

SQL Quick Reference

DML (Data Manipulation Language)

```
SELECT [DISTINCT | DISTINCTROW | ALL]
select_expression,...
[FROM table_references
[WHERE where_definition]
[GROUP BY col_name,...]
[HAVING where_definition]
[ORDER BY {unsigned_integer | col_name | formula} [ASC | DESC]
,...]
[LIMIT [offset,] rows]
[PROCEDURE procedure_name ]
```

```
table_reference, table_reference
table_reference [CROSS] JOIN table_reference
table_reference INNER JOIN table_reference
table_reference STRAIGHT_JOIN table_reference
table_reference LEFT [OUTER] JOIN table_reference ON
conditional_expr
table_reference LEFT [OUTER] JOIN table_reference USING
(column_list)
table_reference NATURAL LEFT [OUTER] JOIN table_reference
```

```
INSERT [INTO] tbl_name [(col_name,...)]
VALUES (expression,...),(...),...
```

```
INSERT [INTO] tbl_name [(col_name,...)]
SELECT ...
```

```
INSERT [INTO] tbl_name
SET col_name=expression, col_name=expression, ...
```

```
DELETE [LOW_PRIORITY] FROM tbl_name
[WHERE where_definition]
```

```
UPDATE tbl_name SET col_name1=expr1,col_name2=expr2,...
[WHERE where_definition]
```

DDL (Data Definition Language)

```
CREATE TABLE [IF NOT EXISTS] tbl_name [(create_definition,...)]
[table_options] [select_statement]
```

```
create_definition: col_name type [NOT NULL | NULL] [DEFAULT
default_value] [AUTO_INCREMENT] [PRIMARY KEY]
[reference_definition]
or PRIMARY KEY (index_col_name,...)
or KEY [index_name] (index_col_name,...)
or INDEX [index_name] (index_col_name,...)
or UNIQUE [INDEX] [index_name] (index_col_name,...)
or [CONSTRAINT symbol] FOREIGN KEY index_name
(index_col_name,...) [reference_definition]
or CHECK (expr)
```

```
DROP TABLE [IF EXISTS] tbl_name [, tbl_name,...]
```

```
ALTER TABLE tbl_name alter_spec [, alter_spec ...]
```

alter_specification:

```
ADD [COLUMN] create_definition [FIRST | AFTER column_name ]
or ADD [COLUMN] (create_definition, create_definition,...)
or ADD INDEX [index_name] (index_col_name,...)
or ADD PRIMARY KEY (index_col_name,...)
or ADD UNIQUE [index_name] (index_col_name,...)
or ALTER [COLUMN] col_name {SET DEFAULT literal | DROP
DEFAULT}
or CHANGE [COLUMN] old_col_name create_definition
or MODIFY [COLUMN] create_definition
or DROP [COLUMN] col_name
or DROP PRIMARY KEY
or DROP INDEX index_name
or RENAME [AS] new_tbl_name
or table_options
```

```
CREATE [UNIQUE] INDEX index_name ON tbl_name
(col_name[(length)],... )
```

```
DROP INDEX index_name ON tbl_name
```

```
CREATE [AGGREGATE] FUNCTION function_name RETURNS
{STRING|REAL|INTEGER}
SONAME shared_library_name
```

```
DROP FUNCTION function_name
```

AC (Access Control)

```
GRANT priv_type [(column_list)] [, priv_type [(column_list)] ...]
ON {tbl_name | * | *.* | db_name.*}
TO user_name [IDENTIFIED BY 'password']
[, user_name [IDENTIFIED BY 'password'] ...]
[WITH GRANT OPTION]
```

```
REVOKE priv_type [(column_list)] [, priv_type [(column_list)] ...]
ON {tbl_name | * | *.* | db_name.*}
FROM user_name [, user_name ...]
```

priv_type:

```
ALL PRIVILEGES FILE RELOAD ALTER INDEX
SELECT CREATE INSERT SHUTDOWN DELETE
PROCESS UPDATE DROP REFERENCES USAGE
```

TC (Transaction Control)

```
COMMIT [WORK]
ROLLBACK [WORK]
```

Programmatic SQL

```
EXPLAIN tbl_name
```

```
EXPLAIN SELECT select_options
```

```
{DESCRIBE | DESC} tbl_name {col_name | wild}
```