SQL ASSIGNMENT 4

Dataset: Customer Information

You have been given a dataset containing information about customers. The dataset includes the following columns:

- customer_id (integer): Unique identifier for each customer.
- first_name (string): First name of the customer.
- last_name (string): Last name of the customer.
- gender (string): Gender of the customer (e.g., 'Male' or 'Female').
- city (string): The city where the customer resides.
- age (integer): The age of the customer

Table Structure:

Create a table named customers with the following structure:

```
CREATE OR REPLACE TABLE CUSTOMERS
(
    CUSTOMER_ID INT PRIMARY KEY,
    FIRST_NAME VARCHAR(50),
    LAST_NAME VARCHAR(50),
    GENDER VARCHAR(10),
    CITY VARCHAR(50),
    AGE INT
);
```

Insert Data:

Insert the following sample data into the customers table:

```
INSERT INTO CUSTOMERS (CUSTOMER_ID, FIRST_NAME, LAST_NAME, GENDER, CITY, AGE)
VALUES
(1, 'John', 'Doe', 'Male', 'New York', 35),
(2, 'Jane', 'Smith', 'Female', 'Los Angeles', 28),
(3, 'Michael', 'Johnson', 'Male', 'Chicago', 45),
(4, 'Emily', 'Davis', 'Female', 'Houston', 22),
(5, 'David', 'Wilson', 'Male', 'Miami', 40),
(6, 'Lisa', 'Brown', 'Female', 'New York', 32),
```

(7, 'William', 'Lee', 'Male', 'Los Angeles', 29),

(8, 'Sarah', 'White', 'Female', 'Chicago', 50),

(9, 'James', 'Harris', 'Male', 'Houston', 37),

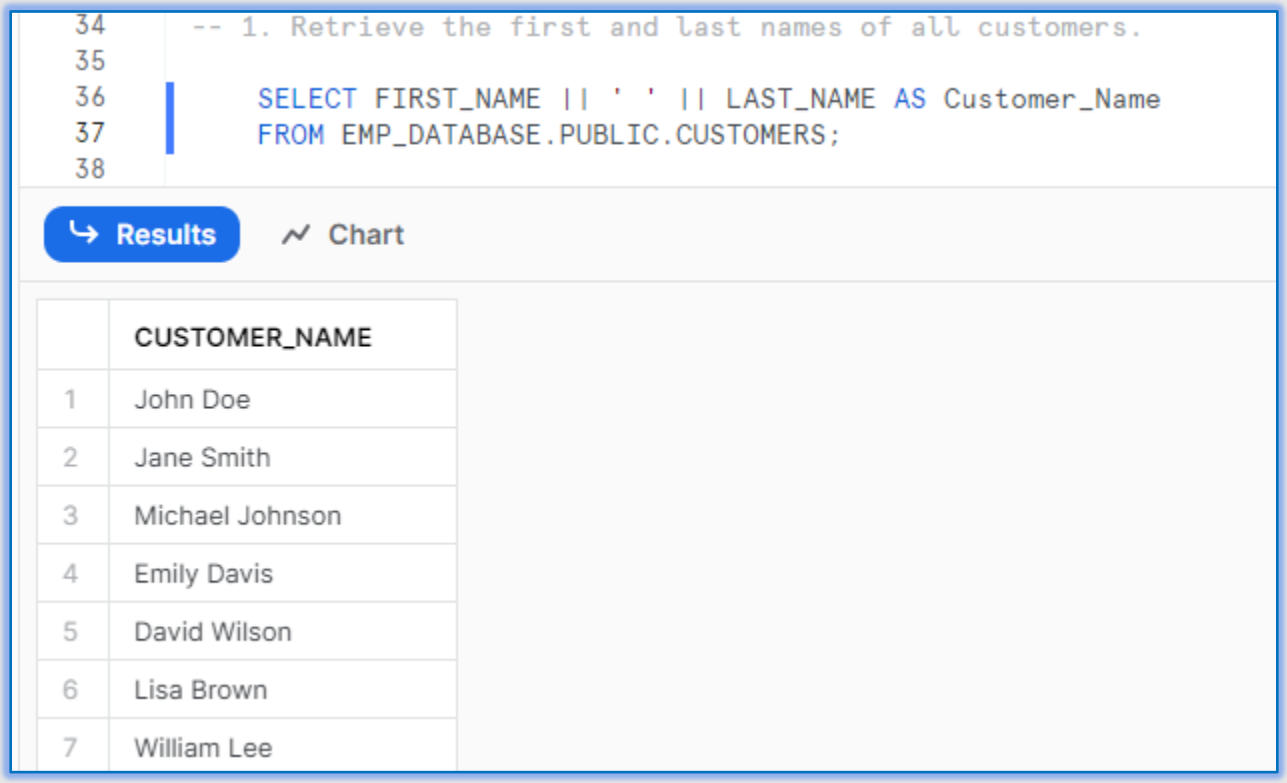
(10, 'Maria', 'Martin', 'Female', 'Miami', 24);

Instructions:

Write SQL queries to answer the following questions using the customers table:

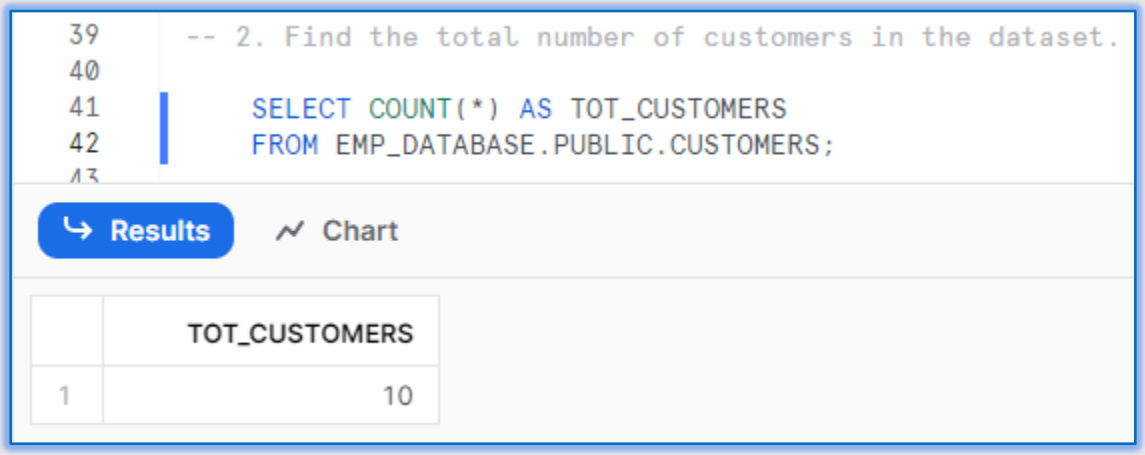
1. **Retrieve the first and last names of all customers.**

```
SELECT FIRST_NAME || ' ' || LAST_NAME AS Customer_Name
FROM EMP_DATABASE.PUBLIC.CUSTOMERS;
```



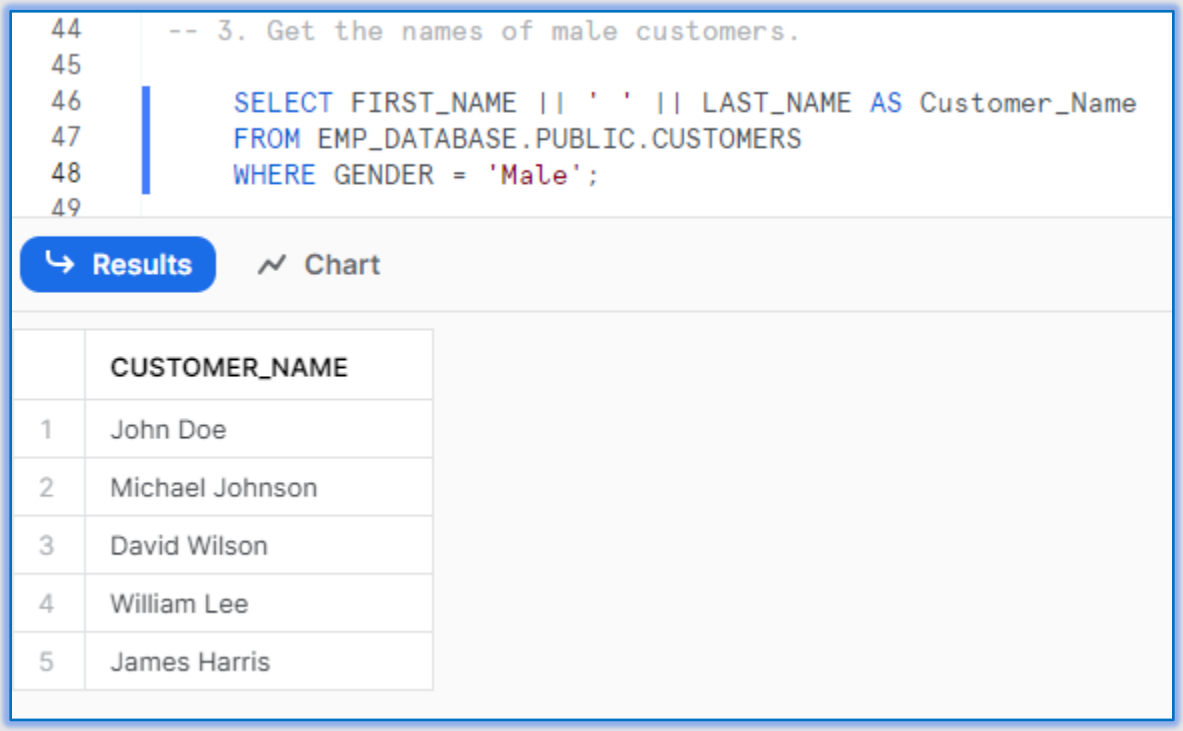
2. Find the total number of customers in the dataset.

```
SELECT COUNT(*) AS TOT_CUSTOMERS
FROM EMP_DATABASE.PUBLIC.CUSTOMERS;
```



3. Get the names of male customers.

```
SELECT FIRST_NAME || ' ' || LAST_NAME AS Customer_Name
FROM EMP_DATABASE.PUBLIC.CUSTOMERS
WHERE GENDER = 'Male';
```



4. Find customers who are aged 30 or older.

```
SELECT * FROM EMP_DATABASE.PUBLIC.CUSTOMERS
WHERE AGE >= 30;
```

```
50  -- 4. Find customers who are aged 30 or older.
51
52      SELECT * FROM EMP_DATABASE.PUBLIC.CUSTOMERS
53      WHERE AGE >= 30;
54
```

Results | Chart

	CUSTOMER_ID	FIRST_NAME	LAST_NAME	GENDER	CITY	AGE
1	1	John	Doe	Male	New York	35
2	3	Michael	Johnson	Male	Chicago	45
3	5	David	Wilson	Male	Miami	40
4	6	Lisa	Brown	Female	New York	32
5	8	Sarah	White	Female	Chicago	50
6	9	James	Harris	Male	Houston	37

5. List customers from New York.

```
SELECT * FROM EMP_DATABASE.PUBLIC.CUSTOMERS
WHERE CITY = 'New York';
```

```
55  -- 5. List customers from New York.
56
57      SELECT * FROM EMP_DATABASE.PUBLIC.CUSTOMERS
58      WHERE CITY = 'New York';
```

Results | Chart

	CUSTOMER_ID	FIRST_NAME	LAST_NAME	GENDER	CITY	AGE
1	1	John	Doe	Male	New York	35
2	6	Lisa	Brown	Female	New York	32

6. **Retrieve customers whose first name starts with 'J'.**

```
SELECT * FROM EMP_DATABASE.PUBLIC.CUSTOMERS
WHERE FIRST_NAME LIKE 'J%';
```

```
60  -- 6. Retrieve customers whose first name starts with 'J'.
61
62      SELECT * FROM EMP_DATABASE.PUBLIC.CUSTOMERS
63      WHERE FIRST_NAME LIKE 'J%';
64
```

Results | Chart

	CUSTOMER_ID	FIRST_NAME	LAST_NAME	GENDER	CITY	AGE
1	1	John	Doe	Male	New York	35
2	2	Jane	Smith	Female	Los Angeles	28
3	9	James	Harris	Male	Houston	37

7. **Find customers aged between 25 and 35 (inclusive).**

```
SELECT * FROM EMP_DATABASE.PUBLIC.CUSTOMERS
WHERE AGE BETWEEN 25 AND 35;
```

```
65  -- 7. Find customers aged between 25 and 35 (inclusive).
66
67      SELECT * FROM EMP_DATABASE.PUBLIC.CUSTOMERS
68      WHERE AGE BETWEEN 25 AND 35;
69
```

Results | Chart

	CUSTOMER_ID	FIRST_NAME	LAST_NAME	GENDER	CITY	AGE
1	1	John	Doe	Male	New York	35
2	2	Jane	Smith	Female	Los Angeles	28
3	6	Lisa	Brown	Female	New York	32
4	7	William	Lee	Male	Los Angeles	29

8. Get female customers from Los Angeles or male customers from Chicago.

```
SELECT * FROM EMP_DATABASE.PUBLIC.CUSTOMERS
WHERE (GENDER = 'Female' AND CITY = 'Los Angeles')
      OR (GENDER = 'Male' AND CITY = 'Chicago');
```

```
70  -- 8. Get female customers from Los Angeles or male customers from Chicago.
71
72      SELECT * FROM EMP_DATABASE.PUBLIC.CUSTOMERS
73      WHERE (GENDER = 'Female' AND CITY = 'Los Angeles')
74              OR (GENDER = 'Male' AND CITY = 'Chicago');
75
```

Results | Chart

	CUSTOMER_ID	FIRST_NAME	LAST_NAME	GENDER	CITY	AGE
1	2	Jane	Smith	Female	Los Angeles	28
2	3	Michael	Johnson	Male	Chicago	45

9. List customers who are either from Miami or aged 50 or older.

```
SELECT * FROM EMP_DATABASE.PUBLIC.CUSTOMERS
WHERE CITY = 'Miami' OR AGE >= 50;
```

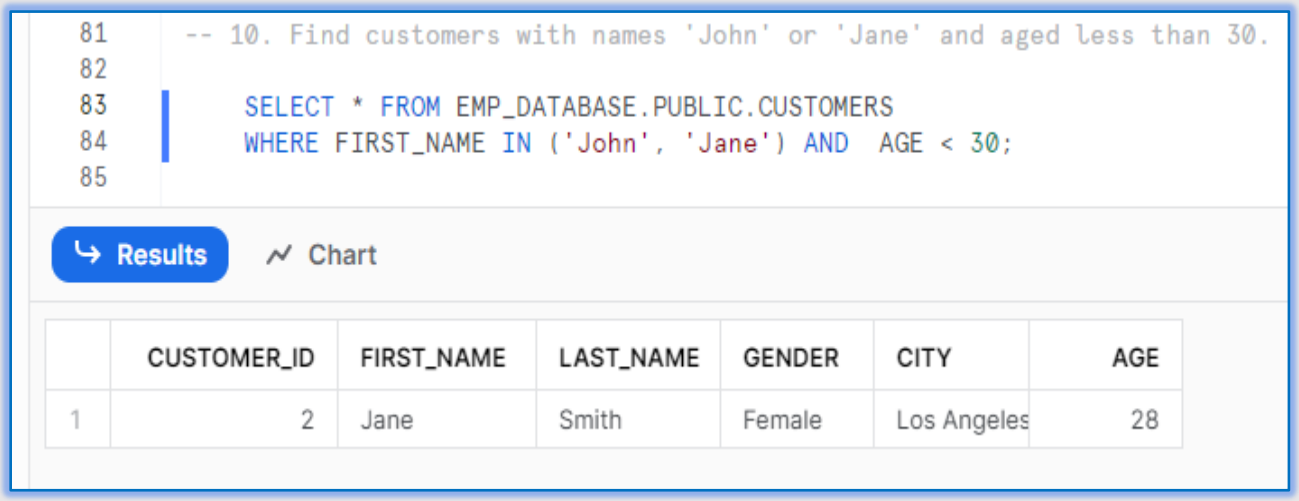
```
76  -- 9. List customers who are either from Miami or aged 50 or older.
77
78      SELECT * FROM EMP_DATABASE.PUBLIC.CUSTOMERS
79      WHERE CITY = 'Miami' OR AGE >= 50;
80
```

Results | Chart

	CUSTOMER_ID	FIRST_NAME	LAST_NAME	GENDER	CITY	AGE
1	5	David	Wilson	Male	Miami	40
2	8	Sarah	White	Female	Chicago	50
3	10	Maria	Martin	Female	Miami	24

10. Find customers with names 'John' or 'Jane' and aged less than 30.

```
SELECT * FROM EMP_DATABASE.PUBLIC.CUSTOMERS
WHERE FIRST_NAME IN ('John', 'Jane') AND  AGE < 30;
```



```
81  -- 10. Find customers with names 'John' or 'Jane' and aged less than 30.
82
83      SELECT * FROM EMP_DATABASE.PUBLIC.CUSTOMERS
84      WHERE FIRST_NAME IN ('John', 'Jane') AND  AGE < 30;
85
```

Results | Chart

	CUSTOMER_ID	FIRST_NAME	LAST_NAME	GENDER	CITY	AGE
1	2	Jane	Smith	Female	Los Angeles	28

********** THANK YOU **********