

SQL Cheatsheet

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Select

```
SELECT [DISTINCT|ALL] colexpr1, colexpr2 ... FROM table1 ... [WHERE bexpr] [GROUP BY ...] [HAVING ][ORDER BY
col1, col2, ...] [LIMIT n];
colexpr=expression [AS column_alias]
expression= + - * / % ( ) = != <= >= <> w/ colnames (or database.colname)
abs/mod/floor/ceiling/round/log/log10/pow/sqrt/sin/cos/tan/rand/truncate(expr,#dig)/format(expr,int)
dayofweek/dayname/monthname/week(date) date_add(date,INTERVAL 1 DAY) curdate()/curtime()/now()
if(bexpr,yesval,noval) database() user()
strexpr LIKE 'letters%' concat(strexpr,strexpr) length(strexpr) locate(strexpr,strexpr) substring(strexpr,start,length)
ltrim(strexpr) rtrim(strexpr) trim(strexpr) lower(strexpr) upper(strexpr)
space(n) strcmp(strexpr,strexpr) (returns -1,0,1)
COUNT(*) COUNT(DISTINCT expression) AVG/MIN/MAX/SUM (ALL|DISTINCT] expression)
GROUP BY expr1 [ASC|DESC] , expr2 .... [HAVING aggregate_expr] (having clause usually also in select)
```

Catalog

```
SHOW DATABASES; USE database; CREATE DATABASE database; (some systems)
SHOW TABLES; SHOW COLUMNS FROM tablename; SHOW INDEX from tablename; SHOW STATUS;
CREATE TABLE name( coldescr1,...[,keystate1,...],[constraint1,...]);
coldescr=name type [DEFAULT expr] [NULL|NOT NULL]
type=int(n) float(n,dec) timesteamp(n) char(n) varchar(n) blob javaobject(javaclass)
keystate=[PRIMARY] KEY (colname[,colname,...])
constraint=[CONSTRAIN][name] [PRIMARY] KEY (colname[,colname...]) or UNIQUE(col1[,col2...]) or CHECK(expression)
ALTER TABLE name [ADD INDEX name(col1[,col2,...])] [ADD [COLUMN] coldescr] [DROP [COLUMN] name] [DROP
CONSTRAINT] [DROP PRIMARY KEY]
DROP TABLE [IF EXISTS] table1, ...
CREATE VIEW name AS SELECT ....
DROP VIEW name
COMPACT TABLE name
```

Writing

```
INSERT INTO table VALUES (v1,v2,v3...)
or INSERT INTO TABLE SET colname=val, colname=val ....
DELETE FROM tablename WHERE bexpr
UPDATE tablename SET column=expr;
```