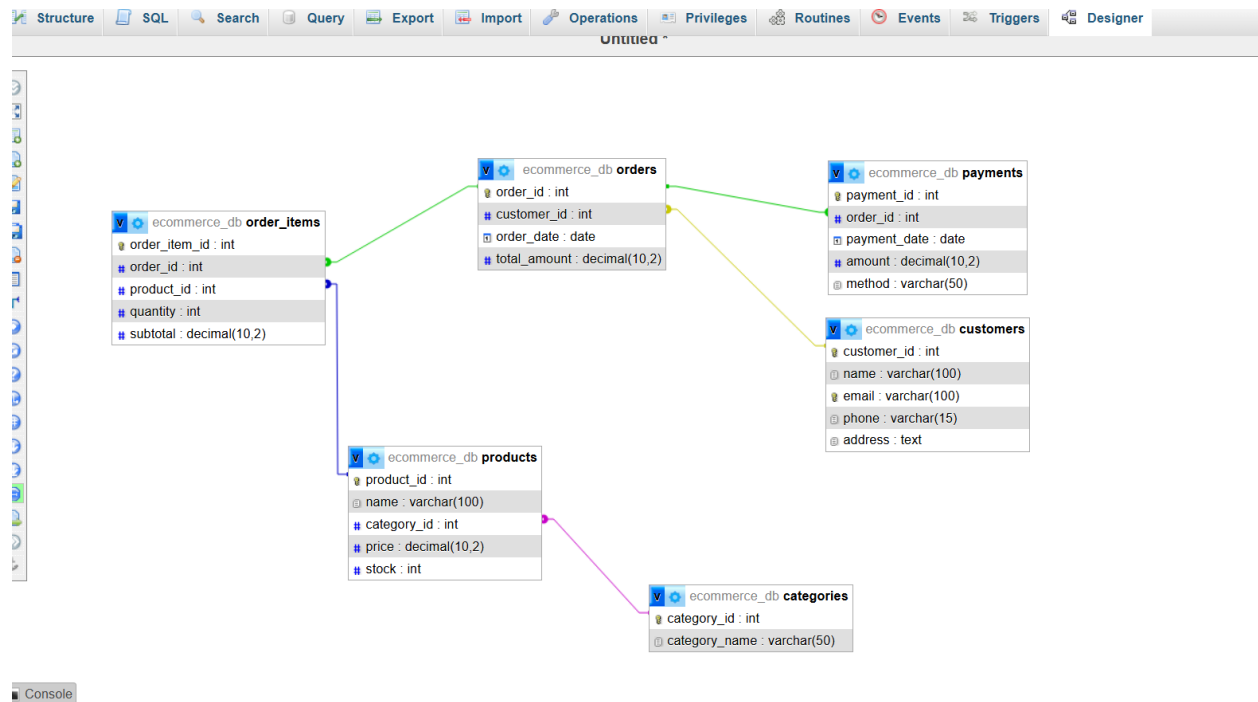Nama: Abdullah Azzam Rabbani

Nim : 10240038

1.Buat database e-commerce
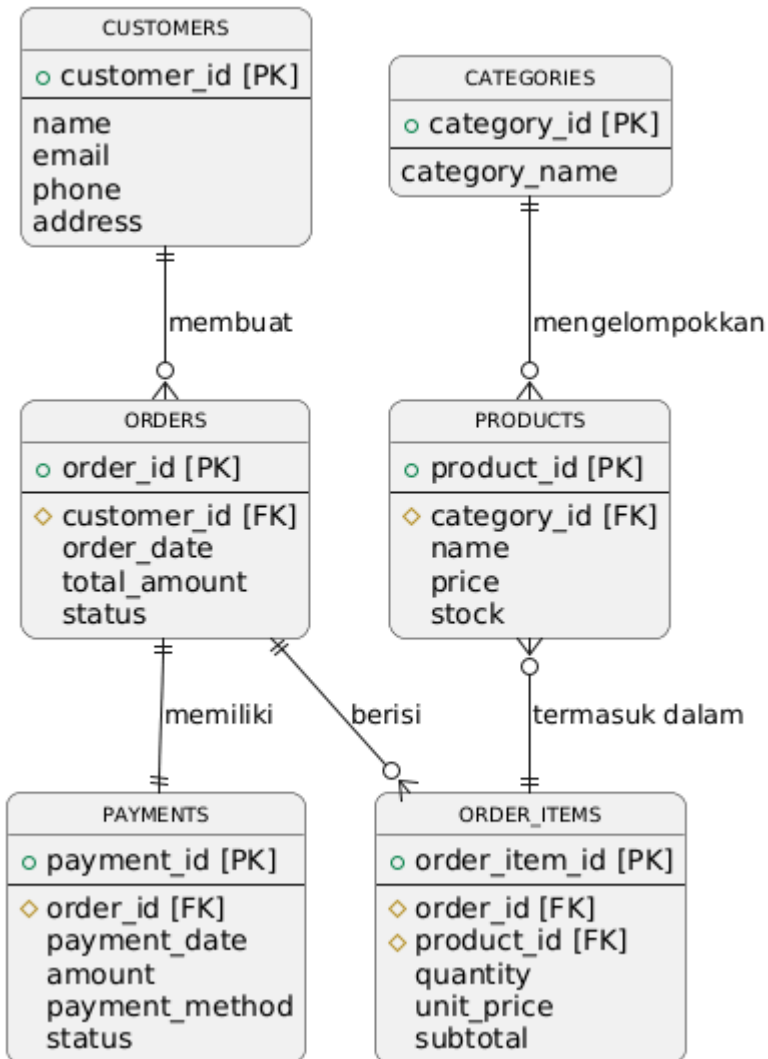

2. **Relational Key**

- **Primary Key (PK)**:

  - customer_id di customers

  - product_id di products

  - category_id di categories

  - order_id di orders

  - order_item_id di order_items

  - payment_id di payments

- **Foreign Key (FK)**:

  - products.category_id → categories.category_id

- orders.customer_id → customers.customer_id

- order_items.order_id → orders.order_id

- order_items.product_id → products.product_id

- payments.order_id → orders.order_id

3. **Entity Relationship Diagram (ERD)**

4.A. **Bentuk Unnormalized**

order_id	customer_name	product_name	category	quantity	price	total
101	Andi	Laptop	Elektronik	1	8000000	8000000
101	Andi	Mouse	Aksesori	2	150000	300000

B. Normalisasi 1 (1NF – Menghilangkan Grup Berulang)

Tabel dipisah menjadi:

Tabel orders

order_id	customer_name
101	Andi

Tabel order_items

order_id	product_name	category	quantity	price
101	Laptop	Elektronik	1	8000000
101	Mouse	Aksesori	2	150000

C. Normalisasi 2 (2NF – Menghilangkan Ketergantungan Parsial)

Tabel orders

order_id	customer_name
101	Andi

Tabel customer

customer_id	name
C001	Andi

Tabel order_items

order_id	product_id	quantity
101	P001	1
101	P002	2

Tabel products

product_id	name	category_id	price
P001	Laptop	CAT1	8000000
P002	Mouse	CAT2	150000

Tabel categories

category_id	category_name

CAT1	Elektronik
CAT2	Aksesori