

1

DDL commands affect an entire database or table, but DML commands affect one or more records in a table. The main difference between DDL and DML is that DDL helps to change the structure of the database while DML helps to manage the data in the database.

- a) **create table** *department*
 (*dept_name* **varchar** (20),
 building **varchar** (15),
 budget **numeric** (12,2),
 primary key (*dept_name*));
drop table *department*;
alter table *department* **drop column** *building*;
- b) **delete from** *department* **where** *dept_name* = 'Finance';
insert into *department* **values** ('Finance', 'block C', '3000') ;
insert into *department* (*dept_name*, *budget*) **values** ('HR', '2000') ;
update *department* **set** *dept_name* = 'Finance' **where** *dept_name* = 'Management';

2

```
create table customers(  
id int,  
full_name varchar(50) not null,  
timestamp timestamp not null,  
delivery_address text not null,  
primary key (id));
```

```
create table orders(  
code integer primary key,  
customer_id integer references customers(id),  
total_sum double precision not null,  
is_paid boolean not null,  
check (total_sum > 0);
```

```
create table products(  
id varchar primary key,  
name varchar not null unique,  
description text,  
price double precision not null,  
check (price > 0));
```

```
create table order_items(  
order_code integer references orders(code),  
product_id varchar references products(id),  
quantity integer not null,  
primary key(order_code, product_id));
```

3

- a) **create table** *students*(
 full_name text primary key,

```

age int(3) not null check(age>0),
birth_date date not null,
gender char(1) not null,
avg_grd double precision not null check(avg_grd>=0.00 and avg_grd<=4.00),
info_abt_yourself text,
dorm boolean not null,
add_info text
);
b) create table instructors(
    full_name text primary key ,
    speak_lang text,
    work_exp text,
    possib_remote_lessons boolean not null
);
    c) create table participants(
        lesson_title text not null,
        teach_instruct text not null references instructors(full_name),
        stud_students text not null references students(full_name),
        room_num smallint not null
    );
4
Insert into products values('1', 'Paper', 'Paper A4' , '12.55');
Update products set name ='Pencil' where name='Paper';
Delete from products where id = '1';

```