

Analyze Ecommerce Online Shopping System

# Project by- . Mansi Gajanana Jadhav.

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Abstract

An in-depth examination of the architecture, features, and performance of an e-commerce online shopping platform, evaluating its usability and effectiveness in facilitating transactions while addressing security and scalability concerns

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Analyze Ecommerce Online Shopping System

***Project for SQL Module***

# Description:

# The analysis of the e-commerce online shopping system delves into the intricate workings of a

# digital platform designed for buying and selling goods or services over the internet.

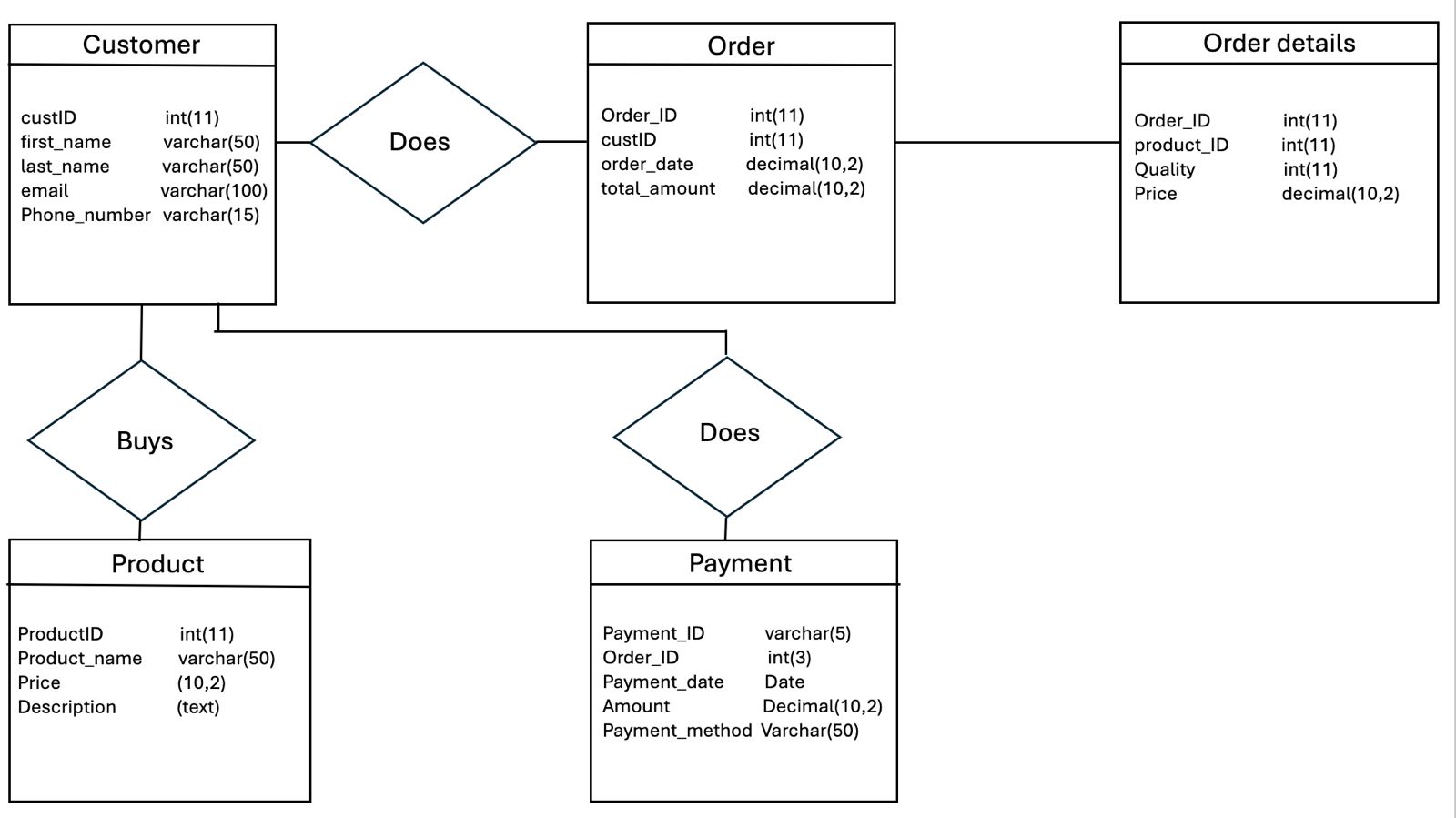
# provide insights into the system's efficiency, user experience, security measures, scalability potential,and overall performance, offering valuable guidance for optimization and enhancement.

**This database contains 5 tables**:

1. Customer
2. Product
3. Order
4. Order\_ Details
5. Payment

How these tables/entities are related to each other is shown pictorially on next page through ER diagram, i.e., Entity Relationship Diagram.

# ER-Diagram (Entity Relation – Diagram) for Online Shopping System:



1. **Table Descriptions:**
   1. **Customer:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Field | Type | Null | Key | Default |  |
| Customer\_ Id | int(11) | NO | PRI | NULL |  |
| first\_ name | varchar (50) | YES |  | NULL |  |
| last\_ name | varchar (50) | YES |  | NULL |  |
| email varchar (100) NULL | | | | | |
| Phone\_ number varchar (15) NULL | | | | | |
|  | | | | | |

* 1. **Product:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Field | Type | Null | Key | Default |  |
| Productid | int (11) | NO | PRI | NULL |  |
| Product\_ name | varchar (50) | YES |  | NULL |  |
| Price (10,2) YES NULL | | | | | |
| Description (text) YES NULL | | | | | |

* 1. **Orders\_ Details:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Order\_ details\_ id | Type | Null | Key | Default |  |
| Order \_ id | int (11) | NO | PRI | NULL |  |
| Product \_id | int (11) | YES |  | NULL |  |
| Quality | int (11) | YES |  | NULL |  |
| price | decimal (10,2) | YES |  | NULL |  |

* 1. **Order:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Field | Type | | Null | Key | Default | |  |
| Order\_ id | int(11) | | NO |  | NULL | |  |
| Customer\_ id | int(11) | | YES | PRI | NULL | |  |
| Order\_ date | | | Date | YES | | | NULL | | |
| Total\_ amount | | | decimal (10,2) | YES | | | NULL | | |

**5. Payment:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Field | Type | Null | Key | Default | Extra |
| Order\_ id | int(3) | NO | PRI | NULL |  |
| Payment\_ id | Date | YES | FOREIGNKEY | NULL |  |
| Amount | Decimal(10,2) | YES | NULL | NULL |  |
| Payement\_method | Varchar(50) | YES | NULL | NULL |  |
|  |  |  |  |  |  |
|  | | | | | |

# 4.Commands:

# create database m2;

# use m2;

# drop database m2;

# /\* Creating table for the Customer/\*

# CREATE TABLE Customers (

# customer\_ id INT PRIMARY KEY,

# first\_ name varchar (50),

# last\_ name varchar (50),

# email varchar100),

# phone\_ number varchar (15)

# );

# desc Customers;

# /\* Insterting Values in it /\*

# INSERT INTO Customers (customer\_id, first\_name, last\_name, email, phone\_number)VALUES

# (1, 'John', 'Doe', 'john@example.com', '123-456-7890'),

# (2, 'Alice', 'Smith', 'alice@example.com', '234-567-8901'),

# (3, 'Bob', 'Johnson', 'bob@example.com', '345-678-9012'),

# (4, 'Emily', 'Brown', 'emily@example.com', '456-789-0123'),

# (5, 'Sarah', 'Wilson', 'sarah@example.com', '567-890-1234'),

# (6, 'Michael', 'Lee', 'michael@example.com', '678-901-2345'),

# (7, 'Emma', 'Garcia', 'emma@example.com', '789-012-3456'),

# (8, 'William', 'Martinez', 'william@example.com', '890-123-4567'),

# (9, 'Sophia', 'Lopez', 'sophia@example.com', '901-234-5678'),

# (10, 'James', 'Hernandez', 'james@example.com', '012-345-6789'),

# (11, 'Olivia', 'Gonzalez', 'olivia@example.com', '123-456-7890'),

# (12, 'Liam', 'Perez', 'liam@example.com', '234-567-8901'),

# (13, 'Isabella', 'Rodriguez', 'isabella@example.com', '345-678-9012'),

# (14, 'Benjamin', 'Smith', 'benjamin@example.com', '456-789-0123'),

# (15, 'Amelia', 'Williams', 'amelia@example.com', '567-890-1234'),

# (16, 'Ethan', 'Johnson', 'ethan@example.com', '678-901-2345'),

# (17, 'Mia', 'Brown', 'mia@example.com', '789-012-3456'),

# (18, 'Ava', 'Davis', 'ava@example.com', '890-123-4567'),

# (19, 'Lucas', 'Garcia', 'lucas@example.com', '901-234-5678'),

# (20, 'Harper', 'Martinez', 'harper@example.com', '012-345-6789'),

# (21, 'Elijah', 'Hernandez', 'elijah@example.com', '123-456-7890'),

# (22, 'Evelyn', 'Gonzalez', 'evelyn@example.com', '234-567-8901'),

# (23, 'Logan', 'Perez', 'logan@example.com', '345-678-9012'),

# (24, 'Sofia', 'Rodriguez', 'sofia@example.com', '456-789-0123'),

# (25, 'Jackson', 'Smith', 'jackson@example.com', '567-890-1234'),

# (26, 'Avery', 'Williams', 'avery@example.com', '678-901-2345'),

# (27, 'Daniel', 'Johnson', 'daniel@example.com', '789-012-3456'),

# (28, 'Madison', 'Brown', 'madison@example.com', '890-123-4567'),

# (29, 'Liam', 'Davis', 'liam@example.com', '901-234-5678'),

# (30, 'Charlotte', 'Garcia', 'charlotte@example.com', '012-345-6789'),

# (31, 'Mason', 'Martinez', 'mason@example.com', '123-456-7890'),

# (32, 'Ella', 'Hernandez', 'ella@example.com', '234-567-8901'),

# (33, 'David', 'Gonzalez', 'david@example.com', '345-678-9012'),

# (34, 'Penelope', 'Perez', 'penelope@example.com', '456-789-0123'),

# (35, 'Ethan', 'Rodriguez', 'ethan@example.com', '567-890-1234'),

# (36, 'Scarlett', 'Smith', 'scarlett@example.com', '678-901-2345'),

# (37, 'Aria', 'Williams', 'aria@example.com', '789-012-3456'),

# (38, 'Luke', 'Johnson', 'luke@example.com', '890-123-4567'),

# (39, 'Mia', 'Brown', 'mia@example.com', '901-234-5678'),

# (40, 'Zoe', 'Davis', 'zoe@example.com', '012-345-6789'),

# (41, 'Henry', 'Garcia', 'henry@example.com', '123-456-7890'),

# (42, 'Jack', 'Martinez', 'jack@example.com', '234-567-8901'),

# (43, 'Nora', 'Hernandez', 'nora@example.com', '345-678-9012'),

# (44, 'Levi', 'Gonzalez', 'levi@example.com', '456-789-0123'),

# (45, 'Hazel', 'Perez', 'hazel@example.com', '567-890-1234'),

# (46, 'Wyatt', 'Rodriguez', 'wyatt@example.com', '678-901-2345'),

# (47, 'Luna', 'Smith', 'luna@example.com', '789-012-3456'),

# (48, 'Riley', 'Williams', 'riley@example.com', '890-123-4567'),

# (49, 'Leo', 'Johnson', 'leo@example.com', '901-234-5678'),

# (50, 'Grace', 'Brown', 'grace@example.com', '012-345-6789'),

# (51, 'Gabriel', 'Davis', 'gabriel@example.com', '123-456-7890'),

# (52, 'Emma', 'Garcia', 'emma@example.com', '234-567-8901'),

# (53, 'Lucas', 'Martinez', 'lucas@example.com', '345-678-9012'),

# (54, 'Avery', 'Hernandez', 'avery@example.com', '456-789-0123'),

# (55, 'Layla', 'Gonzalez', 'layla@example.com', '567-890-1234'),

# (56, 'Owen', 'Perez', 'owen@example.com', '678-901-2345'),

# (57, 'Zoey', 'Rodriguez', 'zoey@example.com', '789-012-3456'),

# (58, 'Xavier', 'Smith', 'xavier@example.com', '890-123-4567'),

# (59, 'Aubrey', 'Williams', 'aubrey@example.com', '901-234-5678'),

# (60, 'Chloe', 'Johnson', 'chloe@example.com', '012-345-6789'),

# (61, 'Carter', 'Brown', 'carter@example.com', '123-456-7890'),

# (62, 'Skyler', 'Davis', 'skyler@example.com', '234-567-8901'),

# (63, 'Stella', 'Garcia', 'stella@example.com', '345-678-9012'),

# (64, 'Easton', 'Martinez', 'easton@example.com', '456-789-0123'),

# (65, 'Zoe', 'Hernandez', 'zoe@example.com', '567-890-1234'),

# (66, 'Parker', 'Gonzalez', 'parker@example.com', '678-901-2345'),

# (67, 'Hudson', 'Perez', 'hudson@example.com', '789-012-3456'),

# (68, 'Natalie', 'Rodriguez', 'natalie@example.com', '890-123-4567'),

# (69, 'Mateo', 'Smith', 'mateo@example.com', '901-234-5678'),

# (70, 'Hannah', 'Williams', 'hannah@example.com', '012-345-6789'),

# (71, 'Lincoln', 'Johnson', 'lincoln@example.com', '123-456-7890'),

# (72, 'Audrey', 'Brown', 'audrey@example.com', '234-567-8901'),

# (73, 'Brooklyn', 'Davis', 'brooklyn@example.com', '345-678-9012'),

# (74, 'Bentley', 'Garcia', 'bentley@example.com', '456-789-0123'),

# (75, 'Samantha', 'Martinez', 'samantha@example.com', '567-890-1234'),

# (76, 'Leonardo', 'Hernandez', 'leonardo@example.com', '678-901-2345'),

# (77, 'Aidan', 'Gonzalez', 'aidan@example.com', '789-012-3456'),

# (78, 'Allison', 'Perez', 'allison@example.com', '890-123-4567'),

# (79, 'Elena', 'Rodriguez', 'elena@example.com', '901-234-5678'),

# (80, 'Gavin', 'Smith', 'gavin@example.com', '012-345-6789'),

# (81, 'Victoria', 'Williams', 'victoria@example.com', '123-456-7890'),

# (82, 'Nathan', 'Johnson', 'nathan@example.com', '234-567-8901'),

# (83, 'Haley', 'Brown', 'haley@example.com', '345-678-9012'),

# (84, 'Diego', 'Davis', 'diego@example.com', '456-789-0123'),

# (85, 'Eva', 'Garcia', 'eva@example.com', '567-890-1234'),

# (86, 'Justin', 'Martinez', 'justin@example.com', '678-901-2345'),

# (87, 'Julia', 'Hernandez', 'julia@example.com', '789-012-3456'),

# (88, 'Miles', 'Gonzalez', 'miles@example.com', '890-123-4567'),

# (89, 'Violet', 'Perez', 'violet@example.com', '901-234-5678'),

# (90, 'Landon', 'Rodriguez', 'landon@example.com', '012-345-6789'),

# (91, 'Caroline', 'Smith', 'caroline@example.com', '123-456-7890'),

# (92, 'Christian', 'Williams', 'christian@example.com', '234-567-8901'),

# (93, 'Adeline', 'Johnson', 'adeline@example.com', '345-678-9012'),

# (94, 'Max', 'Brown', 'max@example.com', '456-789-0123'),

# (95, 'Maria', 'Davis', 'maria@example.com', '567-890-1234'),

# (96, 'Colton', 'Garcia', 'colton@example.com', '678-901-2345'),

# (97, 'Clara', 'Martinez', 'clara@example.com', '789-012-3456'),

# (98, 'Julian', 'Hernandez', 'julian@example.com', '890-123-4567'),

# (99, 'Cora', 'Gonzalez', 'cora@example.com', '901-234-5678'),

# (100, 'Bryce', 'Perez', 'bryce@example.com', '012-345-6789');

# 

# select \* from Customers;

# /\* Creating table for the Product/\*

# CREATE TABLE Products (

# product\_ id INT PRIMARY KEY,

# product\_ name varchar (100),

# price decimal (10, 2),

# description text

# );

# desc Products;

# /\* Inserting the Values in it /\*

# INSERT INTO Products (product\_id, product\_name, price, description) VALUES

# (1, 'Laptop', 899.99, '15-inch Laptop with Intel Core i7 processor and 16GB RAM'),

# (2, 'Smartphone', 699.99, 'Latest smartphone with high-resolution display and dual-camera setup'),

# (3, 'Smart Watch', 199.99, 'Smartwatch with fitness tracking and heart rate monitoring features'),

# (4, 'Bluetooth Speaker', 49.99, 'Portable Bluetooth speaker with built-in microphone'),

# (5, 'Coffee Maker', 79.99, 'Programmable coffee maker with 12-cup capacity'),

# (6, 'Tablet', 399.99, '10-inch Tablet with quad-core processor and 128GB storage'),

# (7, 'Headphones', 99.99, 'Wireless headphones with noise-canceling technology'),

# (8, 'Microwave', 129.99, 'Countertop microwave oven with 1000 watts of power'),

# (9, 'Wireless Mouse', 29.99, 'Ergonomic wireless mouse with adjustable DPI settings'),

# (10, 'External Hard Drive', 129.99, 'Portable external hard drive with 1TB storage capacity'),

# (11, 'Digital Camera', 499.99, 'Mirrorless digital camera with 24MP sensor and 4K video recording'),

# (12, 'Gaming Console', 399.99, 'Next-gen gaming console with high-fidelity graphics and fast SSD storage'),

# (13, 'Fitness Tracker', 149.99, 'Fitness tracker with GPS and water resistance up to 50 meters'),

# (14, 'Electric Toothbrush', 79.99, 'Electric toothbrush with multiple brushing modes and timer function'),

# (15, 'Wireless Router', 89.99, 'Dual-band wireless router with MU-MIMO technology'),

# (16, 'Power Bank', 39.99, 'High-capacity power bank with fast charging support'),

# (17, 'Wireless Keyboard', 49.99, 'Slim wireless keyboard with multimedia keys and adjustable tilt'),

# (18, 'Printers', 199.99, 'All-in-one printer with printing, scanning, and copying capabilities'),

# (19, 'Smart Thermostat', 149.99, 'Programmable smart thermostat with Wi-Fi connectivity'),

# (20, 'Bluetooth Earbuds', 69.99, 'True wireless earbuds with touch controls and IPX7 waterproof rating'),

# (21, 'Wireless Charger', 29.99, 'Qi-certified wireless charger for smartphones and other Qi-enabled devices'),

# (22, 'Digital Scale', 34.99, 'Digital bathroom scale with high-precision sensors and LCD display'),

# (23, 'Air Purifier', 199.99, 'HEPA air purifier with 3-stage filtration system and quiet operation'),

# (24, 'Robot Vacuum', 299.99, 'Smart robot vacuum with mapping technology and voice control support'),

# (25, 'Bluetooth Beanie', 24.99, 'Beanie hat with built-in Bluetooth headphones for hands-free calling'),

# (26, 'Portable Blender', 39.99, 'USB-rechargeable portable blender for smoothies and shakes on-the-go'),

# (27, 'Digital Photo Frame', 89.99, 'Digital photo frame with high-resolution display and remote control'),

# (28, 'Waterproof Speaker', 59.99, 'Waterproof Bluetooth speaker for outdoor adventures and pool parties'),

# (29, 'Car Dash Cam', 79.99, '1080p car dash cam with loop recording and G-sensor'),

# (30, 'Smart Plug', 19.99, 'Wi-Fi smart plug with app control and voice assistant compatibility'),

# (31, 'Wireless Ear Muffs', 49.99, 'Wireless ear muffs with built-in speakers for music and calls'),

# (32, 'Electric Kettle', 34.99, 'Stainless steel electric kettle with rapid boil technology'),

# (33, 'LED Desk Lamp', 29.99, 'Adjustable LED desk lamp with touch control and USB charging port'),

# (34, 'Portable Power Station', 249.99, 'Portable power station with AC outlets and USB ports for camping and emergencies'),

# (35, 'Fitness Exercise Bike', 299.99, 'Indoor exercise bike with adjustable resistance levels and LCD monitor'),

# (36, 'Home Security Camera', 149.99, 'Wireless home security camera with motion detection and night vision'),

# (37, 'Wireless Charging Pad', 19.99, 'Slim wireless charging pad for smartphones and other Qi-enabled devices'),

# (38, 'Smart Doorbell', 199.99, 'Smart video doorbell with HD camera and two-way audio communication'),

# (39, 'Mini Projector', 129.99, 'Portable mini projector with HDMI input and built-in speaker'),

# (40, 'Electric Scooter', 399.99, 'Foldable electric scooter with long-range battery and LED display'),

# (41, 'Smart Lock', 149.99, 'Keyless smart lock with fingerprint recognition and smartphone control'),

# (42, 'Wireless Backup Camera', 99.99, 'Wireless backup camera for cars with night vision and waterproof design'),

# (43, 'Bluetooth FM Transmitter', 24.99, 'Bluetooth FM transmitter for car with dual USB charging ports'),

# (44, 'Wireless Barcode Scanner', 69.99, 'Wireless barcode scanner with USB receiver and long-range scanning'),

# (45, 'Sleep Sound Machine', 39.99, 'White noise sleep sound machine with multiple sound options and timer'),

# (46, 'Indoor Plant Grow Light', 49.99, 'LED grow light for indoor plants with adjustable brightness and timer'),

# (47, 'Wireless Gaming Mouse', 59.99, 'Wireless gaming mouse with customizable RGB lighting and programmable buttons'),

# (48, 'USB-C Hub', 29.99, 'USB-C hub with multiple ports for MacBook and other USB-C devices'),

# (49, 'Digital Alarm Clock', 19.99, 'Digital alarm clock with large LED display and snooze function'),

# (50, 'Wireless Security Camera System', 299.99, 'Wireless security camera system with multiple cameras and DVR'),

# (51, 'Cordless Electric Drill', 79.99, 'Cordless electric drill with lithium-ion battery and variable speed control'),

# (52, 'Wireless Charging Stand', 29.99, 'Wireless charging stand for smartphones with adjustable viewing angle'),

# (53, 'Portable Espresso Maker', 59.99, 'Handheld portable espresso maker for coffee lovers on-the-go'),

# (54, 'Waterproof Bluetooth Speaker', 39.99, 'Waterproof Bluetooth speaker with rugged design for outdoor use'),

# (55, 'Wireless Bluetooth FM Radio', 29.99, 'Wireless Bluetooth FM radio with built-in speaker and headphone jack'),

# (56, 'Cordless Handheld Vacuum', 89.99, 'Cordless handheld vacuum cleaner for quick cleanups and car detailing'),

# (57, 'Smart Light Bulbs', 19.99, 'Smart LED light bulbs with remote control and adjustable brightness'),

# (58, 'Digital Voice Recorder', 39.99, 'Portable digital voice recorder with built-in microphone and playback'),

# (59, 'Wireless Charging Car Mount', 34.99, 'Wireless charging car mount for smartphones with automatic clamping'),

# (60, 'Portable Solar Charger', 49.99, 'Portable solar charger with USB ports for outdoor adventures and emergencies'),

# (61, 'Wireless Sport Earbuds', 49.99, 'Wireless sport earbuds with sweatproof design and secure fit for workouts'),

# (62, 'Wireless Charging Alarm Clock', 49.99, 'Wireless charging alarm clock with LED display and snooze button'),

# (63, 'Electric Foot Massager', 79.99, 'Electric foot massager with shiatsu kneading and heat therapy'),

# (64, 'Smart LED Strip Lights', 29.99, 'Smart LED strip lights with app control and customizable color options'),

# (65, 'Portable Jump Starter', 79.99, 'Portable jump starter with built-in flashlight and USB charging port'),

# (66, 'Wireless Bluetooth Keyboard', 39.99, 'Wireless Bluetooth keyboard with slim design and comfortable typing experience'),

# (67, 'Wireless Charging Mouse Pad', 24.99, 'Wireless charging mouse pad with non-slip base and LED indicator lights'),

# (68, 'Mini Air Purifier', 49.99, 'Mini air purifier with HEPA filter for personal use in office or travel'),

# (69, 'Wireless Car Charger', 29.99, 'Wireless car charger mount with automatic sensor and fast charging support'),

# (70, 'Portable Neck Massager', 39.99, 'Portable neck massager with adjustable intensity levels and heating function'),

# (71, 'Wireless Bluetooth FM Transmitter', 29.99, 'Wireless Bluetooth FM transmitter for car with hands-free calling'),

# (72, 'Wireless Bluetooth Shower Speaker', 19.99, 'Waterproof wireless Bluetooth speaker for shower and outdoor use'),

# (73, 'Mini Bluetooth Speaker', 14.99, 'Mini portable Bluetooth speaker with built-in microphone for calls'),

# (74, 'Wireless Charging Pad for AirPods', 19.99, 'Wireless charging pad for AirPods with Qi-compatible charging case'),

# (75, 'Portable Clothes Steamer', 29.99, 'Portable clothes steamer for removing wrinkles and refreshing garments'),

# (76, 'Smart WiFi Plug', 19.99, 'Smart WiFi plug with app control and voice assistant compatibility'),

# (77, 'Wireless Bluetooth FM Radio Adapter', 24.99, 'Wireless Bluetooth FM radio adapter for car with USB charging ports'),

# (78, 'Mini Portable Projector', 99.99, 'Mini portable projector with HDMI input and built-in speaker'),

# (79, 'Wireless Backup Camera Kit', 99.99, 'Wireless backup camera kit with monitor for easy installation on vehicles'),

# (80, 'Portable Blender Bottle', 19.99, 'Portable blender bottle for mixing protein shakes and smoothies on-the-go'),

# (81, 'Wireless Charging Desk Lamp', 39.99, 'Wireless charging desk lamp with adjustable brightness and color temperature'),

# (82, 'Bluetooth Karaoke Microphone', 29.99, 'Bluetooth karaoke microphone with built-in speaker and echo effect'),

# (83, 'Mini Digital Camera', 49.99, 'Mini digital camera with HD recording and photo capture capabilities'),

# (84, 'Wireless Car FM Transmitter', 19.99, 'Wireless car FM transmitter with USB charging ports and hands-free calling'),

# (85, 'Portable LED Camping Lantern', 14.99, 'Portable LED camping lantern with collapsible design and multiple light modes'),

# (86, 'Bluetooth Shower Head Speaker', 39.99, 'Bluetooth shower head speaker with waterproof design and built-in microphone'),

# (87, 'Cordless Water Flosser', 39.99, 'Cordless water flosser with multiple pressure settings and interchangeable nozzles'),

# (88, 'Wireless Charging Mouse Pad with Stand', 29.99, 'Wireless charging mouse pad with smartphone stand and USB hub'),

# (89, 'Portable Hand Warmer', 19.99, 'Portable hand warmer with rechargeable battery and adjustable temperature settings'),

# (90, 'Mini Folding Drone', 49.99, 'Mini folding drone with HD camera and altitude hold for stable aerial footage'),

# (91, 'Bluetooth Sleep Headphones', 29.99, 'Bluetooth sleep headphones with ultra-thin speakers for comfortable sleep'),

# (92, 'Wireless Car Charger Mount', 29.99, 'Wireless car charger mount with automatic clamping and fast charging support'),

# (93, 'Portable Wireless Bluetooth Speaker', 24.99, 'Portable wireless Bluetooth speaker with stereo sound and built-in microphone'),

# (94, 'Smart LED Light Bulbs', 14.99, 'Smart LED light bulbs with voice control and customizable color options'),

# (95, 'Wireless Earbuds with Charging Case', 39.99, 'Wireless earbuds with charging case and touch control for music playback'),

# (96, 'Cordless Handheld Vacuum Cleaner', 69.99, 'Cordless handheld vacuum cleaner with powerful suction and washable filter'),

# (97, 'Portable Outdoor Bluetooth Speaker', 29.99, 'Portable outdoor Bluetooth speaker with rugged design and IPX5 waterproof rating'),

# (98, 'Portable USB Rechargeable Blender', 29.99, 'Portable USB rechargeable blender for making smoothies and shakes anywhere'),

# (99, 'Wireless Bluetooth Shower Head', 49.99, 'Wireless Bluetooth shower head with built-in speaker and music playback controls'),

# (100, 'Mini Portable Handheld Fan', 9.99, 'Mini portable handheld fan with USB rechargeable battery for cooling on-the-go');

# 

# select \* from Products;

# /\* Creating the Table for the Order/\*

# CREATE TABLE Orders (

# order\_id INT PRIMARY KEY,

# customer\_id INT,

# order\_date DATE,

# total\_amount DECIMAL(10, 2),

# FOREIGN KEY (customer\_id) REFERENCES Customers(customer\_id)

# );

# desc Orders;

# /\*Inserting the values in it /\*

# INSERT INTO Orders (order\_ id, customer\_ id, order\_ date, total\_ amount)

# VALUES

# (1, 1, '2024-04-26', 899.99),

# (2, 2, '2024-04-26', 799.99),

# (3, 3, '2024-04-26', 599.98),

# (4, 4, '2024-04-26', 429.96),

# (5, 5, '2024-04-26', 159.98),

# (6, 6, '2024-04-26', 979.97),

# (7, 7, '2024-04-26', 799.99),

# (8, 8, '2024-04-26', 249.98),

# (9, 9, '2024-04-26', 899.99),

# (10, 10, '2024-04-26', 159.98),

# (11, 11, '2024-04-27', 199.99),

# (12, 12, '2024-04-27', 399.99),

# (13, 13, '2024-04-27', 149.99),

# (14, 14, '2024-04-27', 79.99),

# (15, 15, '2024-04-27', 89.99),

# (16, 16, '2024-04-27', 34.99),

# (17, 17, '2024-04-27', 199.99),

# (18, 18, '2024-04-27', 299.99),

# (19, 19, '2024-04-27', 149.99),

# (20, 20, '2024-04-27', 69.99),

# (21, 21, '2024-04-27', 29.99),

# (22, 22, '2024-04-28', 24.99),

# (23, 23, '2024-04-28', 79.99),

# (24, 24, '2024-04-28', 299.99),

# (25, 25, '2024-04-28', 39.99),

# (26, 26, '2024-04-28', 199.99),

# (27, 27, '2024-04-28', 249.99),

# (28, 28, '2024-04-28', 399.99),

# (29, 29, '2024-04-28', 29.99),

# (30, 30, '2024-04-28', 499.99),

# (31, 31, '2024-04-28', 199.99),

# (32, 32, '2024-04-28', 69.99),

# (33, 33, '2024-04-29', 129.99),

# (34, 34, '2024-04-29', 399.99),

# (35, 35, '2024-04-29', 49.99),

# (36, 36, '2024-04-29', 199.99),

# (37, 37, '2024-04-29', 129.99),

# (38, 38, '2024-04-29', 199.99),

# (39, 39, '2024-04-29', 99.99),

# (40, 40, '2024-04-29', 299.99),

# (41, 41, '2024-04-29', 499.99),

# (42, 42, '2024-04-29', 199.99),

# (43, 43, '2024-04-29', 99.99),

# (44, 44, '2024-04-30', 399.99),

# (45, 45, '2024-04-30', 159.98),

# (46, 46, '2024-04-30', 199.99),

# (47, 47, '2024-04-30', 99.99),

# (48, 48, '2024-04-30', 39.99),

# (49, 49, '2024-04-30', 799.99),

# (50, 50, '2024-04-30', 199.99),

# (51, 51, '2024-04-30', 99.99),

# (52, 52, '2024-04-30', 159.98),

# (53, 53, '2024-04-30', 199.99),

# (54, 54, '2024-04-30', 49.99),

# (55, 55, '2024-05-01', 299.99),

# (56, 56, '2024-05-01', 299.99),

# (57, 57, '2024-05-01', 79.99),

# (58, 58, '2024-05-01', 49.99),

# (59, 59, '2024-05-01', 199.99),

# (60, 60, '2024-05-01', 199.99),

# (61, 61, '2024-05-01', 129.99),

# (62, 62, '2024-05-01', 69.99),

# (63, 63, '2024-05-01', 499.99),

# (64, 64, '2024-05-01', 79.99),

# (65, 65, '2024-05-01', 249.99),

# (66, 66, '2024-05-02', 49.99),

# (67, 67, '2024-05-02', 89.99),

# (68, 68, '2024-05-02', 129.99),

# (69, 69, '2024-05-02', 49.99),

# (70, 70, '2024-05-02', 799.99),

# (71, 71, '2024-05-02', 39.99),

# (72, 72, '2024-05-02', 199.99),

# (73, 73, '2024-05-02', 29.99),

# (74, 74, '2024-05-02', 159.98),

# (75, 75, '2024-05-02', 129.99),

# (76, 76, '2024-05-02', 79.99),

# (77, 77, '2024-05-03', 299.99),

# (78, 78, '2024-05-03', 149.99),

# (79, 79, '2024-05-03', 399.99),

# (80, 80, '2024-05-03', 69.99),

# (81, 81, '2024-05-03', 299.99),

# (82, 82, '2024-05-03', 299.99),

# (83, 83, '2024-05-03', 49.99),

# (84, 84, '2024-05-03', 399.99),

# (85, 85, '2024-05-03', 499.99),

# (86, 86, '2024-05-03', 49.99),

# (87, 87, '2024-05-03', 29.99),

# (88, 88, '2024-05-04', 24.99),

# (89, 89, '2024-05-04', 199.99),

# (90, 90, '2024-05-04', 299.99),

# (91, 91, '2024-05-04', 99.99),

# (92, 92, '2024-05-04', 199.99),

# (93, 93, '2024-05-04', 299.99),

# (94, 94, '2024-05-04', 79.99),

# (95, 95, '2024-05-04', 399.99),

# (96, 96, '2024-05-04', 199.99),

# (97, 97, '2024-05-04', 69.99),

# (98, 98, '2024-05-04', 99.99),

# (99, 99, '2024-05-05', 199.99),

# (100, 100, '2024-05-05', 399.99);

# select \* from Orders;

# 

# /\* Creating the table for the Order details/\*

# CREATE TABLE Order\_ Details (

# order\_ detail\_ 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)

# );

# desc Order\_ Details;

# /\* Inserting the values in it /\*

# INSERT INTO Order\_ Details (order\_ detail\_ id, order\_ id, product\_ id, quantity, price) VALUES

# (1, 1, 1, 1, 899.99),

# (2, 2, 2, 1, 699.99),

# (3, 3, 3, 2, 399.98),

# (4, 4, 4, 3, 149.97),

# (5, 5, 5, 1, 159.98),

# (6, 6, 6, 1, 399.99),

# (7, 7, 7, 1, 99.99),

# (8, 8, 8, 2, 259.98),

# (9, 9, 9, 1, 29.99),

# (10, 10, 10, 3, 479.97),

# (11, 11, 11, 1, 199.99),

# (12, 12, 12, 1, 399.99),

# (13, 13, 13, 2, 299.98),

# (14, 14, 14, 1, 79.99),

# (15, 15, 15, 1, 89.99),

# (16, 16, 16, 1, 34.99),

# (17, 17, 17, 2, 399.98),

# (18, 18, 18, 1, 199.99),

# (19, 19, 19, 1, 149.99),

# (20, 20, 20, 2, 139.98),

# (21, 21, 21, 1, 29.99),

# (22, 22, 22, 3, 74.97),

# (23, 23, 23, 1, 79.99),

# (24, 24, 24, 2, 599.98),

# (25, 25, 25, 1, 39.99),

# (26, 26, 26, 1, 199.99),

# (27, 27, 27, 1, 249.99),

# (28, 28, 28, 1, 399.99),

# (29, 29, 29, 2, 59.98),

# (30, 30, 30, 1, 499.99),

# (31, 31, 31, 1, 49.99),

# (32, 32, 32, 1, 29.99),

# (33, 33, 33, 2, 259.98),

# (34, 34, 34, 1, 399.99),

# (35, 35, 35, 1, 299.99),

# (36, 36, 36, 1, 199.99),

# (37, 37, 37, 2, 259.98),

# (38, 38, 38, 1, 199.99),

# (39, 39, 39, 1, 99.99),

# (40, 40, 40, 1, 399.99),

# (41, 41, 41, 1, 149.99),

# (42, 42, 42, 2, 199.98),

# (43, 43, 43, 1, 24.99),

# (44, 44, 44, 1, 69.99),

# (45, 45, 45, 1, 79.99),

# (46, 46, 46, 1, 199.99),

# (47, 47, 47, 2, 159.98),

# (48, 48, 48, 1, 39.99),

# (49, 49, 49, 1, 799.99),

# (50, 50, 50, 1, 199.99),

# (51, 51, 51, 1, 99.99),

# (52, 52, 52, 2, 279.98),

# (53, 53, 53, 1, 199.99),

# (54, 54, 54, 1, 49.99),

# (55, 55, 55, 1, 299.99),

# (56, 56, 56, 1, 299.99),

# (57, 57, 57, 2, 159.98),

# (58, 58, 58, 1, 49.99),

# (59, 59, 59, 1, 199.99),

# (60, 60, 60, 1, 199.99),

# (61, 61, 61, 1, 129.99),

# (62, 62, 62, 2, 139.98),

# (63, 63, 63, 1, 499.99),

# (64, 64, 64, 1, 79.99),

# (65, 65, 65, 1, 249.99),

# (66, 66, 66, 1, 49.99),

# (67, 67, 67, 1, 89.99),

# (68, 68, 68, 1, 129.99),

# (69, 69, 69, 1, 49.99),

# (70, 70, 70, 1, 799.99),

# (71, 71, 71, 1, 39.99),

# (72, 72, 72, 1, 199.99),

# (73, 73, 73, 2, 59.98),

# (74, 74, 74, 1, 79.99),

# (75, 75, 75, 1, 159.98),

# (76, 76, 76, 1, 89.99),

# (77, 77, 77, 1, 299.99),

# (78, 78, 78, 1, 149.99),

# (79, 79, 79, 2, 799.98),

# (80, 80, 80, 1, 69.99),

# (81, 81, 81, 1, 299.99),

# (82, 82, 82, 1, 299.99),

# (83, 83, 83, 2, 99.98),

# (84, 84, 84, 1, 399.99),

# (85, 85, 85, 1, 499.99),

# (86, 86, 86, 1, 49.99),

# (87, 87, 87, 1, 29.99),

# (88, 88, 88, 1, 24.99),

# (89, 89, 89, 1, 199.99),

# (90, 90, 90, 1, 299.99),

# (91, 91, 91, 1, 99.99),

# (92, 92, 92, 1, 199.99),

# (93, 93, 93, 2, 599.98),

# (94, 94, 94, 1, 79.99),

# (95, 95, 95, 1, 399.99),

# (96, 96, 96, 1, 199.99),

# (97, 97, 97, 1, 69.99),

# (98, 98, 98, 1, 99.99),

# (99, 99, 99, 1, 199.99),

# (100, 100, 100, 1, 399.99);

# select \* from Order\_ Details;

# /\* Creating the table for the Payments/\*

# CREATE TABLE Payments (

# payment\_ id INT (20),

# order\_ id INT,

# payment\_ date Date ,

# amount DECIMAL (10, 2),

# payment\_ method VARCHAR(50),

# FOREIGN KEY (order\_ id) REFERENCES Orders(order\_ id)

# );

# desc payments;

# /\* inserting the values in it /\*

# INSERT INTO Payments (payment\_ id, order\_ id, payment\_ date, amount, payment\_ method)

# VALUES

# (1, 1, '2024-04-26', 899.99, 'Credit Card'),

# (2, 2, '2024-04-26', 799.99, 'PayPal'),

# (3, 3, '2024-04-26', 599.98, 'Credit Card'),

# (4, 4, '2024-04-26', 429.96, 'Cash'),

# (5, 5, '2024-04-26', 159.98, 'Credit Card'),

# (6, 6, '2024-04-26', 979.97, 'Credit Card'),

# (7, 7, '2024-04-26', 799.99, 'PayPal'),

# (8, 8, '2024-04-26', 249.98, 'Credit Card'),

# (9, 9, '2024-04-26', 899.99, 'Cash'),

# (10, 10, '2024-04-26', 159.98, 'PayPal'),

# (11, 11, '2024-04-27', 199.99, 'Credit Card'),

# (12, 12, '2024-04-27', 399.99, 'Credit Card'),

# (13, 13, '2024-04-27', 149.99, 'Cash'),

# (14, 14, '2024-04-27', 79.99, 'PayPal'),

# (15, 15, '2024-04-27', 89.99, 'Credit Card'),

# (16, 16, '2024-04-27', 34.99, 'Credit Card'),

# (17, 17, '2024-04-27', 199.99, 'PayPal'),

# (18, 18, '2024-04-27', 299.99, 'Credit Card'),

# (19, 19, '2024-04-27', 149.99, 'Cash'),

# (20, 20, '2024-04-27', 69.99, 'PayPal'),

# (21, 21, '2024-04-27', 29.99, 'Credit Card'),

# (22, 22, '2024-04-28', 24.99, 'Credit Card'),

# (23, 23, '2024-04-28', 79.99, 'PayPal'),

# (24, 24, '2024-04-28', 299.99, 'Credit Card'),

# (25, 25, '2024-04-28', 39.99, 'Cash'),

# (26, 26, '2024-04-28', 199.99, 'Credit Card'),

# (27, 27, '2024-04-28', 249.99, 'Credit Card'),

# (28, 28, '2024-04-28', 399.99, 'PayPal'),

# (29, 29, '2024-04-28', 29.99, 'Credit Card'),

# (30, 30, '2024-04-28', 499.99, 'Cash'),

# (31, 31, '2024-04-28', 199.99, 'PayPal'),

# (32, 32, '2024-04-28', 69.99, 'Credit Card'),

# (33, 33, '2024-04-29', 129.99, 'Credit Card'),

# (34, 34, '2024-04-29', 399.99, 'PayPal'),

# (35, 35, '2024-04-29', 49.99, 'Cash'),

# (36, 36, '2024-04-29', 199.99, 'Credit Card'),

# (37, 37, '2024-04-29', 129.99, 'Credit Card'),

# (38, 38, '2024-04-29', 199.99, 'PayPal'),

# (39, 39, '2024-04-29', 99.99, 'Credit Card'),

# (40, 40, '2024-04-29', 299.99, 'Cash'),

# (41, 41, '2024-04-29', 499.99, 'Credit Card'),

# (42, 42, '2024-04-29', 199.99, 'PayPal'),

# (43, 43, '2024-04-29', 99.99, 'Credit Card'),

# (44, 44, '2024-04-30', 399.99, 'Credit Card'),

# (45, 45, '2024-04-30', 159.98, 'PayPal'),

# (46, 46, '2024-04-30', 199.99, 'Credit Card'),

# (47, 47, '2024-04-30', 99.99, 'Cash'),

# (48, 48, '2024-04-30', 39.99, 'PayPal'),

# (49, 49, '2024-04-30', 799.99, 'Credit Card'),

# (50, 50, '2024-04-30', 199.99, 'Credit Card'),

# (51, 51, '2024-04-30', 99.99, 'Cash'),

# (52, 52, '2024-04-30', 159.98, 'PayPal'),

# (53, 53, '2024-04-30', 199.99, 'Credit Card'),

# (54, 54, '2024-04-30', 49.99, 'Credit Card'),

# (55, 55, '2024-05-01', 299.99, 'PayPal'),

# (56, 56, '2024-05-01', 299.99, 'Credit Card'),

# (57, 57, '2024-05-01', 79.99, 'PayPal'),

# (58, 58, '2024-05-01', 49.99, 'Credit Card'),

# (59, 59, '2024-05-01', 199.99, 'Cash'),

# (60, 60, '2024-05-01', 199.99, 'Credit Card'),

# (61, 61, '2024-05-01', 129.99, 'Credit Card'),

# (62, 62, '2024-05-01', 69.99, 'PayPal'),

# (63, 63, '2024-05-01', 499.99, 'Credit Card'),

# (64, 64, '2024-05-01', 79.99, 'PayPal'),

# (65, 65, '2024-05-01', 249.99, 'Credit Card'),

# (66, 66, '2024-05-02', 49.99, 'Credit Card'),

# (67, 67, '2024-05-02', 89.99, 'PayPal'),

# (68, 68, '2024-05-02', 129.99, 'Credit Card'),

# (69, 69, '2024-05-02', 49.99, 'Credit Card'),

# (70, 70, '2024-05-02', 799.99, 'Cash'),

# (71, 71, '2024-05-02', 39.99, 'PayPal'),

# (72, 72, '2024-05-02', 199.99, 'Credit Card'),

# (73, 73, '2024-05-02', 29.99, 'Credit Card'),

# (74, 74, '2024-05-02', 159.98, 'PayPal'),

# (75, 75, '2024-05-02', 129.99, 'Credit Card'),

# (76, 76, '2024-05-02', 79.99, 'Cash'),

# (77, 77, '2024-05-03', 299.99, 'Credit Card'),

# (78, 78, '2024-05-03', 149.99, 'PayPal'),

# (79, 79, '2024-05-03', 399.99, 'Credit Card'),

# (80, 80, '2024-05-03', 69.99, 'PayPal'),

# (81, 81, '2024-05-03', 299.99, 'Credit Card'),

# (82, 82, '2024-05-03', 299.99, 'Cash'),

# (83, 83, '2024-05-03', 49.99, 'Credit Card'),

# (84, 84, '2024-05-03', 399.99, 'PayPal'),

# (85, 85, '2024-05-03', 499.99, 'Credit Card'),

# (86, 86, '2024-05-03', 49.99, 'Credit Card'),

# (87, 87, '2024-05-03', 29.99, 'PayPal'),

# (88, 88, '2024-05-04', 24.99, 'Credit Card'),

# (89, 89, '2024-05-04', 199.99, 'PayPal'),

# (90, 90, '2024-05-04', 299.99, 'Credit Card'),

# (91, 91, '2024-05-04', 99.99, 'Cash'),

# (92, 92, '2024-05-04', 199.99, 'Credit Card'),

# (93, 93, '2024-05-04', 299.99, 'Credit Card'),

# (94, 94, '2024-05-04', 79.99, 'PayPal'),

# (95, 95, '2024-05-04', 399.99, 'Credit Card'),

# (96, 96, '2024-05-04', 199.99, 'PayPal'),

# (97, 97, '2024-05-04', 69.99, 'Credit Card'),

# (98, 98, '2024-05-04', 99.99, 'Cash'),

# (99, 99, '2024-05-05', 199.99, 'Credit Card'),

# (100, 100, '2024-05-05', 399.99, 'PayPal');

# select \* from payments;

# /\* END OF THE CODE/\*

# 

**1.Sub-queries:**

**1. List orders with their total amount:**

* SELECT order\_id, total\_amount FROM Orders;

|  |  |  |  |
| --- | --- | --- | --- |
| Customer\_id | First-name | Last-name | Total-sales |
| 1 | John | Doe | 899.99 |
| 2 | Alice | Smith | 799.99 |
| 3 | Bob | Johnson | 599.98 |
| 4 | Emily | Brown | 429.96 |
| 5 | Sarah | Wilson | 159.98 |
| 6 | Michael | Lee | 979.97 |
| 7 | Emma | Garcia | 799.99 |
| 8 | William | Martinez | 249.98 |
| 9 | Sophia | Lopez | 899.99 |
| 10 | James | Hernandez | 159.98 |
| 11 | Olivia | Gonzalez | 199.99 |
| 12 | Liam | Perez | 399.99 |
| 13 | Isabella | Rodriguez | 149.99 |
| 14 | Benjamin | Smith | 79.99 |
| 15 | Amelia | Williams | 89.99 |
| 16 | Ethan | Johnson | 34.99 |
| 17 | Mia | Brown | 199.99 |
| 18 | Ava | Davis | 299.99 |
| 19 | Lucas | Garcia | 149.99 |
| 20 | Harper | Martinez | 69.99 |
| 21 | Elijah | Hernandez | 29.99 |
| 22 | Evelyn | Gonzalez | 24.99 |
| 23 | Logan | Perez | 79.99 |
| 24 | Sofia | Rodriguez | 299.99 |
| 25 | Jackson | Smith | 39.99 |
| 26 | Avery | Williams | 199.99 |
| 27 | Daniel | Johnson | 249.99 |
| 28 | Madison | Brown | 399.99 |
| 29 | Liam | Davis | 29.99 |
| 30 | Charlotte | Garcia | 499.99 |
| 31 | Mason | Martinez | 199.99 |
| 32 | Ella | Hernandez | 69.99 |
| 33 | David | Gonzalez | 129.99 |
| 34 | Penelope | Perez | 399.99 |
| 35 | Ethan | Rodriguez | 49.99 |
| 36 | Scarlett | Smith | 199.99 |
| 37 | Aria | Williams | 129.99 |
| 38 | Luke | Johnson | 199.99 |
| 39 | Mia | Brown | 99.99 |
| 40 | Zoe | Davis | 299.99 |
| 41 | Henry | Garcia | 499.99 |
| 42 | Jack | Martinez | 199.99 |
| 43 | Nora | Hernandez | 99.99 |
| 44 | Levi | Gonzalez | 399.99 |
| 45 | Hazel | Perez | 159.98 |
| 46 | Wyatt | Rodriguez | 199.99 |
| 47 | Luna | Smith | 99.99 |
| 48 | Riley | Williams | 39.99 |
| 49 | Leo | Johnson | 799.99 |
| 50 | Grace | Brown | 199.99 |
| 51 | Gabriel | Davis | 99.99 |
| 52 | Emma | Garcia | 159.98 |
| 53 | Lucas | Martinez | 199.99 |
| 54 | Avery | Hernandez | 49.99 |
| 55 | Layla | Gonzalez | 299.99 |
| 56 | Owen | Perez | 299.99 |
| 57 | Zoey | Rodriguez | 79.99 |
| 58 | Xavier | Smith | 49.99 |
| 59 | Aubrey | Williams | 199.99 |
| 60 | Chloe | Johnson | 199.99 |
| 61 | Carter | Brown | 129.99 |
| 62 | Skyler | Davis | 69.99 |
| 63 | Stella | Garcia | 499.99 |
| 64 | Easton | Martinez | 79.99 |
| 65 | Zoe | Hernandez | 249.99 |
| 66 | Parker | Gonzalez | 49.99 |
| 67 | Hudson | Perez | 89.99 |
| 68 | Natalie | Rodriguez | 129.99 |
| 69 | Mateo | Smith | 49.99 |
| 70 | Hannah | Williams | 799.99 |
| 71 | Lincoln | Johnson | 39.99 |
| 72 | Audrey | Brown | 199.99 |
| 73 | Brooklyn | Davis | 29.99 |
| 74 | Bentley | Garcia | 159.98 |
| 75 | Samantha | Martinez | 129.99 |
| 76 | Leonardo | Hernandez | 79.99 |
| 77 | Aidan | Gonzalez | 299.99 |
| 78 | Allison | Perez | 149.99 |
| 79 | Elena | Rodriguez | 399.99 |
| 80 | Gavin | Smith | 69.99 |
| 81 | Victoria | Williams | 299.99 |
| 82 | Nathan | Johnson | 299.99 |
| 83 | Haley | Brown | 49.99 |
| 84 | Diego | Davis | 399.99 |
| 85 | Eva | Garcia | 499.99 |
| 86 | Justin | Martinez | 49.99 |
| 87 | Julia | Hernandez | 29.99 |
| 88 | Miles | Gonzalez | 24.99 |
| 89 | Violet | Perez | 199.99 |
| 90 | Landon | Rodriguez | 299.99 |
| 91 | Caroline | Smith | 99.99 |
| 92 | Christian | Williams | 199.99 |
| 93 | Adeline | Johnson | 299.99 |
| 94 | Max | Brown | 79.99 |
| 95 | Maria | Davis | 399.99 |
| 96 | Colton | Garcia | 199.99 |
| 97 | Clara | Martinez | 69.99 |
| 98 | Julian | Hernandez | 99.99 |
| 99 | Cora | Gonzalez | 199.99 |
| 100 | Bryce | Perez | 399.99 |

# 2.Queries

**2. List orders placed on a specific date (e.g., '2024-04-26'):**

* SELECT \* FROM Orders WHERE order\_date = '2024-04-26';

|  |  |  |  |
| --- | --- | --- | --- |
| Order-id | Customer-id | Order-date | Total-sales |
| 1 | 1 | 2024-04-26 | 899.99 |
| 2 | 2 | 2024-04-26 | 799.99 |
| 3 | 3 | 2024-04-26 | 599.98 |
| 4 | 4 | 2024-04-26 | 429.96 |
| 5 | 5 | 2024-04-26 | 159.98 |
| 6 | 6 | 2024-04-26 | 979.97 |
| 7 | 7 | 2024-04-26 | 799.99 |
| 8 | 8 | 2024-04-26 | 249.98 |
| 9 | 9 | 2024-04-26 | 899.99 |
| 10 | 10 | 2024-04-26 | 159.98 |
|  |  |  |  |

**3 . Queries**

**3. List customers with a last name starting with 'M':**

* SELECT \* FROM Customers WHERE last\_name LIKE 'm%';

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Customer-id | First | lastname | Email-id | phonenumber |
| 8 | William | Martinez | william@example.com | 890-1234567 |
| 20 | Harper | Martinez | harper@example.com | 012-3456789 |
| 31 | Mason | Martinez | mason@example.com | 123-4567890 |
| 42 | Jack | Martinez | jack@example.com | 234-567-901 |
| 53 | Lucas | Martinez | lucas@example.com | 345-6789012 |
| 64 | Easton | Martinez | easton@example.com | 456-7890123 |
| 75 | Samanth | Martinez | samantha@example.com | 567-8901234 |
| 86 | Justin | Martinez | justin@example.com | 678-9012345 |
| 97 | Clara | Martinez | clara@example.com | 789-0123456 |
|  |  |  |  |  |

**4 . Queries**

**4. List products with prices greater than $100:**

* SELECT \* FROM Products WHERE price > 100;

|  |  |  |  |
| --- | --- | --- | --- |
| Product-id | Product-name | Price | Description |
| 1 | Laptop | 899.99 | 15-inch Laptop with Intel Core i7 processor and 16GB RAM |
| 2 | Smartphone | 699.99 | Latest smartphone with high-resolution display and dual-camera setup |
| 3 | Smart Watch | 199.99 | Smartwatch with fitness tracking and heart rate monitoring features |
| 6 | Tablet | 399.99 | 10-inch Tablet with quad-core processor and 128GB storage |
| 8 | Microwave | 129.99 | Countertop microwave oven with 1000 watts of power |
| 10 | External Hard Drive | 129.99 | Portable external hard drive with 1TB storage capacity |
| 11 | Digital Camera | 499.99 | Mirrorless digital camera with 24MP sensor and 4K video recording |
| 12 | Gaming Console | 399.99 | Next-gen gaming console with high-fidelity graphics and fast SSD storage |
| 13 | Fitness Tracker | 149.99 | Fitness tracker with GPS and water resistance up to 50 meters |
| 18 | Printers | 199.99 | All-in-one printer with printing, scanning, and copying capabilities |
| 19 | Smart Thermostat | 149.99 | Programmable smart thermostat with Wi-Fi connectivity |
| 23 | Air Purifier | 199.99 | HEPA air purifier with 3-stage filtration system and quiet operation |
| 24 | Robot Vacuum | 299.99 | Smart robot vacuum with mapping technology and voice control support |
| 34 | Portable Power Station | 249.99 | Portable power station with AC outlets and USB ports for camping and emergencies |
| 35 | Fitness Exercise Bike | 299.99 | Indoor exercise bike with adjustable resistance levels and LCD monitor |
| 36 | Home Security Camera | 149.99 | Wireless home security camera with motion detection and night vision |
| 38 | Smart Doorbell | 199.99 | Smart video doorbell with HD camera and two-way audio communication |
| 39 | Mini Projector | 129.99 | Portable mini projector with HDMI input and built-in speaker |
| 40 | Electric Scooter | 399.99 | Foldable electric scooter with long-range battery and LED display |
| 41 | Smart Lock | 149.99 | Keyless smart lock with fingerprint recognition and smartphone control |
| 50 | Wireless Security Camera System | 299.99 | Wireless security camera system with multiple cameras and DVR |

**5 . Queries**

1. **Find the customer who spent the most:**

* SELECT c.customer\_id, c.first\_name, c.last\_name, SUM(o.total\_amount) AS total\_spent

FROM Customers c

JOIN Orders o ON c.customer\_id = o.customer\_id

GROUP BY c.customer\_id

ORDER BY total\_spent DESC

LIMIT 1;

|  |  |  |  |
| --- | --- | --- | --- |
| Customer-id | First-name | Last-time | Total spend |
| 6 | Michael | Lee | 979.97 |

**6. Queries**

**6.List the top 5 most expensive products:**

* SELECT \* FROM Products ORDER BY price DESC LIMIT 5;

|  |  |  |  |
| --- | --- | --- | --- |
| Product-id | Product-name | price | Description |
| 1 | Laptop | 899.99 | 15-inch Laptop with Intel Core i7 processor and 16GB RAM |
| 2 | Smartphone | 699.99 | Latest smartphone with high-resolution display and dual-camera setup |
| 11 | Digital Camera | 499.99 | Mirrorless digital camera with 24MP sensor and 4K video recording |
| 6 | Tablet | 399.99 | 10-inch Tablet with quad-core processor and 128GB storage |
| 12 | Gaming Console | 399.99 | Next-gen gaming console with high-fidelity graphics and fast SSD storage |
|  |  |  |  |

**7. Queries**

**7. Find the average total amount spent by customers:**

* SELECT AVG(total\_amount) AS average\_total\_amount

FROM (

SELECT customer\_id, SUM(total\_amount) AS total\_amount

FROM Orders

GROUP BY customer\_id

) AS customer\_totals;

Average-total-amount

235.438800

**8. Queries**

**8. List all orders with a total amount greater than the average total amount of all orders:**

* SELECT \*

FROM Orders

WHERE total\_amount > (

SELECT AVG(total\_amount)

FROM Orders

);

|  |  |  |  |
| --- | --- | --- | --- |
| Order-id | Customer-id | Order-date | Total-amount |
| 1 | 1 | 2024-04-26 | 899.99 |
| 2 | 2 | 2024-04-26 | 799.99 |
| 3 | 3 | 2024-04-26 | 599.98 |
| 4 | 4 | 2024-04-26 | 429.96 |
| 6 | 6 | 2024-04-26 | 979.97 |
| 7 | 7 | 2024-04-26 | 799.99 |
| 8 | 8 | 2024-04-26 | 249.98 |
| 9 | 9 | 2024-04-26 | 899.99 |
| 12 | 12 | 2024-04-27 | 399.99 |
| 18 | 18 | 2024-04-27 | 299.99 |
| 24 | 24 | 2024-04-28 | 299.99 |
| 27 | 27 | 2024-04-28 | 249.99 |
| 28 | 28 | 2024-04-28 | 399.99 |
| 30 | 30 | 2024-04-28 | 499.99 |
| 34 | 34 | 2024-04-29 | 399.99 |
| 40 | 40 | 2024-04-29 | 299.99 |
| 41 | 41 | 2024-04-29 | 499.99 |
| 44 | 44 | 2024-04-30 | 399.99 |
| 49 | 49 | 2024-04-30 | 799.99 |
| 55 | 55 | 2024-05-01 | 299.99 |
| 56 | 56 | 2024-05-01 | 299.99 |
| 63 | 63 | 2024-05-01 | 499.99 |
| 65 | 65 | 2024-05-01 | 249.99 |
| 70 | 70 | 2024-05-02 | 799.99 |
| 77 | 77 | 2024-05-03 | 299.99 |
| 79 | 79 | 2024-05-03 | 399.99 |
| 81 | 81 | 2024-05-03 | 299.99 |
| 82 | 82 | 2024-05-03 | 299.99 |
| 84 | 84 | 2024-05-03 | 399.99 |
| 85 | 85 | 2024-05-03 | 499.99 |
| 90 | 90 | 2024-05-04 | 299.99 |
| 93 | 93 | 2024-05-04 | 299.99 |
| 95 | 95 | 2024-05-04 | 399.99 |
| 100 | 100 | 2024-05-05 | 399.99 |
|  |  |  |  |

**10. Queries**

**10. Find the customer who made the last order:**

* SELECT customer\_id, first\_name, last\_name

FROM Customers

WHERE customer\_id = (

SELECT customer\_id

FROM Orders

ORDER BY order\_date DESC

LIMIT 1

);

|  |  |  |
| --- | --- | --- |
| Customer-id | First-name | Last-name |
| 99 | Cora | Gonzalez |
|  |  |  |

**11. Queries**

**11. Find the customer who spent the least amount of money:**

* SELECT customer\_id, first\_name, last\_name

FROM Customers

WHERE customer\_id = (

SELECT customer\_id

FROM Orders

GROUP BY customer\_id

ORDER BY SUM(total\_amount) ASC

LIMIT 1

);

|  |  |  |
| --- | --- | --- |
| Customer-id | First-name | Last-name |
| 22 | Evelyn | Gonzalez |
|  |  |  |

**12. Queries**

**List customers with a last name starting with 'D':**

* SELECT \* FROM Customers WHERE last\_name LIKE 'd%'

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Customer-id | Firstname | Lastname | Email | Phonenumber |
| 40 | Zoe | Davis | zoe@example.com | 012-345-6789 |
| 1 | John | Doe | john@example.com | 123-456-7890 |
| 51 | Gabriel | Davis | gabriel@example.com | 123-456-7890 |
| 62 | Skyler | Davis | skyler@example.com | 234-567-8901 |
| 73 | Brooklyn | Davis | brooklyn@example.com | 345-678-9012 |
| 84 | Diego | Davis | diego@example.com | 456-789-0123 |
| 95 | Maria | Davis | maria@example.com | 567-890-1234 |
| 18 | Ava | Davis | ava@example.com | 890-123-4567 |
| 29 | Liam | Davis | liam@example.com | 901-234-5678 |



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |