

Lab2

1. DML- provides the ability to add, delete or modify tuples in the database, while DDL responds for specification of information about relations.

DML commands:

INSERT, UPDATE, DELETE

DDL commands:

CREATE, DROP, RENAME

2. create table customers(
id int not null primary key,
full_name varchar(50) not null,
timestamp timestamp not null,
delivery_adress text not null);

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

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

```
create table order_items(  
order_code int not null,  
product_id varchar not null,  
quantity int not null check(quantity>0),  
primary key(order_code, product_id),  
foreign key (order_code) references orders(code),  
foreign key (product_id) references products(id));
```

3. create table students(id int not null primary key,
full_name varchar(50) not null,
age int not null,
birth_date date not null,
average_grade double precision not null,
info_student text,
need_dormitory boolean not null,
add_info text);

```
create table instructors(  
id int not null primary key,  
full_name varchar(50) not null,  
work_exp text,  
remote_lessons boolean not null);
```

```
create table lesson_participants(  
  lesson_title varchar not null,  
  instructor_id int not null,  
  room_num int not null,  
  primary key(lesson_title,instructor_id),  
  foreign key (instructor_id) references instructors(id));
```

```
create table languages(  
  instructor_id int not null,  
  language_name varchar not null,  
  primary key(instructor_id, language_name),  
  foreign key (instructor_id) references instructors(id));
```

```
create table studying_students(  
  student_id int not null,  
  studying_lesson varchar not null,  
  instructor_id int not null,  
  primary key(studying_lesson, student_id),  
  foreign key(studying_lesson,instructor_id) references  
  lesson_participants,  
  foreign key(student_id) references students(id));
```

4. a) insert into products values('12','Tutti','db noob','153.12');

b) update products
set price = price * 0.1
where price > 100

c) delete from products
where id = '12'