

Assignment 3

1) Display Shopper's information along with number of orders he/she placed during last 30 days.

// user table

user_id	email_id	password	phone	type	created_at
1	john.doe@example.com	password123	9876543210	SHOPPER	2025-03-24 17:28:18
2	jane.smith@example.com	securePass1	9123456789	ADMIN	2025-03-24 17:28:18
3	alice.jones@example.com	alicePass99	9987654321	SHOPPER	2025-03-24 17:28:18
4	bob.brown@example.com	brownie456	9785641230	SHOPPER	2025-03-24 17:28:18
5	charlie.davis@example.com	charlie789	9432167890	SHOPPER	2025-03-24 17:28:18
6	emily.wilson@example.com	wilson123	9551234567	SHOPPER	2025-03-24 17:28:18
7	daniel.lee@example.com	leePass555	9987412365	ADMIN	2025-03-24 17:28:18
8	olivia.moore@example.com	oliviaPass	9911223344	SHOPPER	2025-03-24 17:28:18
9	henry.taylor@example.com	henryPass	9109876543	SHOPPER	2025-03-24 17:28:18
10	sophia.anderson@example.com	sophia123	8899776655	SHOPPER	2025-03-24 17:28:18

// orders table

order_id	user_id	cart_value	order_date	address_id
1	1	250.75	2025-03-24 17:28:32	1
2	2	1250.00	2025-03-24 17:28:32	2
3	3	99.99	2025-03-24 17:28:32	3
4	4	320.50	2025-03-24 17:28:32	4
5	5	45.90	2025-03-24 17:28:32	5
6	6	560.00	2025-03-24 17:28:32	6
7	7	670.45	2025-03-24 17:28:32	7
8	8	149.99	2025-03-24 17:28:32	8
9	9	240.10	2025-03-24 17:28:32	9
10	10	299.80	2025-03-24 17:28:32	10

```

SELECT
    u.type AS Shopper_name ,
    u.user_id, u.email_id ,
    COUNT(o.order_id) AS Orders_count
FROM
    Users u
INNER JOIN
    Orders o ON o.user_id = u.user_id
WHERE
    u.type = 'SHOPPER' AND o.order_date > NOW() - INTERVAL 30 DAY
GROUP BY
    u.user_id ,u.user_id, u.email_id ;

```

// result table

Shopper_name	user_id	email_id	Orders_count
SHOPPER	1	john.doe@example.com	1
SHOPPER	3	alice.jones@example.com	1
SHOPPER	4	bob.brown@example.com	1
SHOPPER	5	charlie.davis@example.com	1
SHOPPER	6	emily.wilson@example.com	1
SHOPPER	8	olivia.moore@example.com	1
SHOPPER	9	henry.taylor@example.com	1
SHOPPER	10	sophia.anderson@example.com	1

2) Display the top 10 Shoppers who generated maximum number of revenue in last 30 days.

// user table

user_id	email_id	password	phone	type	created_at
1	john.doe@example.com	password123	9876543210	SHOPPER	2025-03-24 17:28:18
2	jane.smith@example.com	securePass1	9123456789	ADMIN	2025-03-24 17:28:18
3	alice.jones@example.com	alicePass99	9987654321	SHOPPER	2025-03-24 17:28:18
4	bob.brown@example.com	brownie456	9785641230	SHOPPER	2025-03-24 17:28:18
5	charlie.davis@example.com	charlie789	9432167890	SHOPPER	2025-03-24 17:28:18
6	emily.wilson@example.com	wilson123	9551234567	SHOPPER	2025-03-24 17:28:18
7	daniel.lee@example.com	leePass555	9987412365	ADMIN	2025-03-24 17:28:18
8	olivia.moore@example.com	oliviaPass	9911223344	SHOPPER	2025-03-24 17:28:18
9	henry.taylor@example.com	henryPass	9109876543	SHOPPER	2025-03-24 17:28:18
10	sophia.anderson@example.com	sophia123	8899776655	SHOPPER	2025-03-24 17:28:18

// orders table

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6	6	560.00	2025-03-24 17:28:32	6
7	7	670.45	2025-03-24 17:28:32	7
8	8	149.99	2025-03-24 17:28:32	8
9	9	240.10	2025-03-24 17:28:32	9
10	10	299.80	2025-03-24 17:28:32	10

```

SELECT u.user_id,
       u.type,
       u.email_id,
       SUM(o.cart_value)
FROM Users u
INNER JOIN Orders o
ON o.user_id = u.user_id
WHERE u.type = 'SHOPPER'
GROUP BY u.user_id, u.type , u.email_id
ORDER BY SUM(o.cart_value) DESC
LIMIT 10;

```

// result table

user_id	type	email_id	SUM(o.cart_value)
6	SHOPPER	emily.wilson@example.com	560.00
4	SHOPPER	bob.brown@example.com	320.50
10	SHOPPER	sophia.anderson@example.com	299.80
1	SHOPPER	john.doe@example.com	250.75
9	SHOPPER	henry.taylor@example.com	240.10
8	SHOPPER	olivia.moore@example.com	149.99
3	SHOPPER	alice.jones@example.com	99.99
5	SHOPPER	charlie.davis@example.com	45.90

3) Display top 20 Products which are ordered most in last 60 days along with numbers.

// product table

product_id	product_name	order_item_id	price	stock_count	image_url	category_id	child_category_name	created_at
1	iPhone 13	1	1000	50	url1	1	Mobile Phones	2025-03-24 17:53:30
2	MacBook Air	2	1500	30	url2	1	Laptops	2025-03-24 17:53:30
3	Men's T-Shirt	3	20	200	url3	2	Men's Wear	2025-03-24 17:53:30
4	Women's Dress	4	50	150	url4	2	Women's Wear	2025-03-24 17:53:30
5	Blender	5	45	100	url5	3	Kitchen Appliances	2025-03-24 17:53:30
6	Novel - XYZ	6	10	300	url6	4	Fiction	2025-03-24 17:53:30
7	Biography - ABC	7	15	120	url7	4	Non-fiction	2025-03-24 17:53:30
8	Dumbbells	8	30	80	url8	5	Fitness	2025-03-24 17:53:30
9	Tent	9	100	50	url9	5	Outdoor	2025-03-24 17:53:30
10	Study Desk	10	200	40	url10	7	Study Tables	2025-03-24 17:53:30

// order_item table

order_item_id	order_id	quantity_added	total
1	1	2	2000
2	2	5	7500
3	3	1	20
4	4	2	100
5	5	3	135
6	6	4	40
7	7	2	30
8	8	3	90
9	9	2	200
10	10	1	200

// orders table

order_id	user_id	cart_value	order_date	address_id
1	1	250.75	2025-03-24 17:28:32	1
2	2	1250.00	2025-03-24 17:28:32	2
3	3	99.99	2025-03-24 17:28:32	3
4	4	320.50	2025-03-24 17:28:32	4
5	5	45.90	2025-03-24 17:28:32	5
6	6	560.00	2025-03-24 17:28:32	6
7	7	670.45	2025-03-24 17:28:32	7
8	8	149.99	2025-03-24 17:28:32	8
9	9	240.10	2025-03-24 17:28:32	9
10	10	299.80	2025-03-24 17:28:32	10

```

SELECT
    p.product_name AS NAME,
    COUNT(oi.quantity_added) AS Order_Count
FROM
    Product p
INNER JOIN
    Order_item oi ON oi.order_item_id = p.order_item_id
INNER JOIN
    Orders o ON o.order_id = oi.order_id
WHERE
    o.order_date > NOW() - INTERVAL 60 DAY
GROUP BY
    p.product_name
ORDER BY
    Order_Count DESC
LIMIT 20;

```

// result table

NAME	Order_Count
iPhone 13	1
MacBook Air	1
Men's T-Shirt	1
Women's Dress	1
Blender	1
Novel - XYZ	1
Biography - ABC	1
Dumbbells	1
Tent	1
Study Desk	1

4) Display Monthly sales revenue of the StoreFront for last 6 months. It should display each month's sale.

```
SELECT
  CASE
    WHEN order_date BETWEEN '2024-10-01' AND '2024-10-31' THEN 'Month 1'
    WHEN order_date BETWEEN '2024-11-01' AND '2024-11-30' THEN 'Month 2'
    WHEN order_date BETWEEN '2024-12-01' AND '2024-12-31' THEN 'Month 3'
    WHEN order_date BETWEEN '2025-01-01' AND '2025-01-30' THEN 'Month 4'
    WHEN order_date BETWEEN '2025-02-01' AND '2025-02-27' THEN 'Month 5'
    WHEN order_date BETWEEN '2025-03-01' AND '2025-03-27' THEN 'Month 6'
    ELSE 'Before 6 months'
  END AS Month,
  SUM(cart_value) AS Sales
FROM
  Orders
GROUP BY
  CASE
    WHEN order_date BETWEEN '2024-10-01' AND '2024-10-31' THEN 'Month 1'
    WHEN order_date BETWEEN '2024-11-01' AND '2024-11-30' THEN 'Month 2'
    WHEN order_date BETWEEN '2024-12-01' AND '2024-12-31' THEN 'Month 3'
    WHEN order_date BETWEEN '2025-01-01' AND '2025-01-30' THEN 'Month 4'
    WHEN order_date BETWEEN '2025-02-01' AND '2025-02-27' THEN 'Month 5'
    WHEN order_date BETWEEN '2025-03-01' AND '2025-03-27' THEN 'Month 6'
    ELSE 'Before 6 months'
  END;
```

// result table

Month	Sales
Month 6	7888.73
Month 5	1200.00
Month 4	500.25
Month 3	800.40
Month 2	1900.65
Month 1	3501.00
Before 6 months	2101.40

5) Mark the products as Inactive which are not ordered in last 90 days.

// product

product_id	product_name	order_item_id	price	stock_count	image_url	category_id	child_category_name	created_at
1	iPhone 13	1	1000	50	url1	1	Mobile Phones	2025-03-24 17:53:30
2	MacBook Air	2	1500	30	url2	1	Laptops	2025-03-24 17:53:30
3	Men's T-Shirt	3	20	200	url3	2	Men's Wear	2025-03-24 17:53:30
4	Women's Dress	4	50	150	url4	2	Women's Wear	2025-03-24 17:53:30
5	Blender	5	45	100	url5	3	Kitchen Appliances	2025-03-24 17:53:30
6	Novel - XYZ	6	10	300	url6	4	Fiction	2025-03-24 17:53:30
7	Biography - ABC	7	15	120	url7	4	Non-fiction	2025-03-24 17:53:30
8	Dumbbells	8	30	80	url8	5	Fitness	2025-03-24 17:53:30
9	Tent	9	100	50	url9	5	Outdoor	2025-03-24 17:53:30
10	Study Desk	10	200	40	url10	7	Study Tables	2025-03-24 17:53:30

/ order_item

order_item_id	order_id	quantity_added	total
1	1	2	2000
2	2	5	7500
3	3	1	20
4	4	2	100
5	5	3	135
6	6	4	40
7	7	2	30
8	8	3	90
9	9	2	200
10	10	1	200

// orders

order_id	user_id	cart_value	order_date	address_id
1	1	250.75	2025-03-24 17:28:32	1
2	2	1250.00	2025-03-24 17:28:32	2
3	3	99.99	2025-03-24 17:28:32	3
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7	7	670.45	2025-03-24 17:28:32	7
8	8	149.99	2025-03-24 17:28:32	8
9	9	240.10	2025-03-24 17:28:32	9
10	10	299.80	2025-03-24 17:28:32	10
19	1	1500.50	2025-03-18 17:54:11	111
20	2	2500.75	2025-03-08 17:54:11	112
21	3	1200.00	2025-02-11 17:54:11	113
22	4	500.25	2025-01-27 17:54:11	114
23	5	800.40	2024-12-28 17:54:11	115
24	1	400.15	2024-11-28 17:54:11	111
25	3	1000.25	2024-10-29 17:54:11	113
26	2	300.75	2024-09-29 17:54:11	112
27	1	1500.50	2024-11-28 18:01:21	111
28	2	2500.75	2024-10-29 18:01:21	112
29	3	800.40	2024-09-29 18:01:21	113
30	4	1000.25	2024-09-09 18:01:21	114

```

SELECT p.product_name AS Product_name ,
       CASE
         WHEN o.order_date > NOW() - INTERVAL 90 DAY THEN 'INACTIVE'
         ELSE 'ACTIVE'
       END AS Status
FROM
  Product p
INNER JOIN
  Order_item oi ON oi.order_item_id = p.order_item_id
INNER JOIN
  Orders o ON o.order_id = oi.order_id ;

```

// result table

Product_name	Status
iPhone 13	INACTIVE
MacBook Air	INACTIVE
Men's T-Shirt	INACTIVE
Women's Dress	INACTIVE
Blender	INACTIVE
Novel - XYZ	INACTIVE
Biography - ABC	INACTIVE
Dumbbells	INACTIVE
Tent	INACTIVE
Study Desk	INACTIVE

6) Given a category search keyword, display all the Products present in this category/categories.

// category table

category_id	category_name
9	Beauty
4	Books
2	Clothing
1	Electronics
7	Furniture
10	Groceries
3	Home Appliances
5	Sports
8	Stationery
6	Toys

//product table

product_id	product_name	order_item_id	price	stock_count	image_url	category_id	child_category_name	created_at
1	iPhone 13	1	1000	50	url1	1	Mobile Phones	2025-03-24 17:53:30
2	MacBook Air	2	1500	30	url2	1	Laptops	2025-03-24 17:53:30
3	Men's T-Shirt	3	20	200	url3	2	Men's Wear	2025-03-24 17:53:30
4	Women's Dress	4	50	150	url4	2	Women's Wear	2025-03-24 17:53:30
5	Blender	5	45	100	url5	3	Kitchen Appliances	2025-03-24 17:53:30
6	Novel - XYZ	6	10	300	url6	4	Fiction	2025-03-24 17:53:30
7	Biography - ABC	7	15	120	url7	4	Non-fiction	2025-03-24 17:53:30
8	Dumbbells	8	30	80	url8	5	Fitness	2025-03-24 17:53:30
9	Tent	9	100	50	url9	5	Outdoor	2025-03-24 17:53:30
10	Study Desk	10	200	40	url10	7	Study Tables	2025-03-24 17:53:30

```

SELECT
    p.product_name AS Product_Name ,
    p.product_id AS Product_id
FROM Category c
INNER JOIN Product p
ON c.category_id = p.category_id
WHERE c.category_name = "ELECTRONICS";

```

// result table

Product_Name	Product_id
iPhone 13	1
MacBook Air	2

7) Display top 10 Items which were cancelled most.

// order_item table

order_item_id	order_id	quantity_added	total
1	1	2	2000
2	2	5	7500
3	3	1	20
4	4	2	100
5	5	3	135
6	6	4	40
7	7	2	30
8	8	3	90
9	9	2	200
10	10	1	200

// order_status table

order_item_id	status	updated_at
1	SHIPPED	2025-03-24 17:29:09
2	CANCELED	2025-03-24 17:29:09
3	RETURNED	2025-03-24 17:29:09
4	SHIPPED	2025-03-24 17:29:09
5	SHIPPED	2025-03-24 17:29:09
6	SHIPPED	2025-03-24 17:29:09
7	CANCELED	2025-03-24 17:29:09
8	RETURNED	2025-03-24 17:29:09
9	SHIPPED	2025-03-24 17:29:09
10	SHIPPED	2025-03-24 17:29:09

```

SELECT p.product_name AS Product_name ,
       COUNT(os.status) AS Cancelled_Count
FROM
    Order_item oi
INNER JOIN
    Order_status os ON oi.order_item_id = os.order_item_id
INNER JOIN
    Product p ON p.order_item_id = oi.order_item_id
WHERE
    os.status = "CANCELED"
GROUP BY
    p.product_name
ORDER BY
    Cancelled_Count DESC
LIMIT 5;

```

// result table

Product_name	Cancelled_Count
MacBook Air	1
Biography - ABC	1