

1) DDL is Data Definition Language which is used to define data structures. For example: create table, alter table are instructions in SQL.

DML is Data Manipulation Language which is used to manipulate data itself. For example: insert, update, delete are instructions in SQL.

DDL	DML
It stands for Data Definition Language.	It stands for Data Manipulation Language
It is used to create database schema and can be used to define some constraints as well.	It is used to add, retrieve or update the data.
It basically defines the column (Attributes) of the table.	It add or update the row of the table. These rows are called as tuple.

- a. CREATE to create a new table or database.
ALTER for alteration.
DROP to drop a table.
- b. INSERT : It is used to insert data into a table.
UPDATE: It is used to update existing data within a table.
DELETE : It is used to delete records from a database table.
EXPLAIN PLAN: It describes the access path to data.

2)

```
create table costumers(  
    id serial,  
    full_name varchar(50),  
    timestamp timestamp,  
    delivery_address text,  
    primary key (id)  
);
```

```
create table products(  
    id serial,  
    name varchar(150),  
    description text,  
    price double precision,  
    primary key (id)  
);
```

```
create table orders(  
    code integer,  
    costomer_id integer,  
    total_sum double precision,  
    is_paid boolean,  
    foreign key (costomer_id) references costumers(id),  
    primary key (code)  
);
```

```
create table order_items(  
    order_code integer,  
    product_id integer,  
    quantity integer,  
    foreign key (order_code) references orders(code),  
    foreign key (product_id) references products(id)  
);
```

3)

```
a. create table student(  
    id varchar(9) unique not null ,  
    full_name varchar(50),  
    age integer,  
    birth_day date,  
    gender varchar(10),  
    primary key (id)  
);
```

```
create table student_info(  
    id_numder varchar(9),  
    avarage_grade double precision,  
    dorm_needs boolean,  
    add_info text,  
    foreign key (id_numder) references student(id)  
);
```

```
b. create table instructor(  
  
    full_name varchar(50),  
  
    languages varchar(30),  
  
    work_experience integer,  
  
    remote_pos boolean  
  
);
```

```
c. create table lesson(  
  
    name varchar(40),  
  
    instructor varchar(50),  
  
    sudents_sum integer,  
  
    room_number integer  
  
);
```

```
4) insert into costumers(full_name, timestamp, delivery_address) values  
('Erdaulet', now(), 'Kbtu');
```

```
insert into costumers(full_name, timestamp, delivery_address) values  
('Ayan', now(), 'Tolibi');
```

```
insert into products(name, description, price) values  
('Car', 'very fast', 14000.5);
```

```
insert into orders(code, customer_id, total_sum, is_paid) values  
(1898, 1, 1780.35, true)
```

```
insert into order_items(order_code, product_id, quantity) values (1898, 1, 10);
```

```
delete from costumers where full_name = 'Ayan';
```

```
update costumers  
set delivery_address = 'Tolebi'  
where full_name = 'Erdaulet';
```

```
select * from costumers;
```

```
select * from orders;
```