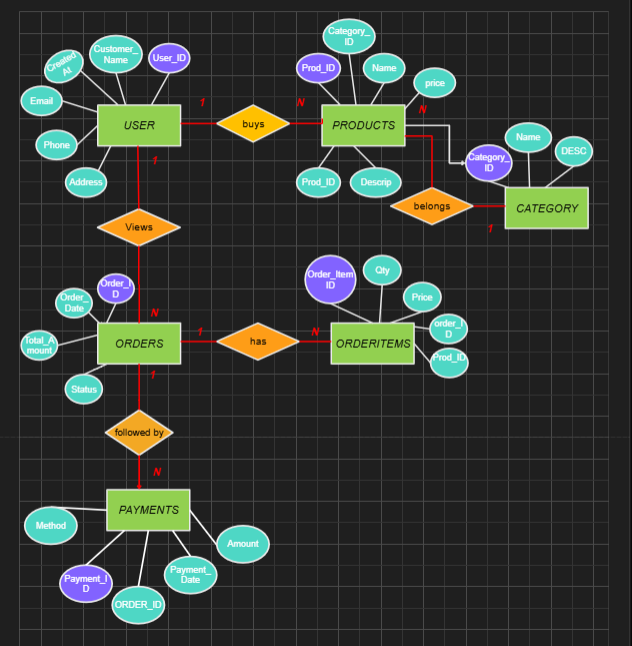
**Create Database:**

CREATE DATABASE ecom;

**ERD:**



**Create Tables:**

* **USER Table:**  
    
  CREATE TABLE Users (

User\_ID INT PRIMARY KEY AUTO\_INCREMENT,

Customer\_Name VARCHAR(50) NOT NULL,

Email VARCHAR(50) NOT NULL,

Phone CHAR(10),

Address VARCHAR(50),

created\_At DATETIME DEFAULT CURRENT\_TIMESTAMP

);

This table keeps track of customers, their contact info, and when they were added to the system. You can now **add, view, or manage users** in the e-commerce database.

* **Categories Table:**

CREATE TABLE Categories (

category\_id INT PRIMARY KEY AUTO\_INCREMENT,

name VARCHAR(100) NOT NULL,

description TEXT

);

This table is used to **group products** into categories like a mobile phone, and link it to a category from this table.

* **Products Table:**

CREATE TABLE Products (

product\_ID INT PRIMARY KEY AUTO\_INCREMENT,

Product\_Name VARCHAR(50) NOT NULL,

Description TEXT,

price DECIMAL(10,2) NOT NULL,

category\_ID INT,

created\_At DATETIME DEFAULT CURRENT\_TIMESTAMP,

FOREIGN KEY (category\_ID) REFERENCES Categories(category\_id)

);

This table stores each product’s name, price, description, category, and when it was added. It ensures that products are **properly grouped by category**.

* **Orders table:**

CREATE TABLE Orders (

order\_id INT PRIMARY KEY,

user\_id INT,

order\_date DATETIME DEFAULT CURRENT\_TIMESTAMP,

total\_amount DECIMAL(10,2),

status VARCHAR(50),

FOREIGN KEY (user\_id) REFERENCES Users(User\_ID)

);

This table keeps track of **every order** placed in your system including **who ordered**, **when**, **how much it cost**, and the **status** of the order.

* **OrderItems table**:

CREATE TABLE OrderItems (

order\_item\_id INT PRIMARY KEY,

order\_id INT,

product\_id INT,

quantity INT,

price DECIMAL(10,2),

FOREIGN KEY (order\_id) REFERENCES Orders(order\_id),

FOREIGN KEY (product\_id) REFERENCES Products(product\_ID)

);

This table tracks **which products are in each order**, how many were bought, and at what cost.

* **Payments table:**

CREATE TABLE Payments (

payment\_id INT PRIMARY KEY AUTO\_INCREMENT,

order\_id INT,

payment\_date DATETIME DEFAULT CURRENT\_TIMESTAMP,

amount DECIMAL(10,2),

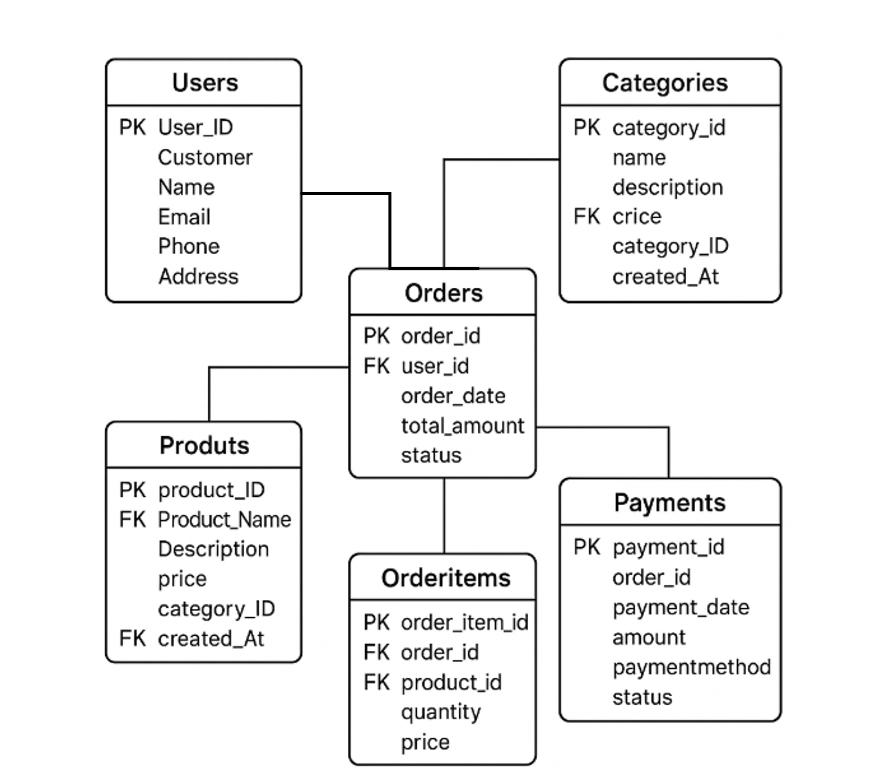
payment\_method VARCHAR(50),

status VARCHAR(50),

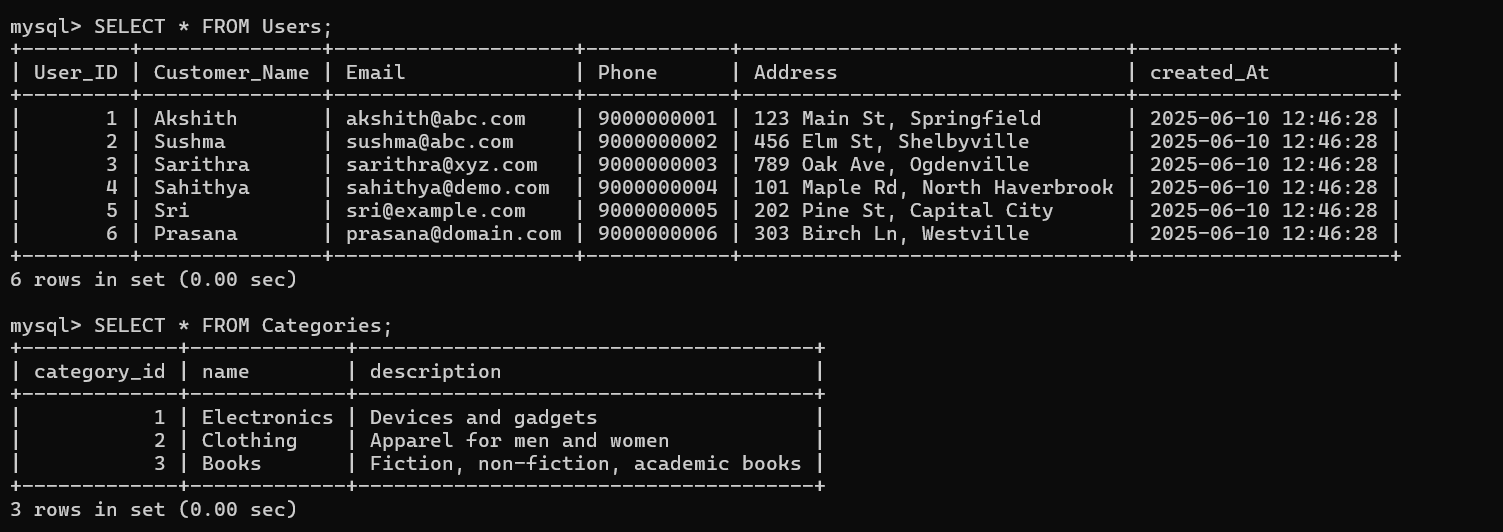
FOREIGN KEY (order\_id) REFERENCES Orders(order\_id)

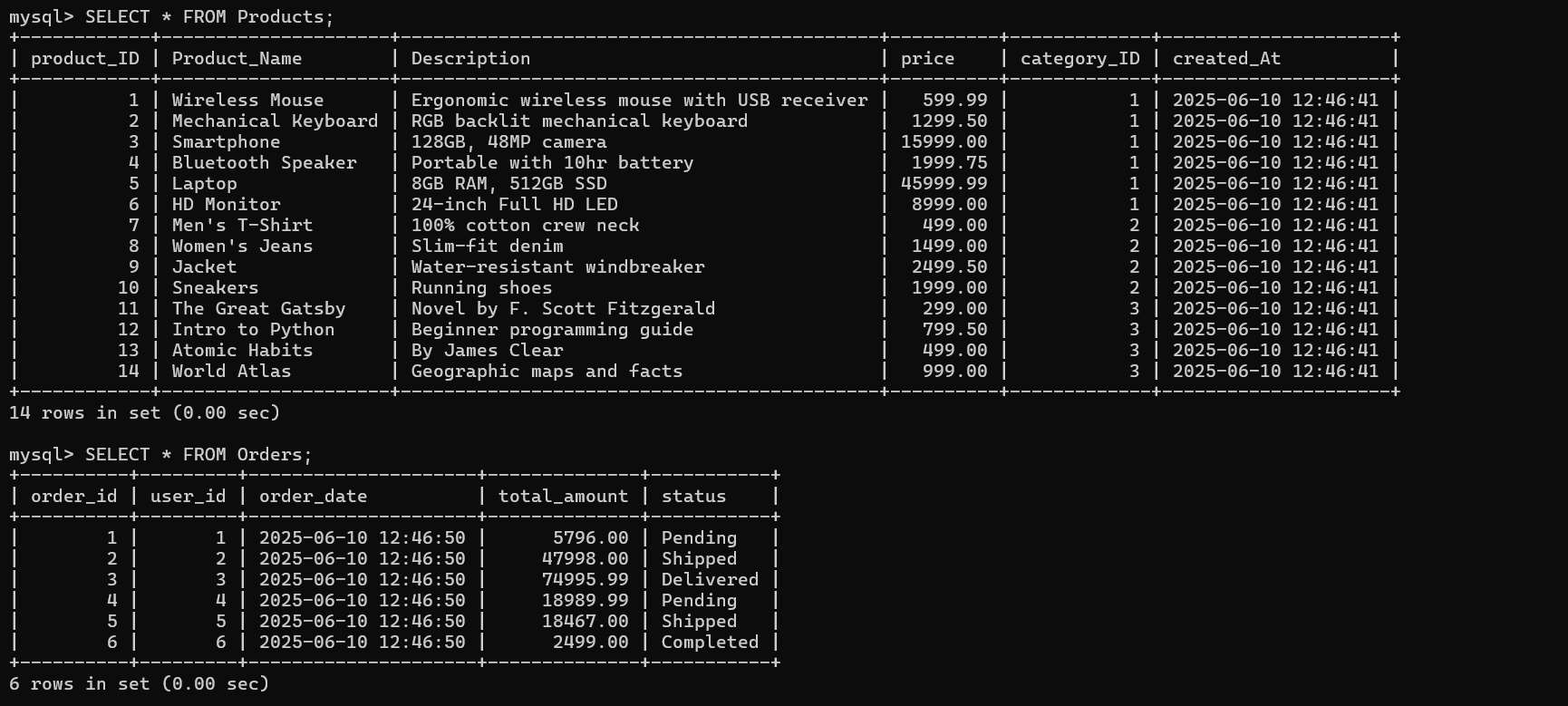
);

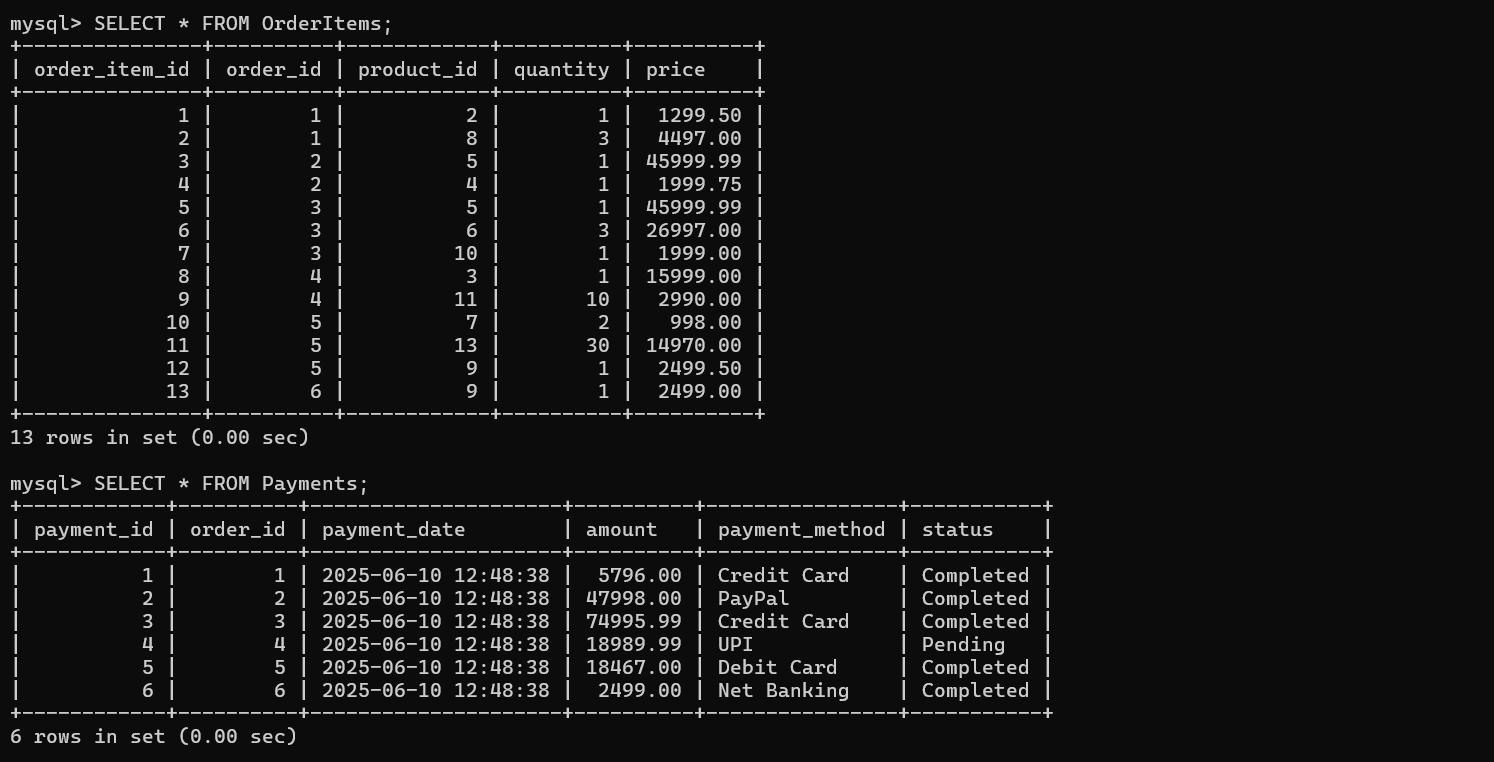
This table records **how and when each order was paid**, how much was paid, and the **status** of the payment.

****

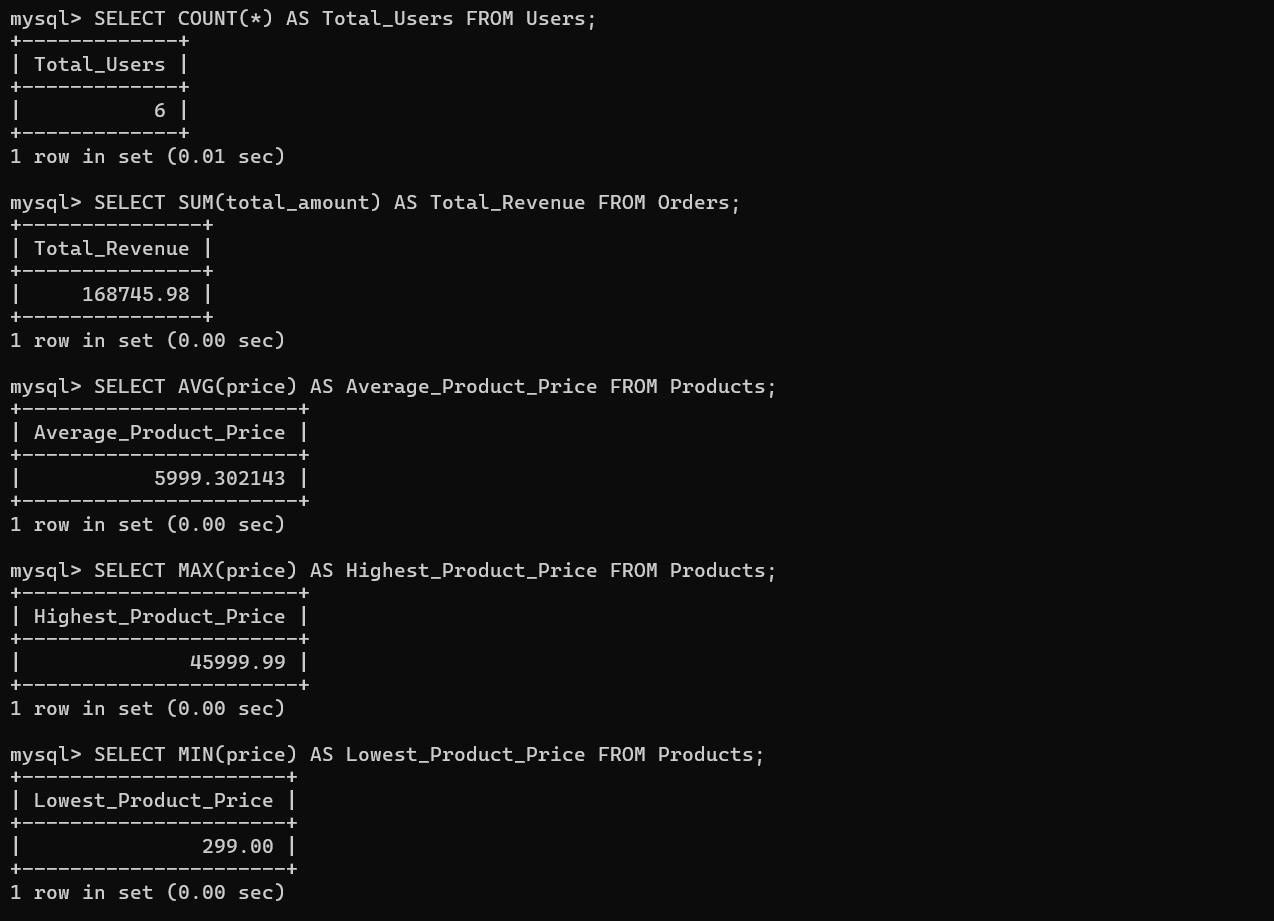
* **Inseted Values in different tables:**



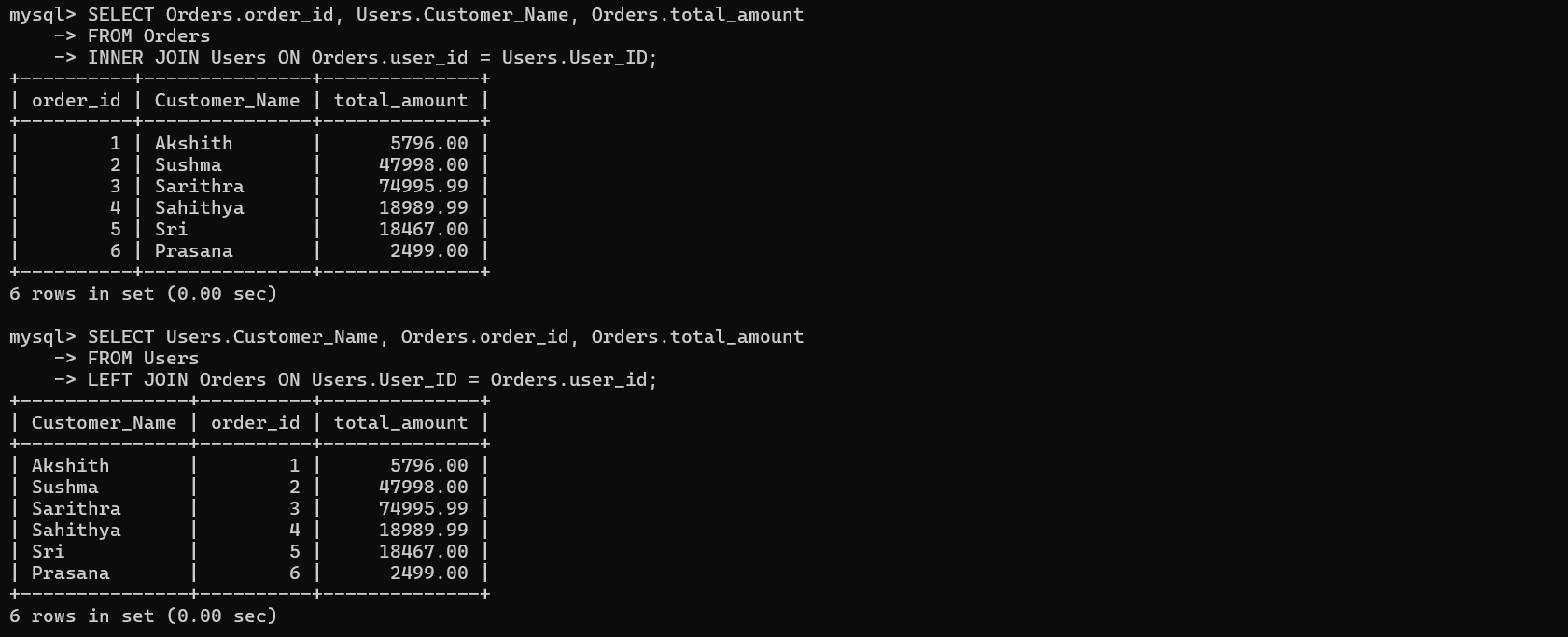




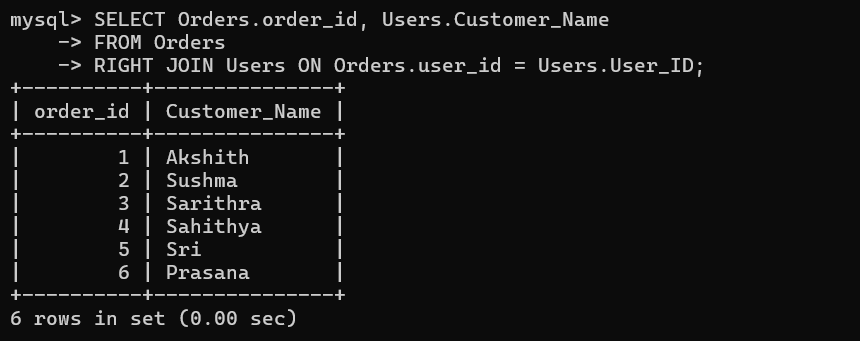
**Aggregate functions:**

****

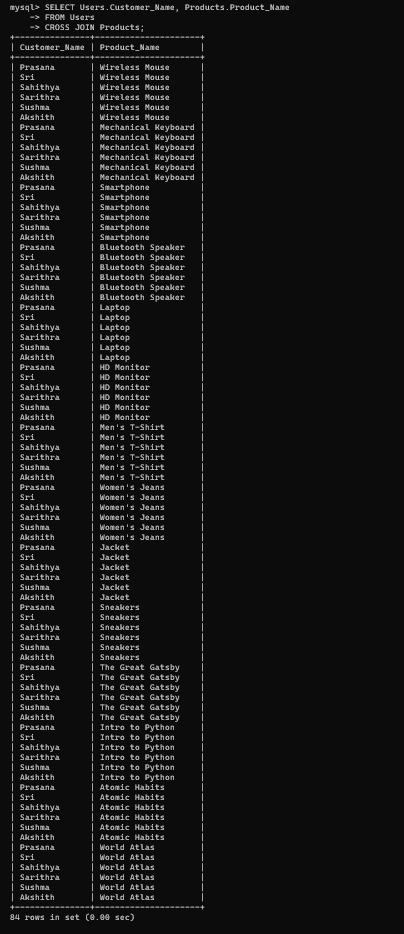
**JOINS:**

Inner & Left: ****

Right:

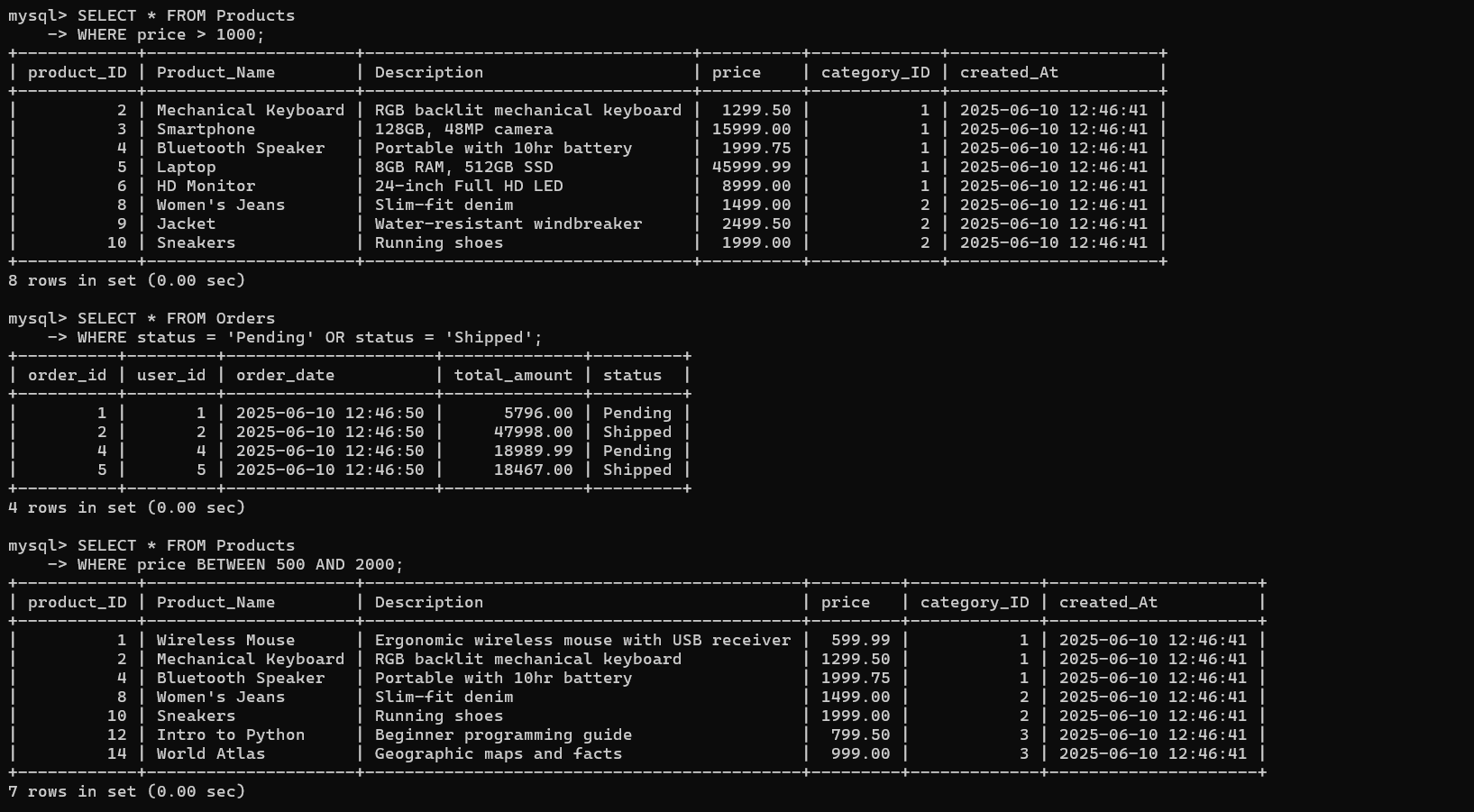
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Cross:

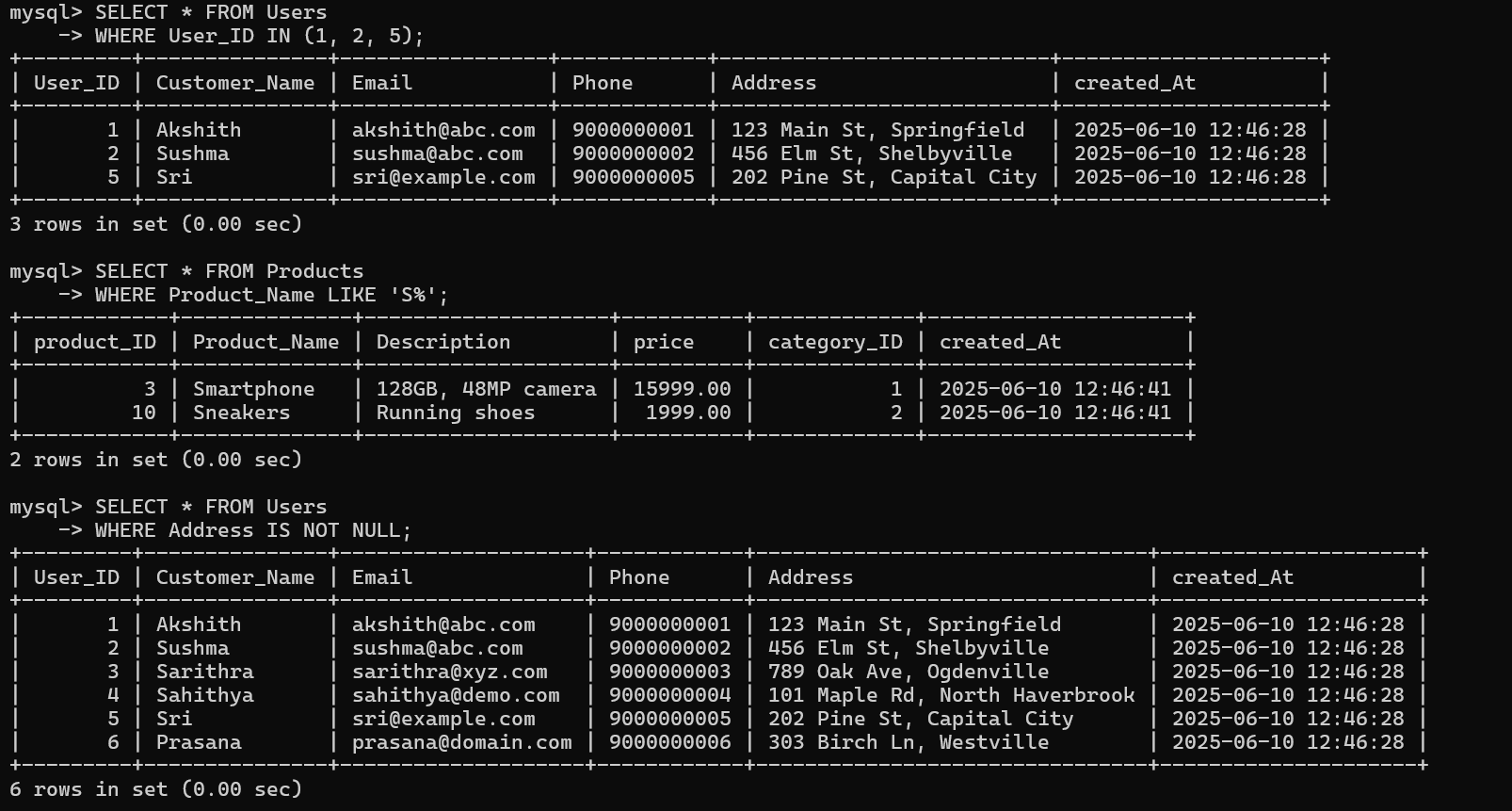
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**Operators:**

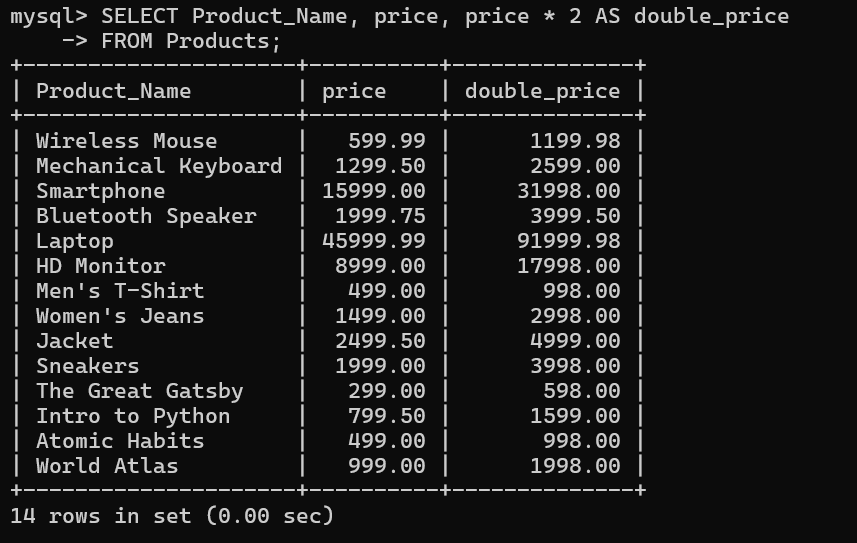
Comparison & AND / OR & BETWEEN Operator:

****

IN & LIKE & IS NULL / IS NOT NULL:

****

Arithmetic Operator:

****