

What is DDL and DML [closed]

[Ask Question](#)

Can you please help me understand from scratch about DDL & DML?

255



sql

ddl

dml

86

edited Feb 7 at 17:52

[Outman](#)

516 6 19

asked Apr 5 '10 at 11:52

[Sachindra](#)

1,934 5 23 35

closed as too broad by [meagar](#) ♦
Dec 31 '18 at 19:15

Please edit the question to limit it to a specific problem with enough detail to identify an adequate answer. Avoid asking multiple distinct questions at once. See the [How to Ask](#) page for help clarifying this question.

If this question can be reworded to fit the rules in the [help center](#), please [edit the question](#).

12 Answers

▲
288
▼

DDL is [Data Definition Language](#) : it is used to define data **structures**.

For example, with SQL, it would be instructions such as
create table , alter table , ...

DML is [Data Manipulation Language](#) : it is used to manipulate **data** **itself**.

For example, with SQL, it would be instructions such as
insert , update , delete , ...

answered Apr 5 '10 at 11:56



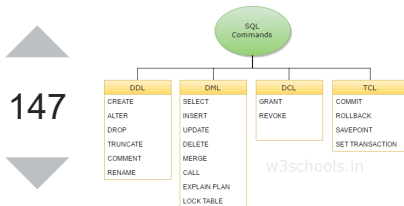
Pascal MARTIN
339k 59 589 615

2 DESCRIBE is DDL or DML? –
[Tom J Muthirenthi](#)
Jan 19 '17 at 3:21

2 @TomJMuthirenthi I don't think DESCRIBE fits into any of the two. It just returns it's own representation of how a Table/DB is structured. You can achieve the same thing with e.g. CREATE but not as "human-readable" –
[JensV](#) Sep 11 '17 at 15:26

If SELECT is considered DML, then DESCRIBE should be considered DDL. –

Shloim Aug 29 '18
at 14:56



More information see
here: [MySQL What is
DDL, DML and DCL?](#),
the original is as
follows:

DDL

DDL is short name
of Data Definition
Language, which
deals with
database schemas
and descriptions,
of how the data
should reside in
the database.

- CREATE – to
create
database and
its objects like
(table, index,
views, store
procedure,
function and
triggers)
- ALTER –
alters the
structure of
the existing
database

- DROP – delete objects from the database
- TRUNCATE – remove all records from a table, including all spaces allocated for the records are removed
- COMMENT – add comments to the data dictionary
- RENAME – rename an object

DML

DML is short name of Data Manipulation Language which deals with data manipulation, and includes most common SQL statements such SELECT, INSERT, UPDATE, DELETE etc, and it is used to store, modify, retrieve, delete and update data in database.

- SELECT – retrieve data from the a database
- INSERT – insert data into a table
- UPDATE – updates

existing data
within a table

- DELETE –
Delete all
records from a
database table
- MERGE –
UPSERT
operation
(insert or
update)
- CALL – call a
PL/SQL or
Java
subprogram
- EXPLAIN
PLAN –
interpretation
of the data
access path
- LOCK TABLE
– concurrency
Control

DCL

DCL is short name
of Data Control
Language which
includes
commands such as
GRANT, and
mostly concerned
with rights,
permissions and
other controls of
the database
system.

- GRANT –
allow users
access
privileges to
database
- REVOKE –
withdraw
users access
privileges
given by using

the GRANT
command

TCL

TCL is short name
of Transaction
Control Language
which deals with
transaction within a
database.

- COMMIT –
commits a
Transaction
- ROLLBACK –
rollback a
transaction in
case of any
error occurs
- SAVEPOINT –
to rollback the
transaction
making points
within groups
- SET
TRANSACTION – specify
characteristics
for the
transaction

edited Jun 30 '17 at 1:40

answered Jun 28 '17 at 7:46



Terry

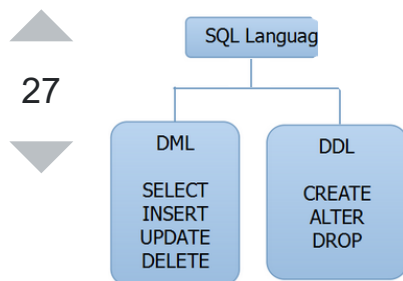
1,607 1 8 5

-
- 1 you might want to
expand you answer
a little in any future
case that link would
become unavailable
– [svarog](#) Jun 28 '17
at 8:20
-

Sometimes you'll
also see commands
such as SELECT /
SHOW / EXPLAIN /

HELP split off from DML and grouped under DQL , with the Q from Query -- because they don't really manipulate anything. – [Fx32](#)
Nov 17 '17 at 14:04

TRUNCATE should be DML – [Pete Alvin](#)
Sep 2 '18 at 10:20



DDL, Data Definition Language

- Create and modify the structure of database object in a database.
- These database object may have the Table, view, schema, indexes....etc

e.g.:

- CREATE , ALTER , DROP , TRUNCATE , COMMIT , etc.

DML, Data Manipulation Language

DML statement are affect on table. So that

is the basic operations
we perform in a table.

- Basic crud
operation are
perform in table.
- These crud
operation are
perform by the
SELECT , INSERT ,
UPDATE , etc.

Below Commands are
used in DML:

- INSERT , UPDATE ,
SELECT , DELETE ,
etc.

edited May 5 '17 at 21:47



[Dorian](#)

13.1k 3 75 87

answered Dec 31 '16 at 8:38



[JegsVala](#)

1,110 14 21

This is excellent. –
[Tigerjz32](#) Mar 24 '17
at 21:18



19



**DDL is Data
Definition Language**
: Specification notation
for defining the
database schema. It
works on Schema
level.

DDL commands are:

create, drop, alter, rena
me, truncate

For example:

```
create table account (  
    account-number char  
    balance integer);
```


DML is Data Manipulation Language .It is used for accessing and manipulating the data.

DML commands are:

`select, insert, delete, update`

For example :

`update account set bal:`


edited Oct 5 '18 at 15:54

answered Jul 31 '17 at 17:13



[Raju](#)

354 3 9

@isapir There are three general ways you can "manipulate" data in SQL: (1) You can change which results are presented. (2) You can change how the results are presented or organized (in terms of things like sort order, etc). (3) You can change the underlying data. In the first case, you can change which results are presented by using different WHERE clauses, JOIN predicates, etc, in a SELECT statement, ie- "select * from account ;" will give a much different result (assuming account has more than 1 row) than select * from account where balance = 1000; – [Raju](#) Sep 30 '18 at 8:28 

When you select the

data in different formats, you modify the presentation of the data for that query, and not the data itself. The M in DML stands for Manipulation, or in laymen terms Modification, of the data. `SELECT` does not modify the data. Alternatively, `TRUNCATE` does, and is therefore a DML instruction and NOT a DDL one. – [isapir](#) Sep 30 '18 at 17:43

12

In layman terms suppose you want to build a house, what do you do.

DDL i.e Data Definition Language

1. Build from scratch
2. Rennovate it
3. Destroy the older one and recreate it from scratch

that is

1. `CREATE`
2. `ALTER`
3. `DROP & CREATE`

DML i.e. Data Manipulation Language

People come/go inside/from your house

1. `SELECT`
2. `DELETE`
3. `UPDATE`

4. TRUNCATE

DCL i.e. Data Control Language

You want to control the people what part of the house they are allowed to access and kind of access.

1. GRANT PERMISSION

edited Jun 21 '18 at 3:16

answered Jul 4 '17 at 6:42



Satish Patel

905 14 30

8

DML is abbreviation of **Data Manipulation Language**. It is used to retrieve, store, modify, delete, insert and update data in database.

Examples:
SELECT, UPDATE, INSERT statements

DDL is abbreviation of **Data Definition Language**. It is used to create and modify the structure of database objects in database.

Examples:
CREATE, ALTER, DROP statements

Visit this site for more info:
<http://blog.sqlauthority.com/2008/01/15/sql-server-what-is-dml-ddl-dcl-and-tcl-introduction-and-examples/>

edited Jul 6 '18 at 0:49



Pang

6,951 16 64 103

answered Nov 22 '13 at 1:55



Uc.IT_samuel

128 1 9



3



DDL is Data Definition Language: Just think you are defining the DB. So we use CREATE,ALTER TRUNCATE commands.
DML is after defining we are Manipulating the data. So we use SELECT,INSERT, UPDATE, DELETE command.

Remember DDL commands are auto-committed. You don't need to use COMMIT statements.
DML (Data Manipulation Language) commands need to be committed/rolled back.

answered Jun 6 '16 at 13:52



Chinmoy

658 6 9



3

DDL: Change the schema



DML: Change the data

Seems specific to MySQL limitations
([rails's source code](#))

answered May 5 '17 at 21:48



[Dorian](#)

13.1k 3 75 87



2

In simple words.



DDL(Data definition language): will work on structure of data. define the data structures.

DML (data manipulation language): will work on data. manipulates the data itself

answered Sep 9 '15 at 11:00



[Sakib](#)

56 7



2

[DDL](#) = Data Definition Language, any commands that provides structure and other information about your data

[DML](#) = Data Manipulation Language, there's only 3 of them, INSERT, UPDATE, DELETE. 4, if you will count `SELECT * INTO x_tbl from tbl` of MSSQL (ANSI SQL: `CREATE TABLE x_tbl AS SELECT * FROM tbl`)

answered Apr 5 '10 at 12:01



[Michael Buen](#)

31.4k 5 72 105

▲ DDL

2



Create,Alter,Drop of
(Databases,Tables,Keys,Index,Views,Functions,Stored
Procedures)

DML

Insert
,Delete,Update,Truncate of (Tables)

answered Jul 2 '17 at 11:57



[rajender kumar](#)

136 1 6



1



DDL stands for Data
Definition Language.

DDL is used for
defining structure of
the table such as
create a table or
adding a column to
table and even drop
and truncate table.

DML stands for Data
Manipulation

Language. As the
name suggest DML
used for manipulating
the data of table.

There are some
commands in DML
such as insert and
delete.

answered Apr 26 '17 at 7:27



[Rishish](#)

11 2

