.d/mysql start

#Backup Database to SQL File

mysqldump -u Username -p dbNameYouWant > databasename_backup.sql

#Restore from backup SQL File

mysql - u Username -p dbNameYouWant < databasename_backup.sql

#Browsing

SHOW DATABASES

SHOW TABLES

SHOW FIELDS FROM table / DESCRIBE table

SHOW CREATE TABLE table

SHOW PROCESSLIST

KILL process_number

#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

field1 LIKE 'value _ %'

field1 IS NULL

field1 IS NOT NULL

field1 IS IN (value1, value2)

field1 IS NOT IN (value1, value2)

condition1 AND condition2

condition1 OR condition2

#Update

UPDATE table1 SET field1=new_value1 WHERE condition

UPDATE table1, table2 SET field1=new_value1, field2=new_value2, ... WHERE

   table1.id1 = table2.id2 AND condition

#Keys

CREATE TABLE table (..., PRIMARY KEY (field1, field2))

CREATE TABLE table (..., FOREIGN KEY (field1, field2) REFERENCES table2

(t2_field1, t2_field2))

#Users and Privileges

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

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

TINYINT (1o: -217+128)

SMALLINT (2o: +-65 000)

MEDIUMINT (3o: +-16 000 000)

INT (4o: +- 2 000 000 000)

BIGINT (8o: +-9.10^18)

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 Unix)

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), and LONG (max=4Go). Ex: VARCHAR(32), TINYTEXT, LONGBLOB, MEDIUMTEXT

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