Bokeikhan Kazybek Databases Lab2

1. DML and DDL
DML: SELECT, IINSERT, UPDATE, DELETE
DDL: CREATE, ALTER, DROP
DDL (data definition language) describes database structure
DML (data manipulation language) works with data

a) CREATE DATABASE aa;
DROP DATABASE j_example;
CREATE TABLE bb(
Id integer, name VARCHAR(255);

);

ALTER TABLE bb ADD COLUMN firstname VARCHAR(255);

b) select * from bb;
INSERT INTO bb VALUES(200000, 'Kazybek', 'kazi');
DELETE FROM bb WHERE name='Kazybek';
UPDATE bb SET id = 15354312 WHERE name = 'Kazybek';

2. create table customers(
id integer PRIMARY KEY,
full_name varchar(50) NOT NULL,
timestap timestap NOT NULL,
delivery address text NOT NULL

);

create table orders(
code integer PRIMARY KEY,
customer_id integer customers(id),
total_sum double precision NOT NULL CHECK (total_sum > 0),
is_paid bool NOT NULL
);

create table oder_item(
order_code integer references orders(code),
product_id varchar references products(id),
quantity integer NOT NULL CHECK (quantity > 0),
PRIMARY KEY (oder_code, product_id)
);

create table products(
id varchar PRIMARY KEY,
name varchar UNIQUE NOT NULL,

```
        description text,
        price double precision NOT NULL CHECK (price > 0)
    );
```

3. ***a)***

```
create table students(
        full_name varchar PRIMARY KEY,
        birt_date date NOT NULL,
        age integer NOT NULL CHECK (age > 0),
        average_grade double precision NOT NULL CHECK ( average >= 0),
        information text NOT NULL,
        need_dormitory bolean NOT NULL,
        additional_info text NOT NULL
    );
```

b)

```
create table instructors(
        full_name varchar PRIMARY KEY,
        speaking_language varchar NOT NULL,
        work_experience integer NOT NULL CHECK ( work_experience >= 0),
        remote_possibility bolean NOT NULL
    );
```

c)

```
create table lesseon participants(
        lesson_title varchar NOT NULL,
        instructor varchar(50) not null references instructor (fullname),
        student varchar(50) NOT NULL references students (fullname),
        room_number int NOT NULL CHECK (room_number > 0)
    );
```

4.

```
INSERT INTO products(id, name, description, price) values (2,'pineapple','daddy', 1250);
UPDATE products SET name = 'durak' WHERE id = '2';
DELETE from products WHERE name = 'pineapple';
```