

1. **Data-definition language (DDL)**. The SQL DDL provides commands for defining relation schemas, deleting relations, and modifying relation schemas

Data-manipulation language (DML). The SQL DML provides the ability to query information from the database and to insert tuples into, delete tuples from, and modify tuples in the database.

DDL commands: CREATE, DROP, ALTER, TRUNCATE

DML commands: INSERT, UPDATE, DELETE, SELECT

Examples:

```
CREATE DATABASE earth
  OWNER god
  TEMPLATE template0
  ENCODING DEFAULT;
```

```
DROP DATABASE [IF EXISTS] earth;
```

```
ALTER table people
  ADD COLUMN hungry TYPE boolean,
  DROP COLUMN invisibility RESTRICT;
```

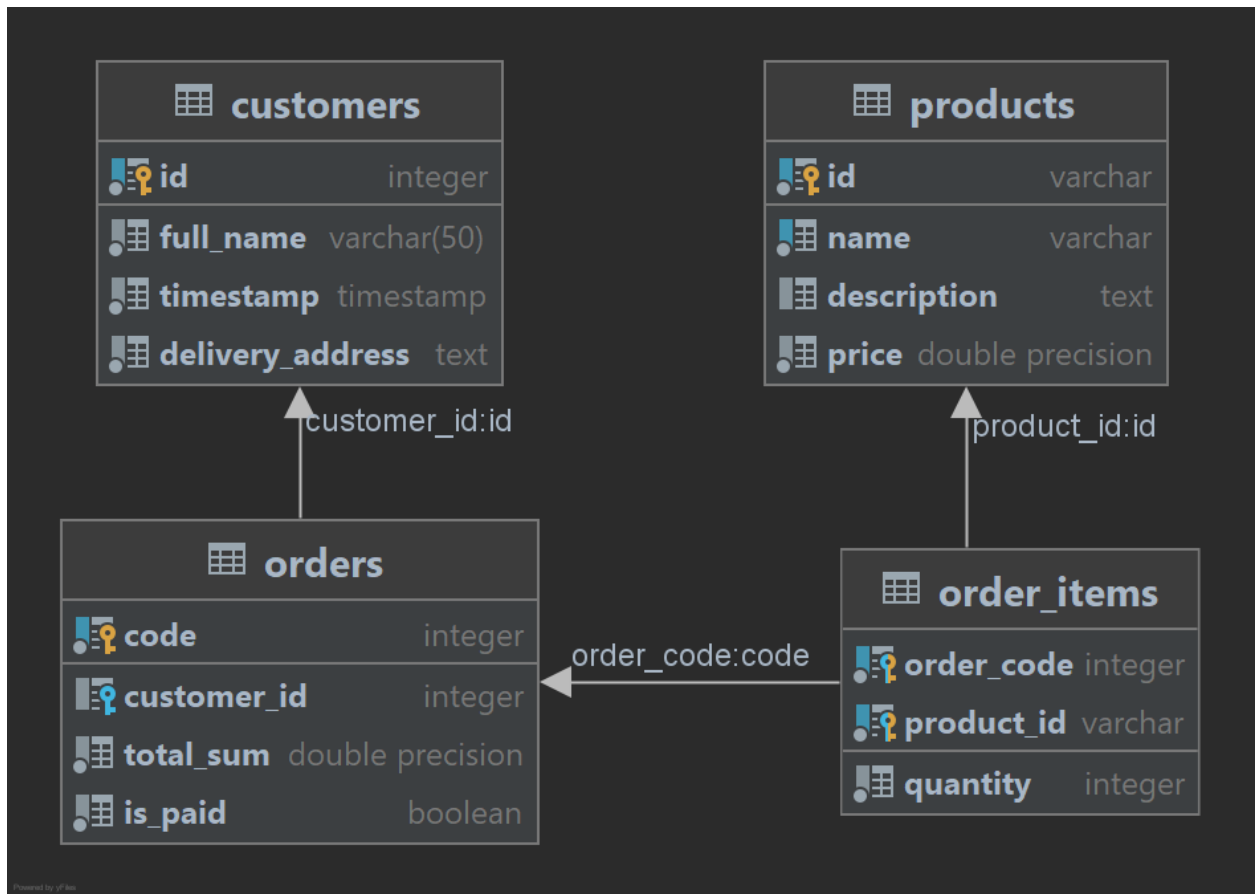
```
SELECT * FROM table1, table2;
SELECT id,first_name FROM student WHERE id=1;
```

```
UPDATE table1 SET name='Geovanni Gogo' WHERE name='Gogo';
```

```
DELETE FROM customers WHERE delivery_address='Astana' and id=3;
DELETE FROM customers WHERE delivery_address='Lanlandia';
```

```
INSERT INTO singers VALUES (1,'Ice Cube','2020-12-01 00:00:10','New York');
INSERT INTO customers VALUES (2,'Nurtas Kairat','2045-12-01 00:00:10','Astana');
```

2. second_task.sql – [2year/second_task.sql at main · Noorius/2year \(github.com\)](#)



```
CREATE table students(  
    id varchar(9) PRIMARY KEY,  
    first_name varchar(40) NOT NULL,  
    last_name varchar(40) NOT NULL,  
    middle_name varchar(40) NOT NULL,  
    gender bytea NOT NULL,  
    birth_date date NOT NULL,  
  
    UNIQUE(id, first_name, last_name, middle_name)  
);
```

```
CREATE table students_info(
    id varchar(9) PRIMARY KEY,
    age smallint NOT NULL CHECK (age>0) ,
    info text,

    foreign key(id) references students(id)
);
```

```
CREATE table dormitory_need(
    id varchar(9) PRIMARY KEY,
    need boolean DEFAULT FALSE,
    foreign key(id) references students(id)
);
```

```
CREATE table grades(
    id varchar(9) PRIMARY KEY,
    av_grade numeric(3,2) NOT NULL,
    foreign key(id) references students(id)
);
```

3. 1) third_task_1.sql – [2year/third task 1.sql at main · Noorius/2year \(github.com\)](#)
 2) third_task_2.sql – [2year/third task 2.sql at main · Noorius/2year \(github.com\)](#)
 3) third_task_3.sql – [2year/third task 3.sql at main · Noorius/2year \(github.com\)](#)

4. **INSERT INTO** customers **VALUES** (1,'Zhetessov Nur','2020-12-01 00:00:10','Almaty');
INSERT INTO customers **VALUES** (2,'Nurtas Kairat','2045-12-01 00:00:10','Astana');
INSERT INTO customers **VALUES** (3,'Baiterek','3020-12-01 00:00:10','Astana');

```
UPDATE customers SET full_name='Nur' WHERE id=1;
UPDATE customers SET delivery_address='Nur-Sultan' WHERE
delivery_address='Astana';
```

```
DELETE FROM customers WHERE delivery_address='Astana' and id=3;
DELETE FROM customers WHERE id=1;
```

