AJEENKYA D Y PATIL UNIVERSITY
THE INNOVATION UNIVERSITY
School of Engineering

TITLE : DROPSHIPPING BUSINESS WEBSITE (SHOPIFY)

GROUP MEMBERS	URN
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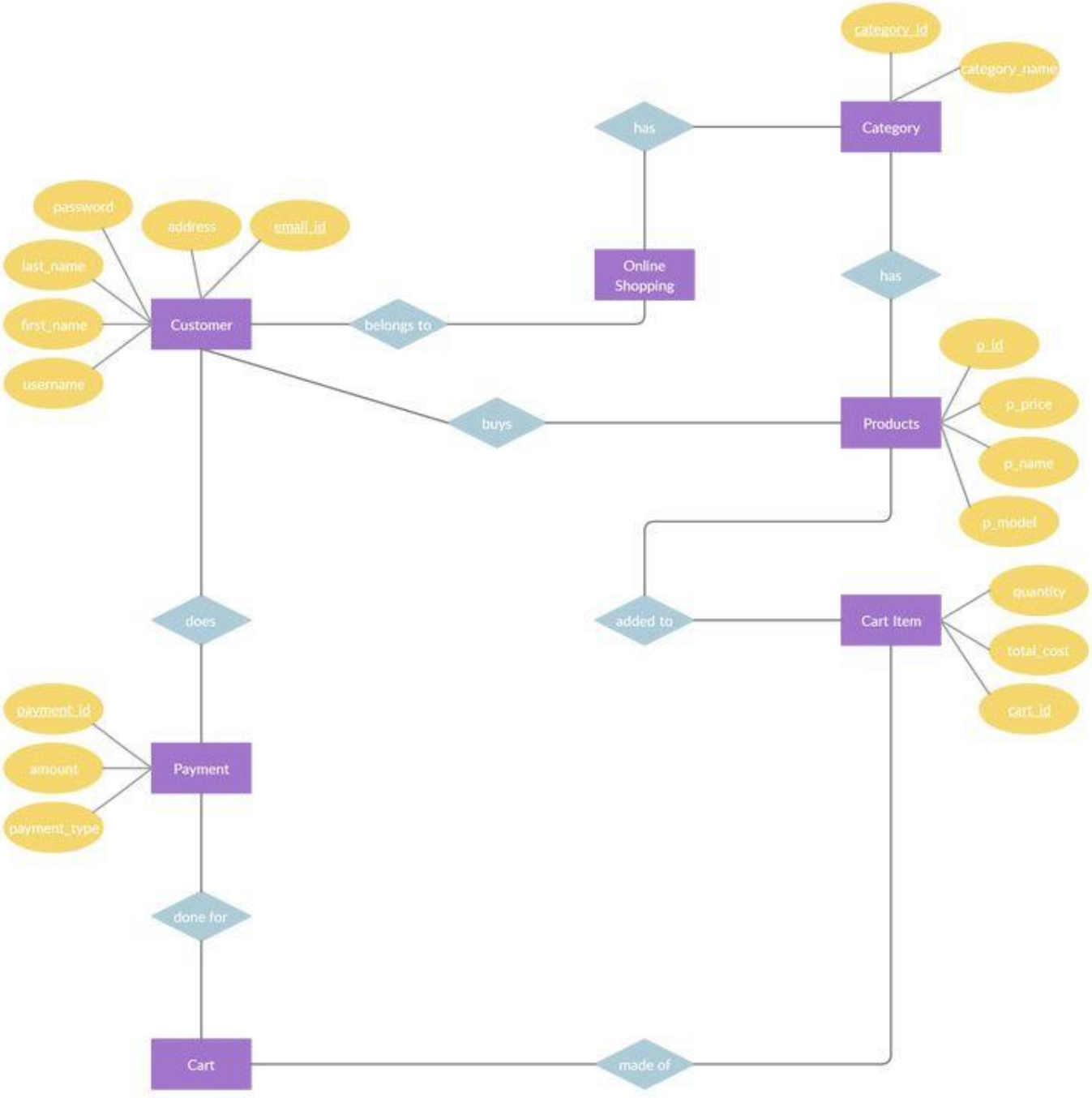
Assignment 1

Problem Statement: - Creating a MySQL project for Drop shipping business which is like a website like (Shopify) in which we can sell any product from the owner and get it's token for like 10-20% . It's more like a side business.

ER-Diagram:



Database Schema:-

1. Customers table:

Customer_id, First_name, Last_name, Email, Phone_number

customer_id	first_name	last_name	email	phone_number
1	John	Doe	john.doe@example.com	+1234567890
2	Jane	Smith	jane.smith@example.com	+9876543210
3	Alice	Johnson	alice.johnson@example.com	+5551234567
4	Michael	Brown	michael.brown@example.com	+8887654321
5	David	Miller	david.miller@example.com	+4443210987
6	Sarah	Garcia	sarah.garcia@example.com	+3332109876
7	Emily	Clark	emily.clark@example.com	+2221098765
8	Matthew	Lewis	matthew.lewis@example.com	+1110987654
9	Jennifer	Robinson	jennifer.robinson@example.com	+9990876543
10	Daniel	Williams	daniel.williams@example.com	+8880765432

2. Orders table:

Order_id, customer_id, order_date, order_total

order_id	customer_id	order_date	order_total
1	1	2024-04-10	150.00
2	2	2024-04-11	225.50
3	3	2024-04-12	80.75
4	4	2024-04-08	312.99
5	5	2024-04-09	107.20
6	6	2024-04-10	450.00
7	7	2024-04-11	188.40
8	8	2024-04-08	271.15
9	9	2024-04-09	623.50
10	10	2024-04-10	99.99

3. **Products table:**

Product_id, name, description, price, category, image_url

product_id	name	description	price	category	image_url
1	Blue Denim Jeans	Classic straight-leg denim jeans	49.99	Clothing	https://example.com/denimjeans.jpg
2	Cotton T-Shirt	Comfortable and stylish t-shirt	19.99	Clothing	https://example.com/tshirt.jpg
3	Running Shoes	Lightweight shoes for running and exercise	79.99	Footwear	https://example.com/runningshoes.jpg
4	Leather Wallet	Sleek and functional leather wallet	34.99	Accessories	https://example.com/wallet.jpg
5	Wireless Headphones	High-quality sound for music and calls	99.99	Electronics	https://example.com/headphones.jpg
6	Laptop Backpack	Durable backpack for carrying your laptop	54.99	Bags	https://example.com/backpack.jpg
7	Wristwatch	Stylish and functional wristwatch	89.99	Accessories	https://example.com/watch.jpg
8	Sunglasses	Protect your eyes from the sun in style	24.99	Accessories	https://example.com/sunglasses.jpg
9	Dress	Elegant dress for any occasion	74.99	Clothing	https://example.com/dress.jpg
10	Sports Bra	Supportive bra for workouts	29.99	Activewear	https://example.com/sportsbra.jpg

4. **Order items table:**

order_item_id, order_id, product_id, quantity

order_item_id	order_id	product_id	quantity
1	1	2	1
2	2	4	2
3	3	1	3
4	4	7	1
5	5	8	2
6	6	3	1
7	7	5	4
8	8	6	2
9	9	9	3
10	10	10	1

Assignment 2

Questions:-

Let's consider only one table for generating 10 questions: -

Question 1: Retrieve first name of all the customers in the database.

Question: How to add column name ‘age’ in a table.

Question 3: Remove the column bag in the table customers.

Question 4: How to use WHERE clause in a table?

Question 5: Use AND clause in the following database.

Question 6: Use LIKE operator in the following database.

Question 7: Use NOT operator in the following database.

Question 8: Use OR operator in the following database.

Question 9: Use BETWEEN operators in the following database.

Question 10: Use IN operator in the following database.

Let's consider only two tables for generating 10 questions: -

Question1: How many total orders were placed in the last week?

Question 2: What are the top 3 most expensive products in the Myntraa catalogue?

Question 3: For a specific customer (ID 10), what are their past 5 orders?

Question 4: What is the average order value (total spent per order) in the last month?

Question 5: Which product categories have seen the most sales in total quantity?

Question 6**:** Find all customers who have placed an order in the last month but haven't placed any orders before that.

Question 7: List the first name, last name, and total number of orders placed for each customer.

Question 8: Which customer has placed the most orders?

Question 9: Find all the customers who have not placed any orders in the last month.

Question 10: Find all orders placed before a specific date.

Let's consider only three tables for generating 10 questions: -

Question 1: What is the average order value for orders placed on weekends?

Question 2: Find all orders with a total amount exceeding Rs. 2000 that were placed by customers whose first name starts with the letter “A”.

Question 3: Find all orders placed between two specific dates.

Question 4: List the 10 most recent orders placed.

Question 5: Find all products with a specific product name.

Question 6: List the 5 most expensive products in the catalogue.

Question 7: What is the total revenue generated from orders placed on a specific day of the week?

Question 8: List the 10 most recent orders placed.

Question 9: Find all customers with a specific email address.

Question 10: What percentage of customers who have placed an order in the last 3 months haven’t placed any orders before that period?

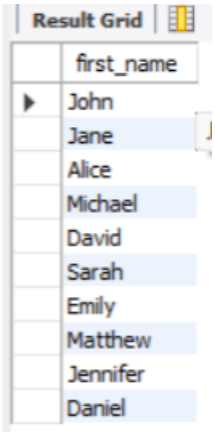
Assignment 3

Question 1: Retrieve first name of all the customers in the database.

Ans. To retrieve all the first name in database, you can use SELECT query on the ‘customers’ table.

```
1 •  select first_name
2    from customers;
```

Output:



Result Grid

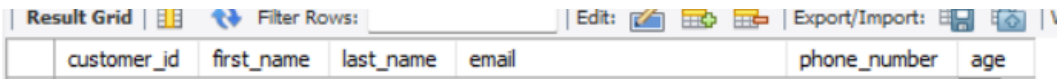
first_name
John
Jane
Alice
Michael
David
Sarah
Emily
Matthew
Jennifer
Daniel

Question 2: How to add column name ‘age’ in a table.

Ans. To add column in a table we have to ALTER command.

```
1 •  alter table customers
2    add age int;
```

Output:



Result Grid | Filter Rows: | Edit: | Export/Import:

customer_id	first_name	last_name	email	phone_number	age

Question 3: Remove the column bag in the table customers.

Ans. To remove a column bag in the table customers we need to use ALTER command.

```
1 •  alter table customers
2    drop age;
```

Output:

Result Grid | Filter Rows: | Edit: | Export/Import:

customer_id	first_name	last_name	email	phone_number
1	John	Doe	john.doe@example.com	+1234567890
2	Jane	Smith	jane.smith@example.com	+9876543210
3	Alice	Johnson	alice.johnson@example.com	+5551234567
4	Michael	Brown	michael.brown@example.com	+8887654321
5	David	Miller	david.miller@example.com	+4443210987
6	Sarah	Garcia	sarah.garcia@example.com	+3332109876
7	Emily	Clark	emily.clark@example.com	+2221098765
8	Matthew	Lewis	matthew.lewis@example.com	+1110987654
9	Jennifer	Robinson	jennifer.robinson@example.com	+9990876543
10	Daniel	Williams	daniel.williams@example.com	+8880765432

Question 4: How to use WHERE clause in a table?

Ans.

```
•  SELECT * FROM orders
   WHERE order_date >= '2024-04-01';
```

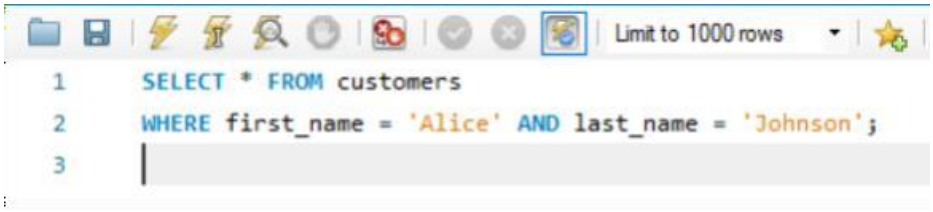
Output:

Result Grid | Filter Rows: | Edit:

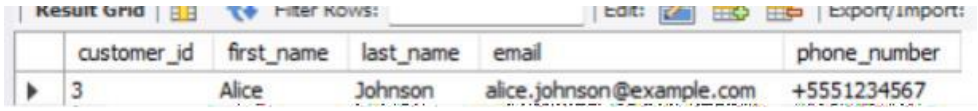
order_id	customer_id	order_date	order_total
1	1	2024-04-10	150.00
2	2	2024-04-11	225.50
3	3	2024-04-12	80.75
4	4	2024-04-08	312.99
5	5	2024-04-09	107.20
6	6	2024-04-10	450.00
7	7	2024-04-11	188.40
8	8	2024-04-08	271.15
9	9	2024-04-09	623.50
10	10	2024-04-10	99.99

Question 5: Use AND clause in the following database.

Ans.



Output:



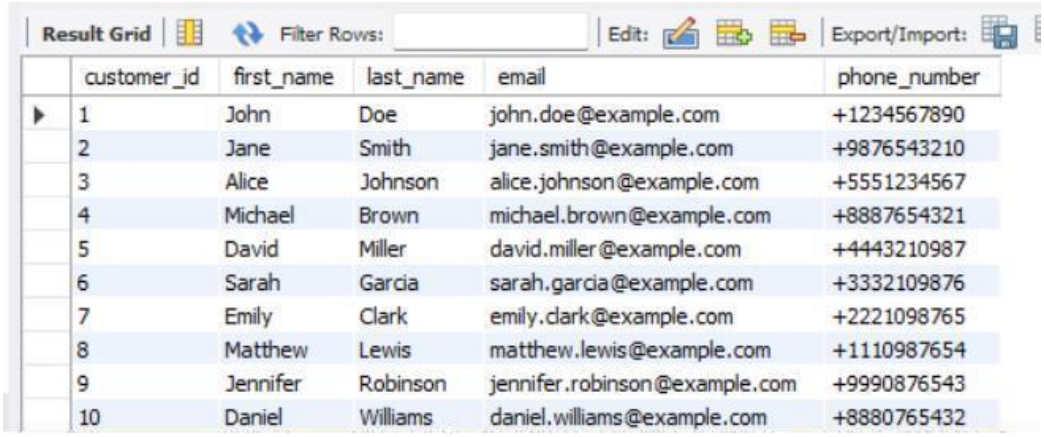
customer_id	first_name	last_name	email	phone_number
3	Alice	Johnson	alice.johnson@example.com	+5551234567

Question 6: Use LIKE operator in the following database.

Ans.

```
SELECT * FROM customers
WHERE email NOT LIKE '%@gmail.com';
```

Output:



Result Grid | Filter Rows: | Edit: | Export/Import:

customer_id	first_name	last_name	email	phone_number
1	John	Doe	john.doe@example.com	+1234567890
2	Jane	Smith	jane.smith@example.com	+9876543210
3	Alice	Johnson	alice.johnson@example.com	+5551234567
4	Michael	Brown	michael.brown@example.com	+8887654321
5	David	Miller	david.miller@example.com	+4443210987
6	Sarah	Garcia	sarah.garcia@example.com	+3332109876
7	Emily	Clark	emily.clark@example.com	+2221098765
8	Matthew	Lewis	matthew.lewis@example.com	+1110987654
9	Jennifer	Robinson	jennifer.robinson@example.com	+9990876543
10	Daniel	Williams	daniel.williams@example.com	+8880765432

Question 7: Use NOT operator in the following database.

Ans.

```
1 •   SELECT * FROM customers
2     WHERE phone_number NOT LIKE '888%';
3
```

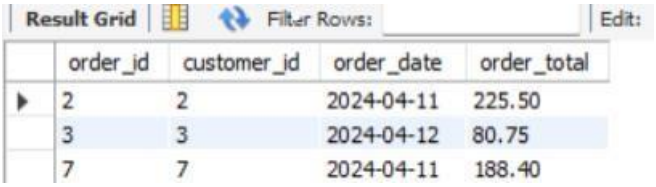
Output:

customer_id	first_name	last_name	email	phone_number
1	John	Doe	john.doe@example.com	+1234567890
2	Jane	Smith	jane.smith@example.com	+9876543210
3	Alice	Johnson	alice.johnson@example.com	+5551234567
4	Michael	Brown	michael.brown@example.com	+8887654321
5	David	Miller	david.miller@example.com	+4443210987
6	Sarah	Garcia	sarah.garcia@example.com	+3332109876
7	Emily	Clark	emily.clark@example.com	+2221098765
8	Matthew	Lewis	matthew.lewis@example.com	+1110987654
9	Jennifer	Robinson	jennifer.robinson@example.com	+9990876543
10	Daniel	Williams	daniel.williams@example.com	+8880765432

Question 8: Use OR operator in the following database.

Ans.

Output:



Result Grid | Filter Rows: | Edit:

order_id	customer_id	order_date	order_total
2	2	2024-04-11	225.50
3	3	2024-04-12	80.75
7	7	2024-04-11	188.40

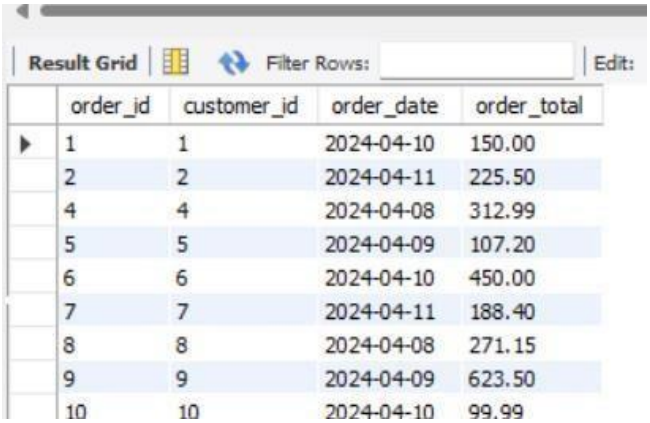
Question 9: Use BETWEEN operators in the following database.

Ans.

Limit to 1000 rows

```
1  SELECT * FROM orders
2  WHERE order_date BETWEEN '2024-04-08' AND '2024-04-11';
3
```

Output:

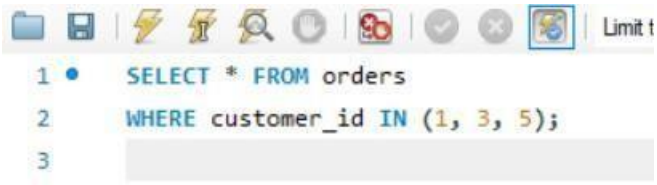


Result Grid | Filter Rows: | Edit:

order_id	customer_id	order_date	order_total
1	1	2024-04-10	150.00
2	2	2024-04-11	225.50
4	4	2024-04-08	312.99
5	5	2024-04-09	107.20
6	6	2024-04-10	450.00
7	7	2024-04-11	188.40
8	8	2024-04-08	271.15
9	9	2024-04-09	623.50
10	10	2024-04-10	99.99

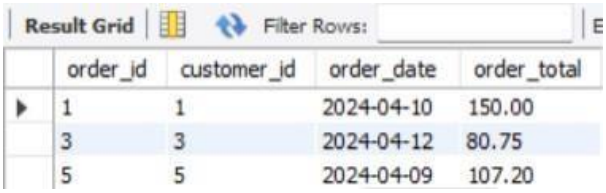
Question 10: Use IN operator in the following database.

Ans.



```
SELECT * FROM orders
WHERE customer_id IN (1, 3, 5);
```

Output:



Result Grid | Filter Rows:

order_id	customer_id	order_date	order_total
1	1	2024-04-10	150.00
3	3	2024-04-12	80.75
5	5	2024-04-09	107.20

Assignment 4

Question 1: How many total orders were placed in the last week?
Ans.

```
1 •  SELECT COUNT(*) AS total_orders
2    FROM orders
3    WHERE order_date >= DATE_SUB(CURDATE(), INTERVAL 7 DAY);
4
```

Output:

Result Grid

	total_orders
▶	10

Question 2: What are the top 3 most expensive products in the Myntraa catalog?

Ans.

```
1 •  SELECT name, price
2    FROM products
3    ORDER BY price DESC
4    LIMIT 3;
5
```

Output:

Result Grid | Filter Rows:

	name	price
▶	Wireless Headphones	99.99
	Wristwatch	89.99
	Running Shoes	79.99

Question 3: For a specific customer (ID 10), what are their past 5 orders?
Ans.

```
1 •  SELECT * FROM orders
2    WHERE customer_id = 10
3    ORDER BY order_date DESC
4    LIMIT 5;
5
```

Output:

Result Grid | Filter Rows: | Edit

	order_id	customer_id	order_date	order_total
▶	10	10	2024-04-10	99.99

Question 4: What is the average order value (total spent per order) in the last month?

Ans.

```
SELECT AVG(order_total) AS avg_order_value
FROM orders
WHERE order_date >= DATE_SUB(CURDATE(), INTERVAL 1 MONTH)
  AND order_date < CURDATE();
```

Output:

Result Grid | Filter

	avg_order_value
▶	250.948000

Question 5: Which product categories have seen the most sales in total quantity?

Ans.

Limit to 1000 rows

```
SELECT p.category, SUM(oi.quantity) AS total_sales
FROM order_items oi
INNER JOIN products p ON oi.product_id = p.product_id
GROUP BY p.category
ORDER BY total_sales DESC
LIMIT 5;
```

Output:

Result Grid | Filter Rows:

	category	total_sales
▶	Clothing	7
	Accessories	5
	Electronics	4
	Bags	2
	Footwear	1

Question 6: Find all customers who have placed an order in the last month but haven't placed any orders before that.

Ans.

```
WITH NewCustomers AS (
  SELECT customer_id
  FROM orders
  WHERE order_date >= DATE_SUB(CURDATE(), INTERVAL 1 MONTH)
  GROUP BY customer_id
  HAVING COUNT(*) = 1
)
-- Step 2: Find these new customers in all orders
SELECT * FROM customers c
WHERE c.customer_id IN (
  SELECT customer_id FROM NewCustomers
)
AND c.customer_id NOT IN (
  SELECT customer_id FROM orders
  WHERE order_date < DATE_SUB(CURDATE(), INTERVAL 1 MONTH)
);
```

Output:

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

customer_id	first_name	last_name	email	phone_number
1	John	Doe	john.doe@example.com	+1234567890
2	Jane	Smith	jane.smith@example.com	+9876543210
3	Alice	Johnson	alice.johnson@example.com	+5551234567
4	Michael	Brown	michael.brown@example.com	+8887654321
5	David	Miller	david.miller@example.com	+4443210987
6	Sarah	Garcia	sarah.garcia@example.com	+3332109876
7	Emily	Clark	emily.clark@example.com	+2221098765
8	Matthew	Lewis	matthew.lewis@example.com	+1110987654
9	Jennifer	Robinson	jennifer.robinson@example.com	+9990876543
10	Daniel	Williams	daniel.williams@example.com	+8880765432

Question 7: List the first name, last name, and total number of orders placed for each customer.

Ans.

```
1 •  SELECT c.first_name, c.last_name, COUNT(o.order_id) AS total_orders
2    FROM customers c
3    INNER JOIN orders o ON c.customer_id = o.customer_id
4    GROUP BY c.customer_id, c.first_name, c.last_name;
```

Output:

Result Grid | Filter Rows: | Expo

first_name	last_name	total_orders
John	Doe	1
Jane	Smith	1
Alice	Johnson	1
Michael	Brown	1
David	Miller	1
Sarah	Garcia	1
Emily	Clark	1
Matthew	Lewis	1
Jennifer	Robinson	1
Daniel	Williams	1

Question 8: Which customer has placed the most orders?

Ans.

```
1 •  SELECT c.first_name, c.last_name, COUNT(o.order_id) AS total_orders
2    FROM customers c
3    INNER JOIN orders o ON c.customer_id = o.customer_id
4    GROUP BY c.customer_id, c.first_name, c.last_name
5    ORDER BY total_orders DESC
6    LIMIT 1;
```

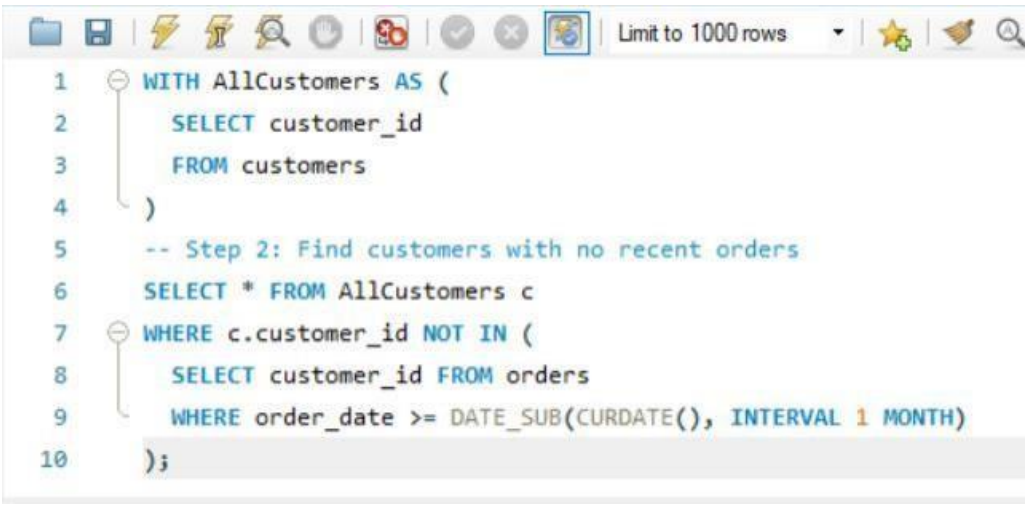
Output:

Result Grid | Filter Rows: | Export:

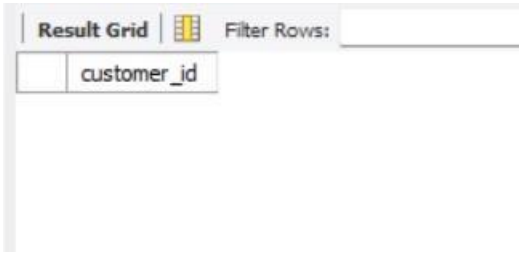
first_name	last_name	total_orders
John	Doe	1

Question 9: Find all the customers who have not placed any orders in the last month.

Ans.



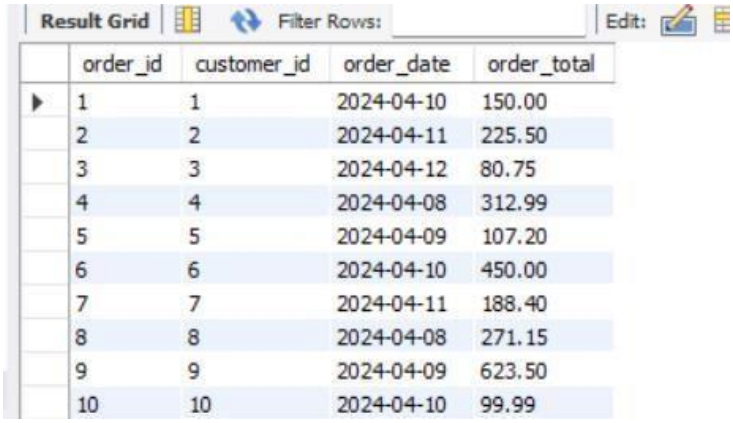
Output:



Question 10: Find all orders placed before a specific date.

Ans.

Output:



Result Grid | Filter Rows: | Edit:

order_id	customer_id	order_date	order_total
1	1	2024-04-10	150.00
2	2	2024-04-11	225.50
3	3	2024-04-12	80.75
4	4	2024-04-08	312.99
5	5	2024-04-09	107.20
6	6	2024-04-10	450.00
7	7	2024-04-11	188.40
8	8	2024-04-08	271.15
9	9	2024-04-09	623.50
10	10	2024-04-10	99.99

Assignment 5

Question 1: What is the average order value for orders placed on weekends?

Ans.

```
1 •  SELECT AVG(order_total) AS avg_weekend_order
2    FROM Orders
3    WHERE DAYNAME(order_date) IN ('Saturday', 'Sunday');
```

Output:

Result Grid | Filter Ro

avg_weekend_order
NULL

Question 2: Find all orders with a total amount exceeding Rs. 2000 that were placed by customers whose first name starts with the letter “A”.

Ans.

Limit to 1000 rows

```
1 •  SELECT o.order_id, c.first_name, c.last_name, o.order_total
2    FROM Orders o
3    INNER JOIN Customers c ON o.customer_id = c.customer_id
4    WHERE o.order_total > 100
5      AND c.first_name LIKE 'A%';
```

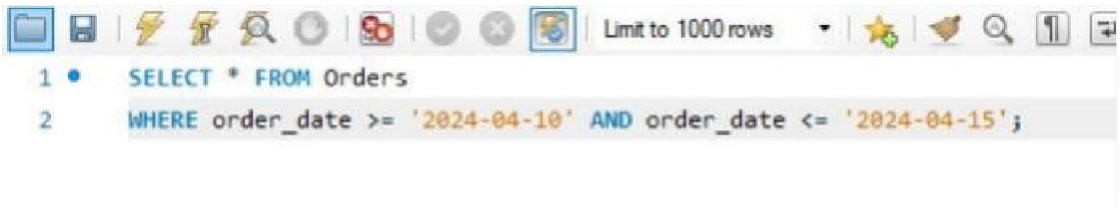
Output:

Result Grid | Filter Rows: | Exp

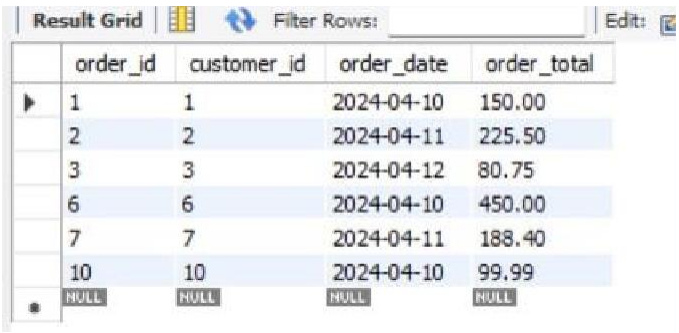
order_id	first_name	last_name	order_total

Question 3: Find all orders placed between two specific dates.

Ans.



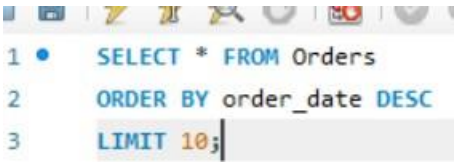
Output:



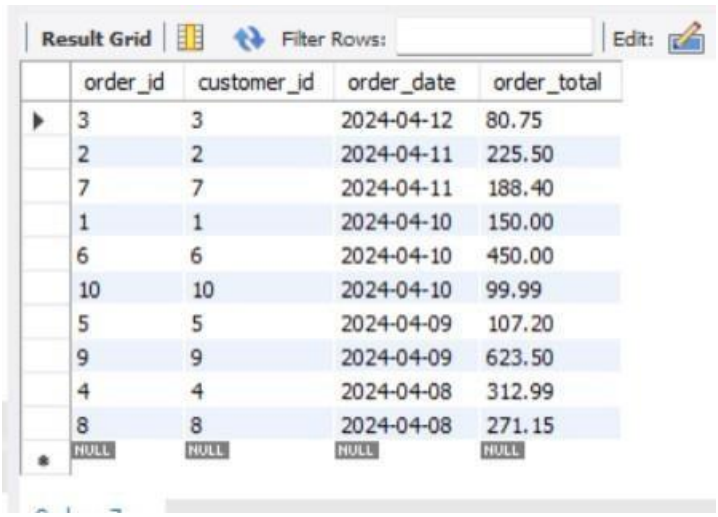
order_id	customer_id	order_date	order_total
1	1	2024-04-10	150.00
2	2	2024-04-11	225.50
3	3	2024-04-12	80.75
6	6	2024-04-10	450.00
7	7	2024-04-11	188.40
10	10	2024-04-10	99.99
NULL	NULL	NULL	NULL

Question 4: List the 10 most recent orders placed.

Ans.



Output:



order_id	customer_id	order_date	order_total
3	3	2024-04-12	80.75
2	2	2024-04-11	225.50
7	7	2024-04-11	188.40
1	1	2024-04-10	150.00
6	6	2024-04-10	450.00
10	10	2024-04-10	99.99
5	5	2024-04-09	107.20
9	9	2024-04-09	623.50
4	4	2024-04-08	312.99
8	8	2024-04-08	271.15
NULL	NULL	NULL	NULL

Question 5: Find all products with a specific product name.

Ans.

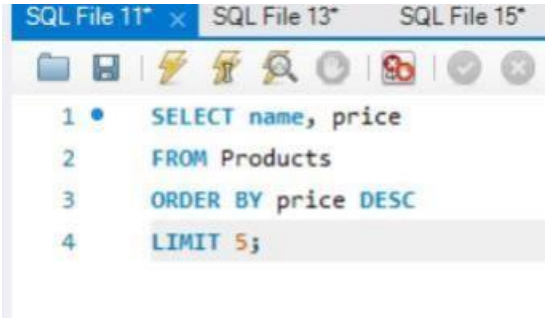
```
1  SELECT * FROM Products
2  WHERE name = 'T-Shirt';
```

Output:

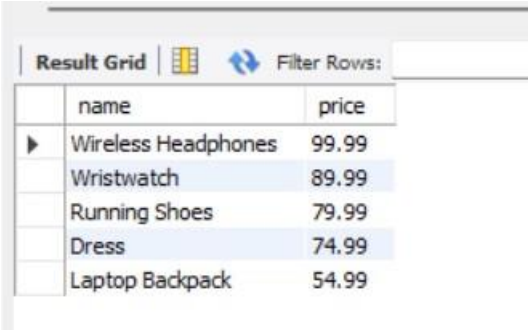
product_id	name	description	price	category	image_url
NULL	NULL	NULL	NULL	NULL	NULL

Question 6: List the 5 most expensive products in the catalogue.

Ans.

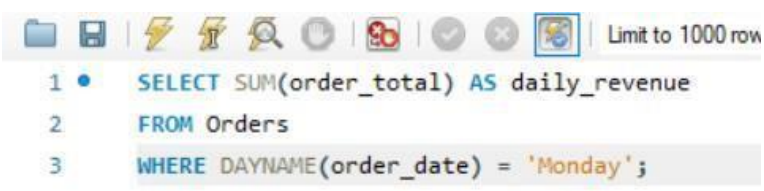


Output:

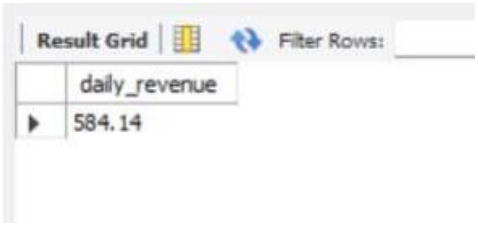


Question 7: What is the total revenue generated from orders placed on a specific day of the week?

Ans.

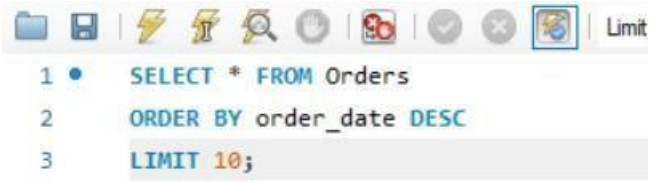


Output:

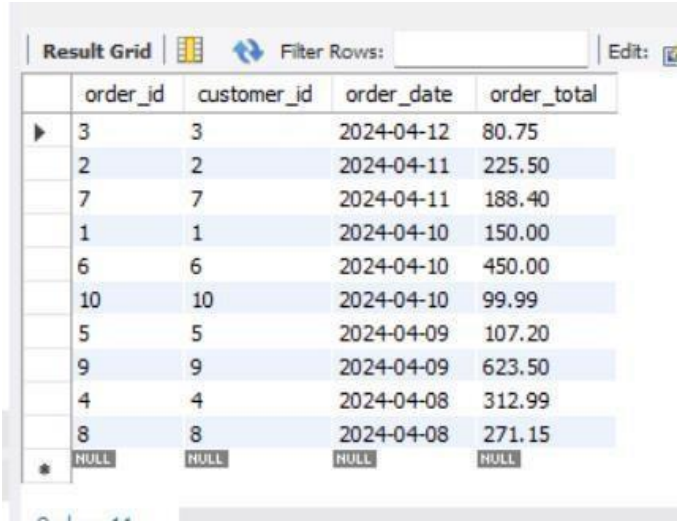


Question 8: List the 10 most recent orders placed.

Ans.

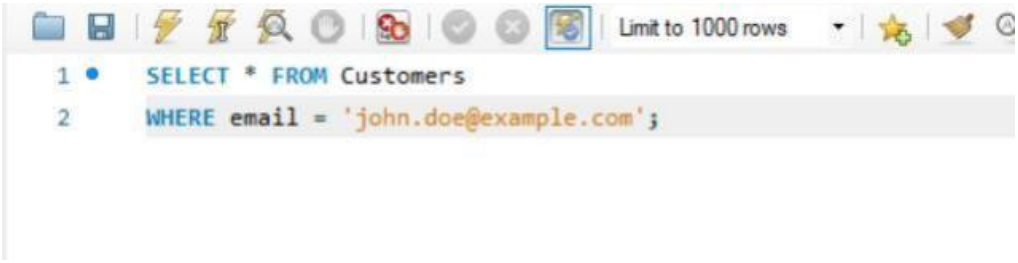


Output:



Question 9: Find all customers with a specific email address.

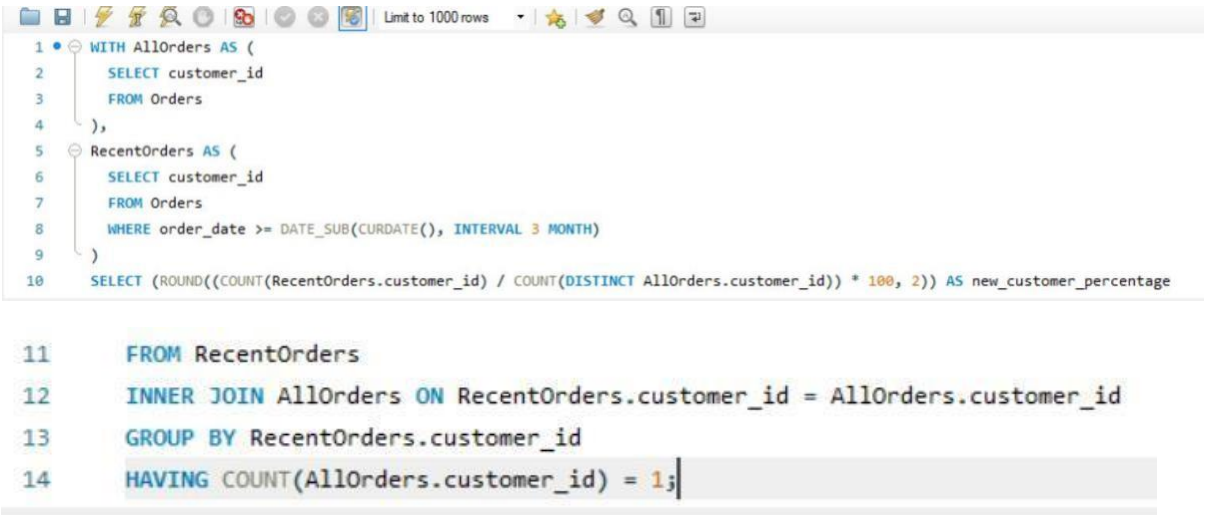
Ans.



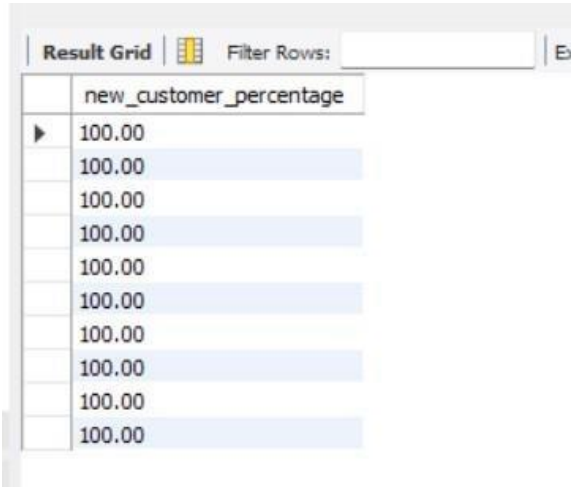
Output:

Question 10: What percentage of customers who have placed an order in the last 3 months haven't placed any orders before that period?

Ans.



Output:



Result Grid | Filter Rows:

new_customer_percentage
100.00
100.00
100.00
100.00
100.00
100.00
100.00
100.00
100.00
100.00