Assignemnt No.4

1. Find the total amount spent by customer ID 3 (sum of all their orders).

Code :-

```
SELECT SUM(total_amount) AS total_spent
FROM Orders 230 WHERE customer id = 3;
```

Output:-

2. Find the total revenue generated from all orders.

Code:-

```
SELECT SUM(total_amount) AS total_revenue FROM Orders 230;
```

Output:-



3. Calculate the stock value (price × stock) for each product.

Code:-

```
SELECT product_id,name,category, (price*stock) AS "stock value" From products 230;
```

Output:-

product_id	name	 category	++ stock value
1 2 3 4 5	Laptop Pro Smartphone X Tablet S Bluetooth Headphones Wireless Mouse	Electronics Electronics Electronics Accessories Accessories	12000.00 4000.00 4800.00 1800.00 600.00
6 7 8	Office Chair Desk Lamp T-Shirt	Furniture Home Decor Clothing	750.00 400.00 1250.00
9 10 	Winter Jacket Gaming Keyboard	Clothing Electronics	1200.00 1200.00 0.00

4. Retrieve customers who are above 30 years old and live in "New York".

Code :-

SELECT product_id, name, category, price, stock, (price * stock) AS stock_value FROM Products_230;

Output :-

+	+	+	+	+	++
product_id	name	category	price	stock	stock_value
+	+	+	+	+	++
1	Laptop Pro	Electronics	1200.00	10	12000.00
2	Smartphone X	Electronics	800.00	5	4000.00
3	Tablet S	Electronics	600.00	8	4800.00
4	Bluetooth Headphones	Accessories	150.00	12	1800.00
5	Wireless Mouse	Accessories	30.00	20	600.00
6	Office Chair	Furniture	250.00	3	750.00
7	Desk Lamp	Home Decor	40.00	10	400.00
8	T-Shirt	Clothing	25.00	50	1250.00
9	Winter Jacket	Clothing	80.00	15	1200.00
10	Gaming Keyboard	Electronics	90.00	0	0.00
+	+	+	+	+	++

4. Retrieve customers who are above 30 years old and live in "New York".

Code:

SELECT *from Customers_230

WHERE age >= 30 and city = "New York";

Output:-

++	++		++	+
customer_id	name	email	city	age
+	+		+ N= V=- -	+ 25 l
1 1	John Doe	john.doe@gmail.com	New York	35

5. Find customers who either live in "Los Angeles" or have placed an order worth more than \$500.

Code:-

SELECT *from customers_230

WHERE city = "Los Angeles" or customer_id IN (select customer_id from orders_230 where total_amount > 500);

Output:-

customer_id	name	email	 city	age
	John Doe	john.doe@gmail.com	New York	35
3	Alice Smith Robert Brown	alice.smith@yahoo.com robert.brown@outlook.com	Los Angeles Chicago	28 40
	Michael Wilson Daniel Martinez	michael.wilson@gmail.com daniel.martinez@gmail.com	Miami Los Angeles	33
	Olivia Anderson William Thomas	olivia.anderson@yahoo.com william.thomas@gmail.com	Chicago Boston	27 32

6. List products that are in stock but cost less than \$50.

Code:-

SELECT *from products_230

WHERE stock > 0 AND price < 50;

Outpuut :-

++ product_id	name	category	++ price	stock
j 7 j	Wireless Mouse Desk Lamp T-Shirt	Accessories Home Decor Clothing	30.00 40.00 25.00	20 10 50

7. Find Products That Have Less Than 5 Items in Stock

Code :-

SELECT *from products_230

Where stock < 5;

Output :-

+ product_id name +	+ category +	+ price +	+ stock
6 Office Chair 10 Gaming Keyboard		:	3 0

8. Find orders that are not completed (status is not 'Completed').

Code :-

Select *from orders_230

where status not in ("Completed");

Output :-

+	+	+		+	++
1	order_id	customer_id	order_date	total_amount	status
+	+	+		+	++
1	2	2	2024-02-20	1200.00	Shipped
П	4	4	2024-04-10	450.00	Pending
П	6	6	2024-06-30	300.00	Cancelled
1	8	8	2024-08-25	900.00	Shipped
П	9	9	2024-09-12	700.00	Pending
ĺ	10	10	2024-10-05	50.00	Delivered
+		+			++

9. Find products that are out of stock or belong to the "Electronics" category.

Code :-

SELECT *from products_230

WHERE category = "Electronics";

Output:-

+ product_id +	 name	category	+ price +	++ stock +
1 2	Laptop Pro Smartphone X Tablet S	Electronics Electronics Electronics	1200.00 800.00 600.00	10 5 8
10		Electronics	90.00	0 0

10. List all email addresses that belong to Gmail.

Code:-

SELECT *from customers 230

WHERE email LIKE "%@gmail%";

Output:-

+ customer_id	name	email	 city	+ age
1	John Doe	john.doe@gmail.com	New York	35
4	Emily Davis	emily.davis@gmail.com	San Francisco	25
5	Michael Wilson	michael.wilson@gmail.com	Miami	33
7	Daniel Martinez	daniel.martinez@gmail.com	Los Angeles	31
9	William Thomas	william.thomas@gmail.com	Boston	32
10	Emma Harris	emma.harris@gmail.com	Houston	26

11. Find product names containing the word "Phone".

Code:-

SELECT *from products 230

WHERE name LIKE "%phone%";

Output:-

+ product_id +	name	category	 price 	stock
:	Smartphone X Bluetooth Headphones	Electronics Accessories	:	5 12

12. Find customers whose names have exactly 5 characters.

Code:-

SELECT *from customers_230

WHERE LENGTH(name) = 5;

Output:-

OK, 0 records retrieved in 0.993ms

13. Find Products That Have "Laptop" or "Tablet" in Their Name

Code :-

SELECT * FROM products_230

WHERE name LIKE '%Laptop%' OR name LIKE '%Tablet%';

Output :-

product_id name	category	+ price	+ stock
1 Laptop Pro	Electronics		10
3 Tablet S	Electronics		8

14. Retrieve orders placed in the year 2024.

Code :-

SELECT *from orders_230

WHERE YEAR(order_date) = 2024;

Output :-

++			·	++
order_id	customer_id	order_date	total_amount	status
1	1	2024-01-15	750.00	Completed
2	2	2024-02-20	1200.00	Shipped
3	3	2024-03-05	2300.00	Completed
4	4	2024-04-10	450.00	Pending
5	5	2024-05-22	600.00	Completed
6	6	2024-06-30	300.00	Cancelled
7	7	2024-07-18	550.00	Completed
8	8	2024-08-25	900.00	Shipped
9	9	2024-09-12	700.00	Pending
10	10	2024-10-05	50.00	Delivered
++		 	+	++

15. Find customers who live in "New York", "Los Angeles", or "Chicago".

Code:-

SELECT *from customers_230

where city in ("New York","Los Angeles","Chicago");

Output :-

+ customer_id	 name	email	+ city +	++ age
3 6 7	John Doe Alice Smith Robert Brown Sophia Taylor Daniel Martinez Olivia Anderson	john.doe@gmail.com alice.smith@yahoo.com robert.brown@outlook.com sophia.taylor@hotmail.com daniel.martinez@gmail.com olivia.anderson@yahoo.com	New York Los Angeles Chicago New York Los Angeles Chicago	35 28 40 29 31 27

16. List products that do not belong to the 'Electronics' or 'Clothing' categories.

Code:-

SELECT *from products_230

WHERE category NOT IN ('Electronics', 'Clothing');

Output:-

+		category	+	
product_id	name		price	stock
•	Bluetooth Headphones Wireless Mouse Office Chair Desk Lamp	Accessories Accessories Furniture Home Decor	150.00 30.00 250.00 40.00	12 20 3 10

17. Find orders placed by customers with IDs 1, 3, or 5.

Code:-

SELECT *from orders_230

WHERE customer_id IN (1,3,5);

Output :-

+ order_id	customer_id	order_date	+ total_amount	++ status
1 3 5	3	2024-01-15 2024-03-05 2024-05-22	2300.00	Completed Completed Completed

18. Find customers who have not placed any orders.

Code:-

SELECT * FROM customers_ 230

WHERE customer id NOT IN (SELECT customer id FROM orders 230);

Output:-

OK, 0 records retrieved in 0.997ms

19. Show All Orders Placed in the Last 30 Days

Code:-

SELECT * FROM orders_230

WHERE order_date >= DATE_SUB(CURDATE(), INTERVAL 30 DAY);

Ouput :-

OK, 0 records retrieved in 0.997ms

20. Find Orders Where the Total Amount is an Exact Multiple of 100

Code:-

SELECT * FROM orders_230

WHERE total amount % 100 = 0;

Output :-

+ order_id +	+ customer_id +	 order_date 	+ total_amount +	++ status
2 3 5 6 8	2 3 5 6 8	2024-02-20 2024-03-05 2024-05-22 2024-06-30 2024-08-25 2024-09-12	1200.00 2300.00 600.00 300.00 900.00	Shipped Completed Completed Cancelled Shipped Pending