

1. Retrieve All Users and Their Roles

```
SELECT u.user_id, u.full_name, u.email, r.role_name
FROM users u
JOIN user_roles r ON u.role_id = r.role_id;
```

	user_id	full_name	email	role_name
▶	18	Matthew Taylor	user18@ecommerce.com	Admin
	21	Ava Allen	user21@ecommerce.com	Admin
	22	Daniel Johnson	user22@ecommerce.com	Admin
	27	Ava Hall	user27@ecommerce.com	Admin
	30	Isabella Brown	user30@ecommerce.com	Admin
	35	Ava Jackson	user35@ecommerce.com	Admin
	36	Daniel Brown	user36@ecommerce.com	Admin
	38	Amelia White	user38@ecommerce.com	Admin
	40	Ethan Harris	user40@ecommerce.com	Admin
	42	Matthew Johnson	user42@ecommerce.com	Admin
	44	Matthew Martinez	user44@ecommerce.com	Admin
	55	Ava White	user55@ecommerce.com	Admin
	56	David Lewis	user56@ecommerce.com	Admin
	58	Michael Taylor	user58@ecommerce.com	Admin
	64	Daniel Walker	user64@ecommerce.com	Admin

2. Count Total Orders Per User

```
SELECT u.user_id, u.full_name, COUNT(o.order_id) AS total_orders
FROM users u
LEFT JOIN orders o ON u.user_id = o.user_id
GROUP BY u.user_id, u.full_name
ORDER BY total_orders DESC;
```

	user_id	full_name	total_orders
►	9888	Mia Robinson	11
	9324	Ava Hall	11
	4846	Sarah White	11
	2569	Charlotte Taylor	11
	398	Michael Walker	10
	1195	Sarah Lewis	10
	648	Isabella Clark	10
	4138	Benjamin Thompson	10
	771	William Johnson	10
	2798	Amelia Garcia	10
	1774	Charlotte Smith	10
	6509	James Smith	10
	9463	Matthew Johnson	10
	7890	Ethan Thompson	9
	7136	Sarah Rodriguez	9

3. Get Total Revenue Per Product

```

SELECT p.product_id, p.name AS product_name, SUM(oi.quantity * oi.price) AS
total_revenue
FROM products p
JOIN order_items oi ON p.product_id = oi.product_id
GROUP BY p.product_id, p.name
ORDER BY total_revenue DESC;

```

	product_id	product_name	total_revenue
▶	31	Macaroni	812236.11
	46	Baby Wipes	810864.14
	5	Whole Wheat Bread	805790.49
	67	Vodka	802807.96
	41	Laundry Detergent	802185.40
	55	First Aid Kit	798138.30
	39	Deodorant	791496.75
	57	Trash Bags	790124.25
	71	Pancake Mix	789904.25
	22	Pepsi	786575.53
	72	Granola	786529.05
	27	Canned Tuna	782739.15
	17	Potato Chips	781386.04
	4	Greek Yogurt	781210.24
	59	Toilet Paper	781172.46

4. Find the Total Number of Orders

SELECT COUNT(order_id) AS total_orders FROM orders;

	total_orders
▶	30000

5. List All Available Categories

```
SELECT DISTINCT category_name FROM categories;
```

	category_name
▶	Alcohol & Spirits
	Baby Products
	Bakery
	Beverages
	Breakfast & Cereal
	Canned Goods
	Cleaning Supplies
	Coffee & Tea
	Condiments
	Dairy & Eggs
	Frozen Foods
	Health & Wellness
	Household Items
	International Fo...
	Meat & Seafood

6. Find the Most Expensive Product

```
SELECT * FROM products ORDER BY price DESC LIMIT 1;
```

	product_id	name	description	price	brand_id	category_id	created_at
▶	43	All-Purpose Cleaner	All-Purpose Cleaner from top brands.	29.66	16	11	2021-09-21 16:37:21

7. Count Total Products by Each Brand

```
SELECT b.brand_name, COUNT(p.product_id) AS total_products
FROM brands b
JOIN products p ON b.brand_id = p.brand_id
GROUP BY b.brand_name;
```

	brand_name	total_products
▶	Campbell Soup	2
	Clorox	3
	Coca-Cola	3
	Colgate-Palmolive	3
	Conagra Brands	6
	Danone	3
	General Mills	6
	Hormel Foods	6
	Johnson & Johnson	3
	Kellogg's	3
	Kimberly-Clark	3
	Kraft Heinz	7
	L'Oréal	4
	Mars	5
	McCormick & Co	3

8. Find Average Order Value

```
SELECT AVG(total_amount) AS avg_order_value FROM orders;
```

	avg_order_value
▶	759.938292

9. Find Orders with a Specific Status (e.g., 'Shipped')

SELECT * FROM orders WHERE order_status = 'Shipped';

	order_id	user_id	total_amount	order_status	order_date
▶	2	8398	245.39	Shipped	2025-01-26 05:24:52
	3	1591	1243.67	Shipped	2025-01-01 11:45:39
	4	1280	705.36	Shipped	2025-01-08 11:08:58
	8	7156	1198.60	Shipped	2025-01-12 13:10:01
	10	8492	1057.57	Shipped	2025-01-12 18:57:40
	12	1048	1054.81	Shipped	2025-01-09 23:38:48
	26	2161	1460.16	Shipped	2025-01-04 02:02:29
	28	5015	1335.11	Shipped	2025-01-17 09:25:03
	35	577	1340.46	Shipped	2025-01-08 18:09:24
	39	1246	892.78	Shipped	2025-01-18 18:13:01
	42	3331	609.88	Shipped	2025-01-05 20:22:10
	43	9880	136.73	Shipped	2025-01-06 00:26:37
	45	6040	160.73	Shipped	2025-01-19 11:36:56
	47	8973	1399.27	Shipped	2025-01-27 02:36:32
	62	1342	344.70	Shipped	2025-01-22 11:53:24

10. List Users Who Have Written Reviews

```
SELECT DISTINCT u.user_id, u.full_name
FROM users u
JOIN reviews r ON u.user_id = r.user_id;
```


	user_id	full_name
▶	2	Daniel White
	3	Olivia Anderson
	4	Emma Walker
	5	Sarah Hall
	6	Mia Johnson
	7	John Brown
	9	Alexander Allen
	13	Benjamin Hall
	14	Daniel Smith
	15	Sophia Robinson
	16	Matthew Harris
	17	David Jackson
	18	Matthew Taylor
	19	Sarah Martinez
	21	Ava Allen

11. Retrieve Payment Details for Orders

```
SELECT p.payment_id, p.order_id, p.payment_method, p.payment_status
FROM payments p;
```

	payment_id	order_id	payment_method	payment_status
▶	1	4971	Credit Card	Failed
	2	24331	PayPal	Completed
	3	2185	Bank Transfer	Completed
	4	16540	PayPal	Completed
	5	16336	Bank Transfer	Pending
	6	18270	Cryptocurrency	Failed
	7	16764	Cryptocurrency	Failed
	8	18875	PayPal	Failed
	9	16241	Credit Card	Pending
	10	22876	PayPal	Failed
	11	1094	PayPal	Completed
	12	28304	PayPal	Completed
	13	17334	Bank Transfer	Failed
	14	2613	Credit Card	Pending
	15	15494	Cryptocurrency	Completed

12. Count Number of Unique Users Who Placed Orders

```
SELECT COUNT(DISTINCT user_id) AS unique_customers FROM orders;
```

	unique_customers
▶	9497

13. Find the Latest Orders Placed

```
SELECT * FROM orders ORDER BY order_date DESC LIMIT 5;
```


	order_id	user_id	total_amount	order_status	order_date
▶	6494	7216	1011.91	Delivered	2025-01-30 02:14:03
	647	9177	1046.63	Shipped	2025-01-30 02:08:33
	4425	5394	175.48	Shipped	2025-01-30 02:06:14
	18776	7132	474.48	Cancelled	2025-01-30 02:02:31
	15959	5647	1429.42	Shipped	2025-01-30 01:57:26

14. Find All Users Who Have Made a Purchase in the Last 30 Days

SELECT DISTINCT user_id FROM orders WHERE order_date >= NOW() - INTERVAL 30 DAY;

	user_id
▶	7393
	8398
	1591
	1280
	7527
	5048
	5447
	7156
	1770
	8492
	5442
	1048
	2697
	376
	6119

15. Retrieve the Most Recent Reviews

```
SELECT * FROM reviews ORDER BY created_at DESC LIMIT 5;
```

	review_id	user_id	product_id	rating	review_text	created_at
►	19775	5797	28	1	Eye spring teach black upon decide movement d...	2025-01-30 15:57:38
	6	9103	60	2	Represent process real myself pay source heart...	2025-01-30 15:57:28
	14220	1427	25	4	Your offer amount generation worker suddenly ...	2025-01-30 15:57:02
	2251	73	42	3	People anything PM develop only me read team ...	2025-01-30 15:56:05
	11533	833	62	1	In power money program radio kind social must ...	2025-01-30 15:55:13
