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;**

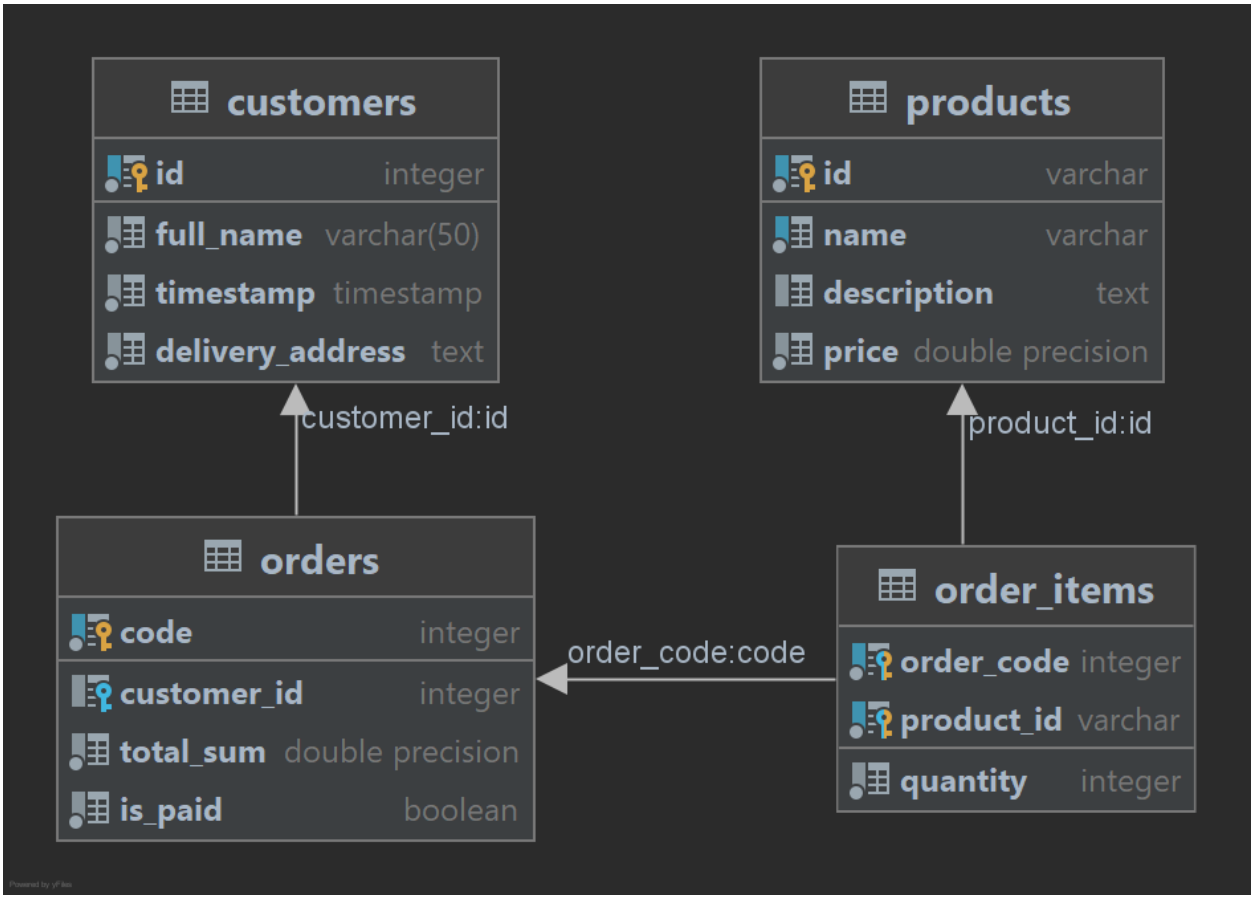
   SELECT * FROM *table1, table2***;**
   SELECT *id,first_name* **FROM** *student* **WHERE** *id=1***;**

   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  customers
(
    id integer not null,
    full_name varchar(50) not null,
    timestamp timestamp not null,
    delivery_address text not null,
    primary key(id),
    unique (id)
);

CREATE table orders
(
    code int NOT NULL,
    customer_id int,
    total_sum double precision NOT NULL CHECK(total_sum
> 0),
```

```
    is_paid boolean NOT NULL,
    primary key(code),
    foreign key(customer_id) references customers(id)
);

CREATE table products(
    id varchar not null,
    name varchar not null,
    description text,
    price double precision not null check(price > 0),
    primary key(id),
    unique(id,name)
);

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. 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;