Laboratory work #2 **Beisenova Fariza**

#1

Difference between DDL and DML:

- DDL used to create database,users, tables
  DML used to insert, update or delete the records.
- DDL has no further classification.
  DML is further classified into procedural DML and non-procedural DML.
- DDL commands are CREATE, DROP, ALTER
  DML commands are SELECT, INSERT, UPDATE,DELETE

#2

```
CREATE TABLE customers(
    id int not null unique PRIMARY KEY ,
    full_name varchar(50) not null,
    timestamp timestamp not null,
    delivery_adress text not null);

SELECT * FROM customers;

CREATE TABLE orders(
    code int unique PRIMARY KEY not null,
    customer_id int,
    total_sum double precision not null check(total_sum>0),
    is_paid boolean not null,
    foreign key (customer_id) references customers(id));

SELECT * FROM orders;

CREATE TABLE products(
    id varchar not null unique PRIMARY KEY,
    name varchar not null,
    description text,
    price double precision not null);

SELECT * FROM products;

CREATE TABLE order_items(
    order_code int unique not null,
    product_id varchar unique 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));

SELECT * FROM order_items;
```

#3

```
CREATE TABLE students(
    student_id int unique PRIMARY KEY not null,
    first_name varchar(50) not null,
    age int not null,
    birth_date date not null,
```

```
    gender varchar(50) not null,
    average_grade double precision not null,
    inf_about_yourself text not null,
    need_dormitory boolean not null,
    additional_info text);

insert into students values ('1','Fariza', 19, '2001-11-23', 'female', 3.00,
'fghj', true);
insert into students values ('2','yujk', 18, '2002-10-09', 'male', 3.00,
'poiukj', false);

select * from students;

CREATE TABLE instructors(
    id int unique PRIMARY KEY not null,
    full_name varchar(50) not null,
    speaking_lang text not null,
    work_exper int,
    having_remote_less boolean not null);

insert into instructors values ('1','fghjh','kz,rus,eng','5', true )

select * from instructors;

CREATE TABLE lessons(
    id int unique PRIMARY KEY not null,
    lesson varchar(50) not null,
    instructor_id int,
    foreign key (instructor_id) references instructors(id));

CREATE TABLE lesson_participants (
    lesson_id int,
    instructor_id int,
    students_id int,
    room_num int not null,
    foreign key (lesson_id) references lessons(id),
    foreign key (instructor_id) references instructors(id),
    foreign key (students_id) references students(student_id));
```

#4

```
insert into products values('1','book','fiction, in russian
language','5000');
insert into products values('2','pen','blue','200');

update products
set price=price+1000
where name='book';

delete from products
where name='pen';
```