

SQL Commands

DDL (Data Definition Language)	• CREATE	Is used to create database objects such as tables
	• ALTER	Is used to alter the structure of database object such as change a columns data type from number to varchar(50)
	• DROP	Deletes objects from the database
	• TRUNCATE	It removes all records from the object
	• RENAME	Renames an object
DQL (Data Query Language)	• SELECT	Is used to retrieve data from a database object
DML (Data Manipulation Language)	• INSERT	Inserts records to a database object
	• UPDATE	Updates records from a database object
	• DELETE	Deletes records from a database object
DCL (Data Control Language)	• GRANT	Provides access privileges
	• REVOKE	Removes access privileges
TCL (Transaction Control Language)	• COMMIT	Commits a transaction (saves changes to database)
	• ROLLBACK	Rolls back a transaction (undoes all changes)

Data Definition Language - CREATE

IF YOU ARE **OUTSIDE** THE SCHEMA:

```
CREATE TABLE SCHEMA_NAME.TABLE_NAME(COL1 DATA_TYPE CONSTRAINT,  
                                         COL1 DATA_TYPE CONSTRAINT,  
                                         COL..N DATA_TYPE CONSTRAINT);
```

IF YOU ARE **INSIDE** THE SCHEMA:

```
CREATE TABLE TABLE_NAME(COL1 DATA_TYPE CONSTRAINT,  
                           COL1 DATA_TYPE CONSTRAINT,  
                           COL..N DATA_TYPE CONSTRAINT);
```

```
CREATE TABLE  
SCHEMA_NAME.TABLE_NAME  
AS  
(SELECT * FROM SCHEMA_NAME.TABLE_NAME);
```

Data Definition Language - ALTER

	SINGLE COLUMN	MULTIPLE COLUMNS
Add columns	ALTER TABLE <i>table_name</i> ADD <i>column_name _1 datatype;</i>	ALTER TABLE <i>table_name</i> ADD (<i>column_name _1 datatype,</i> <i>column_name _2 datatype;</i>
Drop columns	ALTER TABLE <i>table_name</i> DROP COLUMN <i>column_name;</i>	ALTER TABLE <i>table_name</i> DROP (<i>column_name_1,</i> <i>column_name_2;</i>
Change a columns datatype	ALTER TABLE <i>table_name</i> MODIFY <i>column_name_1 datatype;</i>	ALTER TABLE <i>table_name</i> MODIFY (<i>column_name_1 datatype,</i> <i>column_name_2 datatype_2;</i>
Change columns name	ALTER TABLE <i>table_name</i> RENAME COLUMN <i>old_name to new_name;</i>	N/A

** CAN VARY SLIGHTLY FOR MYSQL AND MS SQL SERVER

Data Definition Language - DROP

```
DROP TABLE TABLE_NAME;
```

Data Definition Language - TRUNCATE

```
TRUNCATE TABLE TABLE_NAME;
```

Data Definition Language - RENAME

```
RENAME OLD_TABLE_NAME TO NEW_TABLE_NAME
```

Data Manipulation Language

```
INSERT INTO  
table_name (column1, column2, ... column_n )  
VALUES (value1, value2, ... value_n );
```

Data Control Language

```
GRANT privileges ON table_name TO user;
```

```
REVOKE privileges ON table_name FROM user;
```

Privilege	Description
SELECT	Ability to perform SELECT statements on the table.
INSERT	Ability to perform INSERT statements on the table.
UPDATE	Ability to perform UPDATE statements on the table.
DELETE	Ability to perform DELETE statements on the table.
ALL	All privileges on table.