Assignment - 4 : SQL WHERE Clause and Logical Operators

Creating a table named Customers with the following structure:-

```
2
3   ----------------------------------CREATING A TABLE CALLED CUSTOMERS--------
4
5   CREATE OR REPLACE TABLE customers (
6   customer_id INT PRIMARY KEY,
7   first_name VARCHAR(50),
8   last_name VARCHAR(50),
9   gender VARCHAR(10),
10  city VARCHAR(50),
11  age INT );
12
```

Inserting the data in the table Sales:-

Results:-After data insertion Table be Like-

	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	3	Michael	Johnson	Male	Chicago	45
4	4	Emily	Davis	Female	Houston	22
5	5	David	Wilson	Male	Miami	40
6	6	Lisa	Brown	Female	New York	32
7	7	William	Lee	Male	Los Angeles	29
8	8	Sarah	White	Female	Chicago	50
9	9	James	Harris	Male	Houston	37
10	10	Maria	Martin	Female	Miami	24

Below are the question answer with their results of the SQL Queries.:-

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

```
SELECT FIRST_NAME,LAST_NAME
FROM CUSTOMERS;
```

Results:-

	FIRST_NAME	LAST_NAME
1	John	Doe
2	Jane	Smith
3	Michael	Johnson
4	Emily	Davis
5	David	Wilson
6	Lisa	Brown
7	William	Lee
8	Sarah	White
9	James	Harris
10	Maria	Martin

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

```
SELECT COUNT(CUSTOMER_ID) AS TOTAL_CUSTOMERS
FROM CUSTOMERS;
```

Results:-

	TOTAL_CUSTOMERS
1	10

3. Get the names of male customers.

```
SELECT (FIRST_NAME || ' ' || LAST_NAME) AS
CUSTOMER_NAME,GENDER

FROM CUSTOMERS

WHERE GENDER = 'Male';
```

Results:-

	CUSTOMER_NAME	GENDER
1	John Doe	Male
2	Michael Johnson	Male
3	David Wilson	Male
4	William Lee	Male
5	James Harris	Male

4. Find customers who are aged 30 or older.

```
select (FIRST_NAME || ' ' || LAST_NAME) AS
CUSTOMER_NAME, AGE

from CUSTOMERS

WHERE AGE >= 30;
```

Results:-

	CUSTOMER_NAME	AGE
1	John Doe	35
2	Michael Johnson	45
3	David Wilson	40
4	Lisa Brown	32
5	Sarah White	50
6	James Harris	37

5. List customers from New York.

```
SELECT (FIRST_NAME || ' ' || LAST_NAME) AS
CUSTOMER_NAME

FROM CUSTOMERS

WHERE CITY IN ('New York');
```

Results:-

	CUSTOMER_NAME
1	John Doe
2	Lisa Brown

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

```
select (FIRST_NAME || ' ' || LAST_NAME) AS
CUSTOMER_NAME

from CUSTOMERS

WHERE FIRST_NAME LIKE 'J%';
```

Results:-

	CUSTOMER_NAME
1	John Doe
2	Jane Smith
3	James Harris

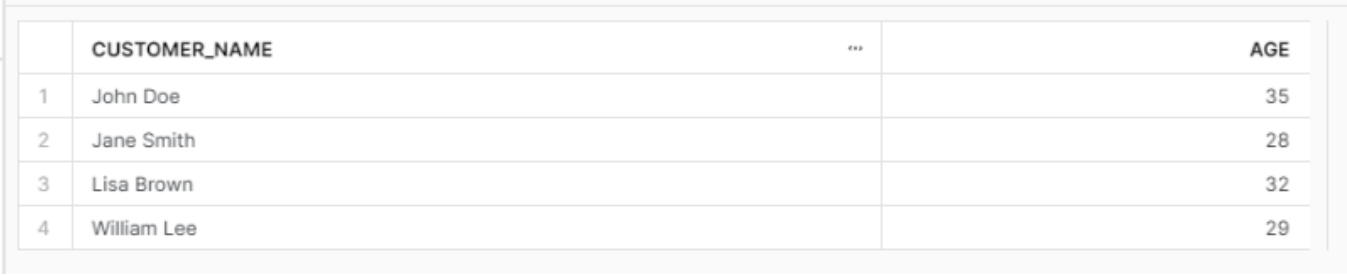
7. Find customers aged between 25 and 35 (inclusive).

```
SELECT (FIRST_NAME || ' ' || LAST_NAME) AS
CUSTOMER_NAME ,AGE

FROM CUSTOMERS

WHERE AGE BETWEEN 25 AND 35;
```

Results:-



	CUSTOMER_NAME	AGE
1	John Doe	35
2	Jane Smith	28
3	Lisa Brown	32
4	William Lee	29

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

```
SELECT (FIRST_NAME || ' ' || LAST_NAME) AS
CUSTOMER_NAME, GENDER, CITY

FROM CUSTOMERS

WHERE (GENDER ='Male' AND CITY= 'Chicago') OR (GENDER =
'Female' AND CITY = 'Los Angeles');
```

Results:-

	CUSTOMER_NAME	GENDER	CITY
1	Jane Smith	Female	Los Angeles
2	Michael Johnson	Male	Chicago

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

```
SELECT (FIRST_NAME || ' ' || LAST_NAME) AS
CUSTOMER_NAME ,CITY,AGE

FROM CUSTOMERS

WHERE CITY= 'Miami' OR AGE >= 50;
```

Results:-

	CUSTOMER_NAME	CITY	AGE
1	David Wilson	Miami	40
2	Sarah White	Chicago	50
3	Maria Martin	Miami	24

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

```
SELECT FIRST_NAME AS CUSTOMER_NAME, AGE

FROM CUSTOMERS

WHERE (FIRST_NAME = 'John' OR FIRST_NAME = 'Jane') and
AGE < 30 ;
```

Results:-

	CUSTOMER_NAME	AGE
1	Jane	28