

# SQL-02 | Filtering and Subqueries

Lecture Queries

Question: Find the booth assignments for vendor 7 for any market date that occurred between April 3, 2019, and May 16, 2019, including either of the two dates.

```
SELECT *
```

```
FROM farmers_market.vendor_booth_assignments
```

```
WHERE
```

```
    vendor_id = 7
```

```
    AND market_date BETWEEN '2019-04-03' and '2019-05-16'
```

```
ORDER BY market_date
```

Question: Return a list of customers with selected last names - [Diaz, Edwards and Wilson].

**Approach 1:**

```
SELECT
    customer_id,
    customer_first_name,
    customer_last_name
FROM farmers_market.customer
WHERE
    customer_last_name = 'Diaz'
    OR customer_last_name = 'Edwards'
    OR customer_last_name = 'Wilson'
ORDER BY customer_last_name,
customer_first_name
```

**Approach 1:**

```
SELECT
    customer_id,
    customer_first_name,
    customer_last_name
FROM farmers_market.customer
WHERE
    customer_last_name IN ('Diaz' , 'Edwards',
'Wilson')
ORDER BY customer_last_name,
customer_first_name
```

Question: Return all products without sizes.

```
SELECT *  
FROM farmers_market.product  
WHERE  
    product_size IS NULL  
    OR TRIM(product_size) = ''
```

Question: You want to get data about a customer you knew as “Jerry,” but you aren’t sure if he was listed in the database as “Jerry” or “Jeremy” or “Jeremiah.”

How would you get the data from this partial string?

```
SELECT  
    customer_id,  
    customer_first_name,  
    customer_last_name  
FROM farmers_market.customer  
WHERE  
    customer_first_name LIKE 'Jer%'
```

Question: Find out which vendors primarily sell fresh produce and which don't??

```
SELECT
  vendor_id,
  vendor_name,
  vendor_type,
  CASE
    WHEN LOWER(vendor_type) LIKE '%fresh%'
    THEN 'Fresh Produce'
    ELSE 'Other'
  END AS vendor_type_condensed
FROM farmers_market.vendor
```

Question: Analyze purchases that were made at the farmer's market on days when it rained.

```
SELECT
  market_date,
  customer_id,
  vendor_id,
  quantity * cost_to_customer_per_qty price
FROM farmers_market.customer_purchases
WHERE
  market_date IN
  (
    SELECT market_date
    FROM farmers_market.market_date_info
    WHERE market_rain_flag = 1
  )
LIMIT 5
```

Question: Put the total cost to customer purchases into bins of

- under \$5.00,
- \$5.00–\$9.99,
- \$10.00–\$19.99, or
- \$20.00 and over.

```
SELECT
    market_date,
    customer_id,
    vendor_id,
    ROUND(quantity * cost_to_customer_per_qty, 2) AS price,
    CASE
        WHEN quantity * cost_to_customer_per_qty < 5.00
        THEN 'Under $5'
        WHEN quantity * cost_to_customer_per_qty < 10.00
        THEN '$5-$9.99'
        WHEN quantity * cost_to_customer_per_qty < 20.00
        THEN '$10-$19.99'
        WHEN quantity * cost_to_customer_per_qty >= 20.00
        THEN '$20 and Up'
    END AS price_bin
FROM farmers_market.customer_purchases
LIMIT 10
```