

[*] Create the ecommerce database

```
> CREATE DATABASE ecommerce;
```

[*] Use the ecommerce database

```
> USE ecommerce;
```

```
mysql> use ecommerce;
```

```
Database changed
```

```
mysql> show tables;
```

```
Empty set (0.07 sec)
```

```
mysql> CREATE TABLE customers (
```

```
-> id INT AUTO_INCREMENT PRIMARY KEY,
```

```
-> name VARCHAR (255) NOT NULL,
```

```
-> email VARCHAR (225) UNIQUE NOT NULL,
```

```
-> address TEXT NOT NULL
```

```
-> );
```

```
Query OK, 0 rows affected (0.17 sec)
```

[*] Create the customers table

```
> CREATE TABLE customers (
```

```
id INT AUTO_INCREMENT PRIMARY KEY,
```

```
name VARCHAR(255) NOT NULL,
```

```
email VARCHAR(255) UNIQUE NOT NULL,
```

```
address TEXT NOT NULL
```

```
);
```

[*] Create the products table

```
> CREATE TABLE products (
```

```
id INT AUTO_INCREMENT PRIMARY KEY,
```

```
name VARCHAR(255) NOT NULL,
```

```
price DECIMAL(10, 2) NOT NULL,
```

```
description TEXT NOT NULL
```

```
);
```

```
mysql> CREATE TABLE products (  
  -> id INT AUTO_INCREMENT PRIMARY KEY,  
  -> name VARCHAR (255) NOT NULL,  
  -> price DECIMAL (10, 2) NOT NULL,  
  -> description TEXT NOT NULL  
  -> );  
Query OK, 0 rows affected (0.09 sec)
```

[*] Create the orders table

```
> CREATE TABLE orders (  
  id INT AUTO_INCREMENT PRIMARY KEY,  
  customer_id INT NOT NULL,  
  order_date DATE NOT NULL,  
  total_amount DECIMAL(10, 2) NOT NULL,  
  FOREIGN KEY (customer_id) REFERENCES customers(id) ON DELETE CASCADE  
);
```

```
mysql> CREATE TABLE orders (  
  -> id INT AUTO_INCREMENT PRIMARY KEY,  
  -> customers_id INT NOT NULL,  
  -> order_date DATE NOT NULL,  
  -> total_amount DECIMAL(10, 2) NOT NULL,  
  -> FOREIGN KEY (customers_id) REFERENCES customers(id) ON DELETE CASCADE  
  -> );  
Query OK, 0 rows affected (0.17 sec)
```

[*] Inserting sample data into the customers table

```
> INSERT INTO customers (name, email, address) VALUES  
( 'Edward Torphy', 'Idella_Koss@gmail.com', 'Gary'),  
( 'Jonas McCullough', 'Laurence_Pouros@example.com', 'West Daphney'),  
( 'Vernon Glover', 'Antonio_Krajcik@hotmail.com', 'Lake Jacquelinaton'),  
( 'Oral Mayer', 'Sheryl_Hirthe95@gmail.com', 'South Jessiebury'),  
( 'Hellen Jast', 'Herbert_Turner72@hotmail.com', 'East Rupertbury'),  
( 'Francisca Goyette', 'Barrett_Hagenes32@hotmail.com', 'Old Branch'),  
( 'Avery Gorczany', 'Corey.Kerluke@hotmail.com', 'West Tami'),  
( 'Kathie Hane', 'Cristina_Zemlak99@gmail.com', 'Port Jerad'),  
( 'Clyde Trantow', 'Rosalie_Gislason2@gmail.com', 'Lacytown'),  
( 'Leonard Schuppe', 'Lynn.Smitham75@gmail.com', 'South Bostony'),  
( 'Raymond Kemmer', 'Candice_McKenzie50@yahoo.com', 'Kennethport'),  
( 'Adella Sawayn', 'Lenny.Welch35@gmail.com', 'Owenbury'),
```

('Enrique Zboncak', 'Tom.Hayes23@yahoo.com', 'Chavezmouth'),
('Ezekiel Carter', 'Jaime.Terry33@gmail.com', 'Schenkburgh'),
('Derrick Mante', 'Clifton.Hirthe42@hotmail.com', 'North Kylarchester'),
('Francisca Torp', 'Georgiana.OHara56@hotmail.com', 'Port Zoie'),
('Reynaldo Kunze', 'Joan.Trantow28@hotmail.com', 'East Anjanette'),
('Herminia Erdman', 'Brennan.Lubowitz75@gmail.com', 'Bartellton'),
('Annalise Feest', 'Derrick_Krajcik73@yahoo.com', 'Tinabury'),
('Katherine Reilly', 'Roslyn.Krajcik23@yahoo.com', 'Fort Tyra'),
('Sherman Mraz', 'Gary_Kemmer@gmail.com', 'South Randimouth'),
('Rebeca Stokes', 'Rachelle.Krajcik@gmail.com', 'Lake Darrelview'),
('Josie Krajcik', 'Elinor_Zemlak80@yahoo.com', 'New Ceciliabury'),
('Jerrell Ratke', 'Hilton.Gibson@weber.com', 'North Earlmouth'),
('Wilbert Ondricka', 'Kiley_Kreiger@schuster.com', 'Lake Brackenville'),
('Glen Littel', 'Samara.Hegmann49@gmail.com', 'East Carletonland'),
('Antonio Paucek', 'Janae.Littel56@yahoo.com', 'Shelbyhaven'),
('Adella Schultz', 'Daisy.Ruecker88@yahoo.com', 'Tyreseburg'),
('Harold Stoltenberg', 'Sidney_Predovic90@hotmail.com', 'Bertsville'),
('Garry Bailey', 'Bertha.Parisi83@yahoo.com', 'South Bridgette'),
('Derrick Hoeger', 'Carmen_Crona@hotmail.com', 'North Oralia'),
('Jesse Rowe', 'Reba.Tremblay71@yahoo.com', 'Hedwigview'),
('Angela Satterfield', 'Marcelina_Krajcik51@hotmail.com', 'Haroldchester'),
('Elsie Watsica', 'Annette_Terry54@hotmail.com', 'West Boydcourt'),
('Mable Harris', 'Marcella_Wilkinson18@gmail.com', 'West Krystalborough'),
('Claudia Beatty', 'Elba.Stokes@yahoo.com', 'Davidton'),
('Regina Reilly', 'Marcella_Larson16@yahoo.com', 'Zulaufview'),
('Matthew Funk', 'Sheridan_Pfannerstill79@yahoo.com', 'West Dora'),
('Emmett Welch', 'Samuel.Marquardt92@yahoo.com', 'Tampaview'),
('Willie Langworth', 'Ervin_Marquardt44@yahoo.com', 'South Bryantland'),
('Paula Lockman', 'Julie_Wolf31@yahoo.com', 'West Alleneview');

id	name	email	address
1	Edward Torphy	Idella_Koss@gmail.com	Gary
2	Jonas McCullough	Laurence_Pouros@example.com	West Daphney
3	Vernon Glover	Antonio_Krajcik@hotmail.com	Lake Jacquelinaton
4	Oral Mayer	Sheryl_Hirthe95@gmail.com	South Jessiebury
5	Hellen Jast	Herbert_Turner72@hotmail.com	East Rupertbury
6	Francisca Goyette	Barrett_Hagenes32@hotmail.com	Old Branch
7	Avery Gorczany	Corey.Kerluke@hotmail.com	West Tami
8	Kathie Hane	Cristina_Zemlak99@gmail.com	Port Jerad
9	Clyde Trantow	Rosalie_Gislason2@gmail.com	Lacytown
10	Leonard Schuppe	Lynn.Smitham75@gmail.com	South Bostony
11	Raymond Kemmer	Candice_McKenzie50@yahoo.com	Kennethport
12	Adella Sawayn	Lenny.Welch35@gmail.com	Owenbury
13	Enrique Zboncak	Tom.Hayes23@yahoo.com	Chavezmouth
14	Ezekiel Carter	Jaime.Terry33@gmail.com	Schenkburgh
15	Derrick Mante	Clifton.Hirthe42@hotmail.com	North Kylarchester
16	Francisca Torp	Georgiana.OHara56@hotmail.com	Port Zoie
17	Reynaldo Kunze	Joan.Trantow28@hotmail.com	East Anjanette
18	Herminia Erdman	Brennan.Lubowitz75@gmail.com	Bartellton
19	Annalise Feest	Derrick_Krajcik73@yahoo.com	Tinabury
20	Katherine Reilly	Roslyn.Krajcik23@yahoo.com	Fort Tyra
21	Sherman Mraz	Gary_Kemmer@gmail.com	South Randimouth
22	Rebeca Stokes	Rachelle.Krajcik@gmail.com	Lake Darrelview
23	Josie Krajcik	Elinor_Zemlak80@yahoo.com	New Ceciliabury
24	Jerrell Ratke	Hilton.Gibson@weber.com	North Earlmouth
25	Wilbert Ondricka	Kiley_Kreiger@schuster.com	Lake Brackenville
26	Glen Littel	Samara.Hegmann49@gmail.com	East Carletonland
27	Antonio Paucek	Janae.Littel56@yahoo.com	Shelbyhaven
28	Adella Schultz	Daisy.Ruecker88@yahoo.com	Tyreseburg
29	Harold Stoltenberg	Sidney_Predovic90@hotmail.com	Bertsville
30	Garry Bailey	Bertha.Parisi83@yahoo.com	South Bridgette
31	Derrick Hoeger	Carmen_Crona@hotmail.com	North Oralia
32	Jesse Rowe	Reba.Tremblay71@yahoo.com	Hedwigview
33	Angela Satterfield	Marcelina_Krajcik51@hotmail.com	Haroldchester
34	Elsie Watsica	Annette_Terry54@hotmail.com	West Boydcourt
35	Mable Harris	Marcella_Wilkinson18@gmail.com	West Krystalborough
36	Claudia Beatty	Elba.Stokes@yahoo.com	Davidton

[*] Inserting sample data into the products table

```
> INSERT INTO products (name, price, description) VALUES
('Apple iPhone 14', 999.99, 'Latest model with A15 Bionic chip and improved
camera capabilities. '),
('Samsung Galaxy S22', 849.99, 'Flagship smartphone with AMOLED display and
powerful camera system. '),
('Sony WH-1000XM5', 349.99, 'Industry-leading noise-canceling headphones with
long battery life. '),
('Dell XPS 13', 1249.99, '13-inch laptop with Intel Core i7 processor, ultra-thin
design, and 4K display. '),
('Fitbit Charge 5', 179.95, 'Fitness tracker with built-in GPS, heart rate
monitoring, and sleep tracking. '),
```

('Apple Watch Series 7', 399.99, 'Smartwatch with larger screen, faster charging, and advanced fitness features.'),
('Sony PlayStation 5', 499.99, 'Next-gen gaming console with ray tracing and lightning-fast SSD.'),
('Microsoft Xbox Series X', 499.99, 'Next-gen console with 4K gaming, ultra-fast load times, and backward compatibility.'),
('Nvidia GeForce RTX 3080', 699.99, 'High-performance graphics card with 10GB of GDDR6X memory for gaming and rendering.'),
('Intel Core i9-12900K', 749.99, 'Top-tier desktop CPU with 16 cores and hyper-threading for gaming and heavy workloads.'),
('Oculus Quest 2', 299.99, 'Standalone VR headset with access to a wide range of games and experiences.'),
('Bose QuietComfort 35 II', 299.99, 'Wireless noise-canceling headphones with exceptional sound and comfort.'),
('Anker PowerCore 26800', 69.99, 'Portable power bank with 26,800mAh capacity for multiple device charging.'),
('Google Pixel 6', 599.99, 'Flagship Android phone with Google Tensor chip, exceptional camera, and 5G support.'),
('Razer BlackWidow V3', 129.99, 'Mechanical keyboard with RGB lighting and tactile switches for gaming.'),
('Apple AirPods Pro', 249.99, 'True wireless earbuds with active noise cancellation and superb sound quality.'),
('HP Spectre x360', 1299.99, 'Convertible 2-in-1 laptop with Intel Core i7, high-res display, and sleek design.'),
('Samsung Galaxy Buds Pro', 199.99, 'Premium wireless earbuds with noise cancellation and 3 microphones for calls.'),
('Nikon D850', 2799.99, 'Full-frame DSLR with 45.7MP sensor, fast autofocus, and high-quality 4K video.'),
('Canon EOS R5', 3899.99, 'Mirrorless camera with 8K video and exceptional image quality in all conditions.'),
('GoPro HERO10 Black', 499.99, 'Waterproof action camera with 5.3K video and enhanced stabilization.'),
('Dyson V11 Torque Drive', 599.99, 'Cordless vacuum cleaner with powerful suction and adaptive cleaning modes.'),
('iRobot Roomba i7+', 799.99, 'Robot vacuum with smart mapping, self-emptying base, and powerful suction.'),
('Instant Pot Duo 7-in-1', 89.99, 'Electric pressure cooker with 7-in-1 functionality for easy cooking.'),
('Sony A7 III', 1999.99, 'Full-frame mirrorless camera with outstanding autofocus and image quality.'),
('LG OLED CX', 1499.99, '55-inch OLED 4K TV with self-lighting pixels and stunning contrast.'),
('Apple MacBook Pro 16"', 2399.99, 'Powerful laptop with Apple M1 Pro chip, 16GB RAM, and retina display.'),

```
('Fujifilm X-T4', 1699.99, 'Mirrorless camera with 4K video, fast autofocus, and great color science.'),  
( 'Seagate Backup Plus 4TB', 109.99, 'External hard drive with 4TB capacity for backup and storage.'),  
( 'Sony 65" 4K LED TV', 799.99, 'Smart TV with 4K resolution, HDR support, and Android TV platform.'),  
( 'KitchenAid Stand Mixer', 349.99, 'Iconic stand mixer for baking with multiple attachments for versatility.'),  
( 'Philips Sonicare HX9937', 149.99, 'Electric toothbrush with smart sensor technology and 2-week battery life.'),  
( 'Kindle Paperwhite', 129.99, 'E-reader with high-resolution display, adjustable lighting, and 8GB storage.'),  
( 'GoPro HERO9 Black', 399.99, 'Action camera with 5K video, front-facing screen, and enhanced stabilization.'),  
( 'Samsung Galaxy Tab S7', 649.99, 'Android tablet with S Pen, 11-inch display, and high-performance specs.'),  
( 'Logitech MX Master 3', 99.99, 'Wireless mouse with customizable buttons and ergonomic design.'),  
( 'Samsung 970 EVO 1TB SSD', 139.99, 'Fast NVMe solid-state drive with 1TB storage for desktops and laptops.');
```



```
mysql> INSERT INTO products (name,price,description) VALUES ('Apple iPhone 14', 999.99, 'Latest model with A15 Bionic chip and improved camera capabilities.'),
-> ('Samsung Galaxy S22', 849.99, 'Flagship smartphone with AMOLED display and powerful camera system.'),
-> ('Sony WH-1000XM5', 349.99, 'Industry-leading noise-canceling headphones with long battery life.'),
-> ('Dell XPS 13', 1249.99, '13-inch laptop with Intel Core i7 processor, ultra-thin design, and 4K display.'),
-> ('Fitbit Charge 5', 179.95, 'Fitness tracker with built-in GPS, heart rate monitoring, and sleep tracking.'),
-> ('Apple Watch Series 7', 399.99, 'Smartwatch with larger screen, faster charging, and advanced fitness features.'),
-> ('Sony PlayStation 5', 499.99, 'Next-gen gaming console with ray tracing and lightning-fast SSD.'),
-> ('Microsoft Xbox Series X', 499.99, 'Next-gen console with 4K gaming, ultra-fast load times, and backward compatibility.'),
-> ('Nvidia GeForce RTX 3080', 699.99, 'High-performance graphics card with 10GB of GDDR6X memory for gaming and rendering.'),
-> ('Intel Core i9-12900K', 749.99, 'Top-tier desktop CPU with 16 cores and hyper-threading for gaming and heavy workloads.'),
-> ('Oculus Quest 2', 299.99, 'Standalone VR headset with access to a wide range of games and experiences.'),
-> ('Bose QuietComfort 35 II', 299.99, 'Wireless noise-canceling headphones with exceptional sound and comfort.'),
-> ('Anker PowerCore 26800', 69.99, 'Portable power bank with 26,800mAh capacity for multiple device charging.'),
-> ('Google Pixel 6', 599.99, 'Flagship Android phone with Google Tensor chip, exceptional camera, and 5G support.'),
-> ('Razer BlackWidow V3', 129.99, 'Mechanical keyboard with RGB lighting and tactile switches for gaming.'),
-> ('Apple AirPods Pro', 249.99, 'True wireless earbuds with active noise cancellation and superb sound quality.'),
-> ('HP Spectre x360', 1299.99, 'Convertible 2-in-1 laptop with Intel Core i7, high-res display, and sleek design.'),
-> ('Samsung Galaxy Buds Pro', 199.99, 'Premium wireless earbuds with noise cancellation and 3 microphones for calls.'),
```

[*] 1 Query to get all customers who have placed an order in the last 30 days

```
> SELECT DISTINCT c.name, c.email, c.address
FROM customers c
JOIN orders o ON c.id = o.customer_id
WHERE o.order_date >= CURDATE() - INTERVAL 30 DAY;
```

```
mysql> SELECT DISTINCT c.name , c.email , c.address
-> FROM customers c
-> JOIN orders o ON c.id = o.customers_id
-> WHERE o.order_date >= CURDATE() - INTERVAL 30 DAY;
```

name	email	address
Leonard Schuppe	Lynn.Smitham75@gmail.com	South Bostony
Raymond Kemmer	Candice_McKenzie50@yahoo.com	Kennethport
Adella Sawayn	Lenny.Welch35@gmail.com	Owenbury
Enrique Zboncak	Tom.Hayes23@yahoo.com	Chavezmouth
Ezekiel Carter	Jaime.Terry33@gmail.com	Schenkburch
Derrick Mante	Clifton.Hirthe42@hotmail.com	North Kylarchester
Francisca Torp	Georgiana.OHara56@hotmail.com	Port Zoie
Reynaldo Kunze	Joan.Trantow28@hotmail.com	East Anjanette
Herminia Erdman	Brennan.Lubowitz75@gmail.com	Bartellton
Annalise Feest	Derrick_Krajcik73@yahoo.com	Tinabury
Katherine Reilly	Roslyn.Krajcik23@yahoo.com	Fort Tyra
Sherman Mraz	Gary_Kemmer@gmail.com	South Randimouth
Rebeca Stokes	Rachelle.Krajcik@gmail.com	Lake Darrelview
Josie Krajcik	Elinor_Zemlak80@yahoo.com	New Ceciliabury
Jerrell Ratke	Hilton.Gibson@weber.com	North Earlmouth
Wilbert Ondricka	Kiley_Kreiger@schuster.com	Lake Brackenville
Glen Littel	Samara.Hegmann49@gmail.com	East Carletonland
Antonio Paucek	Janae.Littel56@yahoo.com	Shelbyhaven
Adella Schultz	Daisy.Ruecker88@yahoo.com	Tyreseburg
Harold Stoltenberg	Sidney_Predovic90@hotmail.com	Bertsville
Garry Bailey	Bertha.Parisi83@yahoo.com	South Bridgette
Derrick Hoeger	Carmen_Crona@hotmail.com	North Oralia
Jesse Rowe	Reba.Tremblay71@yahoo.com	Hedwigview
Angela Satterfield	Marcelina_Krajcik51@hotmail.com	Haroldchester
Elsie Watsica	Annette_Terry54@hotmail.com	West Boydcourt
Mable Harris	Marcella_Wilkinson18@gmail.com	West Krystalborough
Claudia Beatty	Elba.Stokes@yahoo.com	Davidton
Regina Reilly	Marcella_Larson16@yahoo.com	Zulaufview

[*] 2 Query to get total amount of all orders placed by each customer

```
> SELECT c.name, SUM(o.total_amount) AS total_spent
FROM customers c
JOIN orders o ON c.id = o.customer_id
GROUP BY c.id;
```



```
mysql> SELECT c.name, SUM(o.total_amount)AS total
_spent
-> FROM customers c
-> JOIN orders o ON c.id = o.customers_id
-> GROUP BY c.id;
```

name	total_spent
Edward Torphy	120.50
Jonas McCullough	75.25
Vernon Glover	250.00
Oral Mayer	180.75
Hellen Jast	99.99
Francisca Goyette	350.00
Avery Gorczany	60.00
Kathie Hane	200.50
Clyde Trantow	130.10
Leonard Schuppe	220.00
Raymond Kemmer	49.99
Adella Sawayn	100.25
Enrique Zboncak	499.00
Ezekiel Carter	89.50
Derrick Mante	112.75
Francisca Torp	300.00
Reynaldo Kunze	57.20
Herminia Erdman	65.50
Annalise Feest	215.00
Katherine Reilly	145.99
Sherman Mraz	180.00
Rebeca Stokes	199.99
Josie Krajcik	50.00
Jerrell Ratke	80.00
Wilbert Ondricka	120.99
Glen Littel	95.50
Antonio Paucek	220.00
Adella Schultz	310.40
Harold Stoltenberg	150.75

[*] 3 Query to update the price of Product 'Canon EOS R5'

```
> UPDATE products
SET price = 45000
WHERE name = 'Canon EOS R5';
```

```
mysql> UPDATE products
-> SET price = 45000
-> WHERE name = 'canon EOS R5';
Query OK, 1 row affected (0.03 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

[*] 4 Query to add a 'discount' column to the products table

```
> ALTER TABLE products
ADD COLUMN discount DECIMAL(5,2) DEFAULT 0.00;
```

```
mysql> select * from products;
```

id	name	price	description	discounts
1	Apple iPhone 14	999.99	Latest model with A15 Bionic chip and improved camera capabilities.	0.00
2	Samsung Galaxy S22	849.99	Flagship smartphone with AMOLED display and powerful camera system.	0.00
3	Sony WH-1000XM5	349.99	Industry-leading noise-canceling headphones with long battery life.	0.00
4	Dell XPS 13	1249.99	13-inch laptop with Intel Core i7 processor, ultra-thin design, and 4K display.	0.00
5	Fitbit Charge 5	179.95	Fitness tracker with built-in GPS, heart rate monitoring, and sleep tracking.	0.00
6	Apple Watch Series 7	399.99	Smartwatch with larger screen, faster charging, and advanced fitness features.	0.00
7	Sony PlayStation 5	499.99	Next-gen gaming console with ray tracing and lightning-fast SSD.	0.00
8	Microsoft Xbox Series X	499.99	Next-gen console with 4K gaming, ultra-fast load times, and backward compatibility.	0.00
9	Nvidia GeForce RTX 3080	699.99	High-performance graphics card with 10GB of GDDR6X memory for gaming and rendering.	0.00
10	Intel Core i9-12900K	749.99	Top-tier desktop CPU with 16 cores and hyper-threading for gaming and heavy workloads.	0.00
11	Oculus Quest 2	299.99	Standalone VR headset with access to a wide range of games and experiences.	0.00
12	Bose QuietComfort 35 II	299.99	Wireless noise-canceling headphones with exceptional sound and comfort.	0.00
13	Anker PowerCore 26800	69.99	Portable power bank with 26,800mAh capacity for multiple device charging.	0.00
14	Google Pixel 6	599.99	Flagship Android phone with Google Tensor chip, exceptional camera, and 5G support.	0.00
15	Razer BlackWidow V3	129.99	Mechanical keyboard with RGB lighting and tactile switches for gaming.	0.00
16	Apple AirPods Pro	249.99	True wireless earbuds with active noise cancellation and superb sound quality.	0.00
17	HP Spectre x360	1299.99	Convertible 2-in-1 laptop with Intel Core i7, high-res display, and sleek design.	0.00
18	Samsung Galaxy Buds Pro	199.99	Premium wireless earbuds with noise cancellation and 3 microphones for calls.	0.00
19	Nikon D850	2799.99	Full-frame DSLR with 45.7MP sensor, fast autofocus, and high-quality 4K video.	0.00
20	Canon EOS R5	45000.00	Mirrorless camera with 8K video and exceptional image quality in all conditions.	0.00
21	GoPro HERO10 Black	499.99	Waterproof action camera with 5.3K video and enhanced stabilization.	0.00
22	Dyson V11 Torque Drive	599.99	Cordless vacuum cleaner with powerful suction and adaptive cleaning modes.	0.00
23	iRobot Roomba i7+	799.99	Robot vacuum with smart mapping, self-emptying base, and powerful suction.	0.00
24	Instant Pot Duo 7-in-1	89.99	Electric pressure cooker with 7-in-1 functionality for easy cooking.	0.00
25	Sony A7 III	1999.99	Full-frame mirrorless camera with outstanding autofocus and image quality.	0.00
26	LG OLED CX	1499.99	55-inch OLED 4K TV with self-lighting pixels and stunning contrast.	0.00
27	Apple MacBook Pro 16"	2399.99	Powerful laptop with Apple M1 Pro chip, 16GB RAM, and retina display.	0.00
28	Fujifilm X-T4	1699.99	Mirrorless camera with 4K video, fast autofocus, and great color science.	0.00
29	Seagate Backup Plus 4TB	109.99	External hard drive with 4TB capacity for backup and storage.	0.00
30	Sony 65" 4K LED TV	799.99	Smart TV with 4K resolution, HDR support, and Android TV platform.	0.00
31	KitchenAid Stand Mixer	349.99	Iconic stand mixer for baking with multiple attachments for versatility.	0.00
32	Philips Sonicare HX9337	149.99	Electric toothbrush with smart sensor technology and 2-week battery life.	0.00

[*] 5 Query to get the top 3 products with the highest price

```
> SELECT name, price
FROM products
ORDER BY price DESC
LIMIT 3;
```

```
mysql> SELECT name , price
-> FROM products
-> ORDER BY price DESC
-> LIMIT 3;
```

```
+-----+-----+
| name          | price  |
+-----+-----+
| Canon EOS R5  | 45000.00 |
| Nikon D850    | 2799.99 |
| Apple MacBook Pro 16" | 2399.99 |
+-----+-----+
3 rows in set (0.00 sec)
```

[*] 6 Query to get the name of the customers who ordered Sony PlayStation 5

```
SELECT c.name
FROM customers AS c
JOIN orders AS o ON c.id = o.customers_id
JOIN order_items AS oi ON o.id = oi.order_id
JOIN products AS p ON oi.product_id = p.id
WHERE p.name = 'Sony PlayStation 5';
```

```
mysql> SELECT c.name
-> FROM customers AS c
-> JOIN orders AS o ON c.id = o.customers_id
-> JOIN order_items AS oi ON o.id = oi.order_id
-> JOIN products AS p ON oi.product_id = p.id
-> WHERE p.name = 'Sony PlayStation 5';
```

```
+-----+
| name          |
+-----+
| Edward Torphy |
+-----+
1 row in set (0.00 sec)
```

[*] 7 Query to retrieve customer's name and order date for each order

```
> SELECT c.name AS customer_name, o.order_date
FROM customers AS c
JOIN orders AS o ON c.id = o.customers_id;
```

```
mysql> SELECT c.name AS customer_name, o.order_date  
-> FROM customers AS c  
-> JOIN orders AS o ON c.id = o.customers_id;
```

customer_name	order_date
Edward Torphy	2024-10-01
Jonas McCullough	2024-10-02
Vernon Glover	2024-10-03
Oral Mayer	2024-10-04
Hellen Jast	2024-10-05
Francisca Goyette	2024-10-06
Avery Gorczany	2024-10-07
Kathie Hane	2024-10-08
Clyde Trantow	2024-10-09
Leonard Schuppe	2024-10-10
Raymond Kemmer	2024-10-11
Adella Sawayn	2024-10-12
Enrique Zboncak	2024-10-13
Ezekiel Carter	2024-10-14
Derrick Mante	2024-10-15
Francisca Torp	2024-10-16
Reynaldo Kunze	2024-10-17
Herminia Erdman	2024-10-18
Annalise Feest	2024-10-19
Katherine Reilly	2024-10-20
Sherman Mraz	2024-10-21
Rebeca Stokes	2024-10-22

[*] 8 Query to get orders with a total amount greater than 150

```
> SELECT *  
FROM orders  
WHERE total_amount > 150.00;
```

```
mysql> SELECT *
-> FROM orders
-> WHERE total_amount > 150;
```

id	customers_id	order_date	total_amount
3	3	2024-10-03	250.00
4	4	2024-10-04	180.75
6	6	2024-10-06	350.00
8	8	2024-10-08	200.50
10	10	2024-10-10	220.00
13	13	2024-10-13	499.00
16	16	2024-10-16	300.00
19	19	2024-10-19	215.00
21	21	2024-10-21	180.00
22	22	2024-10-22	199.99
27	27	2024-10-27	220.00
28	28	2024-10-28	310.40
29	29	2024-10-29	150.75
32	32	2024-11-01	400.50
34	34	2024-11-03	310.00
35	35	2024-11-04	180.60
36	36	2024-11-05	210.00
39	39	2024-11-08	260.00

```
18 rows in set (0.00 sec)
```

[*] 9 Create order_items table to store order details

```
> CREATE TABLE order_items (
  id INT AUTO_INCREMENT PRIMARY KEY,
  order_id INT NOT NULL,
  product_id INT NOT NULL,
  quantity INT NOT NULL,
  price DECIMAL(10, 2) NOT NULL,
  FOREIGN KEY (order_id) REFERENCES orders(id)
  FOREIGN KEY (product_id) REFERENCES products(id)
);
```

[*] Update orders table to reference order_items

[*] (This involves removing any unnecessary columns from the orders table and updating the logic for data insertion)

[*] Query to get the average total of all orders

```
> SELECT AVG(total_amount) AS average_order_total
```

FROM orders;

```
mysql> SELECT AVG(total_amount) AS average_order_total  
-> FROM orders;
```

```
+-----+  
| average_order_total |  
+-----+  
|          197.760465 |  
+-----+  
1 row in set (0.02 sec)
```