Comandos PSQL(PostgreSQL)
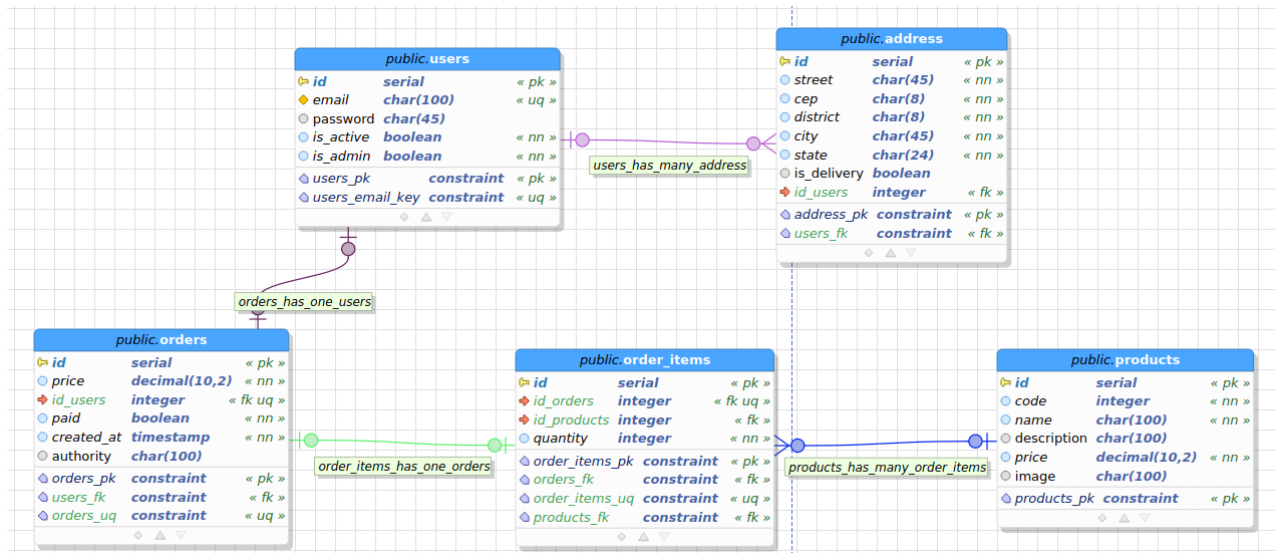
Diagrama Entidade-Relacionamento

1.Criação banco de dados e tabelas:

create database luizacode;

```
create table users(
        id serial,
        email char(100),
        password char(45),
        is_active boolean default true,
        is_admin boolean default false,
        is_admin bool null default false,
        constraint email_uq unique (email),
        constraint users_pkey primary key (id)
);


create table address(
        id serial,
        user_id int,
        street char(45),
        cep char(8),
        district char(45),
        city char(45),
```

```sql
        state char(24),
        is_delivery boolean default true,
        constraint address_pkey primary key(id),
        constraint fk_user foreign key(user_id) references users(id)
);

drop table orders cascade;
create table orders(
        id serial not null,
        user_id int,
        address_id int,
        price decimal(10,2),
        paid boolean default false,
        created_at timestamp not null default now(),
        authority char(100),
        constraint orders_pkey primary key(id),
        constraint order_uq unique(id),
        constraint fk_user FOREIGN KEY(user_id) references users(id),
        constraint fk_address FOREIGN KEY(address_id) references address(id)
);

drop table order_items;
create table order_items(
        code char(100) generated always as (CAST(id_order as char) || '_' ||
CAST(id_product as char)) stored,
        id_order int,
        id_product int,
        quantity integer not null default 1,
        constraint fk_order foreign key(id_order) references orders(id),
        constraint fk_product foreign key(id_product) references products(id),
        constraint order_product_uq unique(id_order, id_product),
        constraint order_product primary key(code)
);


create table products(
        id serial primary key,
        code integer not null,
        name char(100) not null,
        description char(100),
        price decimal(10,2) not null,
        image char(100)
);
```

2.Criação de user e permissão

```
/* DCL - Gerenciamento de acessos e permissões */
create user karlapereira with password 'luizacode123';

grant all privileges on database luizacode to karlapereira;
SELECT * FROM pg_catalog.pg_user;
```

3.Inserção de dados nas tabelas

```
/* DCL - Add/Modify data */
insert into users (email, password)
        values ('karlapereira', 123);

select * from users;


insert into address (user_id, street, cep, district, city, state)
        values (1, 'rua xxxxxx, xx', '01311100', 'xxxx', 'sao paulo', 'sp');
insert into address (user_id, street, cep, district, city, state)
        values (1, 'rua xxxxxx, xx', 'xxxxxxxx', 'xxxx', 'belo horizonte', 'mg');

select * from address;


insert into products (code, name, description, price, image)
        values (1000, 'notebook', 'Acer Nitro 5 - core I7 - geforce GTX', 5500.00,
'notebook1.jpeg');

insert into products (code, name, description, price, image)
        values (2000, 'Iphone', 'Apple', 8500.00, 'iphone.jpeg'),
        (3000, 'Monitor', 'Samsung', 2500.00, 'monitor.jpeg');

update products set price = 5500.89 where code=1000;

select * from products;


insert into orders(user_id, address_id, price, paid)
        values (1, 1, 5500.00, true);
select * from orders;


insert into order_items (id_order, id_product, quantity)
        values (1, 1, 2),
```

```
                    (1,2,1),
                    (1,3,5);

select * from order_items oi;
```

4. JOIN

```
select
        u.id,
        u.email,
        a.city,
        a.state,
        o.price,
        o.paid,
        oi.id_product,
        oi.quantity,
        p.name
        from users u
        inner join address a on a.user_id = u.id
        inner join orders o on o.user_id = u.id and o.address_id = a.id
        inner join order_items oi on oi.id_order = o.id
        inner join products p on p.id = oi.id_product ;
```

5. Agregação

```
/* Agregação */
select
        count(*), price
        from products p
        group by p.price;

select
        min(code)
        from products p;

select distinct
        p.price
        from products p ;
select
        *
        from products p order by p.price DESC;
```