

Laboratory work 2.

1. Difference between DDL and DML

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. DDL commands - create, drop, alter.

b. DML - insert, update, delete, select.

2. Write SQL statements to create tables:

1. CREATE TABLE customers (

id integer PRIMARY KEY,

full_name varchar (50) NOT NULL,

timestamp timestamp NOT NULL,

delivery_address text NOT NULL.

);

2. CREATE TABLE orders (
 code integer PRIMARY KEY,
 customer_id integer references customers (id),
 total_sum double precision NOT NULL CHECK (total_sum > 0),
 is_paid boolean NOT NULL
);

3. CREATE TABLE products (
 id varchar PRIMARY KEY,
 name varchar NOT NULL,
 description text,
 price double precision NOT NULL CHECK (price > 0)
);

4. CREATE TABLE order_items (
 order_code integer references orders (code),
 product_id varchar references products (id),
 quantity integer CHECK (quantity > 0),
);

4. Give examples of insertion, update, and deletion of data on tables from ex.2.

```
INSERT INTO customers
```

```
VALUES (208, 'full_name', '23.09.2021 17:30',  
'Almaty');
```

```
UPDATE orders
```

```
SET is_paid = false
```

```
where code = 'любое число';
```

```
DELETE FROM customers WHERE id=1;
```