

# SQL-02 | Filtering and Subqueries

Lecture Queries

Question: We want to merge each customer's name into a single column that contains the first name, then a space, and then the last name.

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```
SELECT  
customer_id,  
CONCAT(customer_first_name, " ", customer_last_name) AS  
customer_name  
FROM farmers_market.customer  
LIMIT 5
```

Question: Extract all the product names that are part of product category 1

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```
SELECT
```

```
product_id, product_name, product_category_id
```

```
FROM farmers_market.product
```

```
WHERE product_category_id = 1
```

```
LIMIT 5
```

Question: Print a report of everything ***customer\_id 4*** has ever purchased at the farmer's market, sorted by market date, vendor ID, and product ID.

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```
SELECT
```

```
    market_date, customer_id,
```

```
    vendor_id, product_id,
```

```
    quantity,
```

```
    quantity * cost_to_customer_per_qty AS
```

```
price
```

```
FROM farmers_market.customer_purchases
```

```
WHERE customer_id = 4
```

```
ORDER BY market_date, vendor_id, product_id
```

Question: Get all the product info for products with id between 3 and 8 (not inclusive) or of product with id 10.



Question: Get all the product info for products with id between 3 and 8 (not inclusive) or product with id 10.

```
SELECT
    product_id,
    product_name
FROM farmers_market.product
WHERE
    product_id = 10
    OR (product_id > 3
        AND product_id < 8)
```

Question: Find the customer detail with the first name of “Carlos” or the last name of “Diaz”.

Question: Find the customer detail with the first name of “Carlos” or the last name of “Diaz”.

```
SELECT  
    customer_id,  
    customer_first_name,  
    customer_last_name  
FROM farmers_market.customer  
WHERE  
    customer_first_name = 'Carlos'  
    OR customer_last_name = 'Diaz'
```

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.

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```
SELECT *  
  
FROM  
farmers_market.vendor_booth_assignme  
nts  
  
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].

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```
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'
```

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

```
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: 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.”

Find all the products which have no sizes recorded against them.

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```
SELECT *  
FROM farmers_market.product  
WHERE product_size IS NULL
```

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

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```
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: List down all the Product details where product\_category contains 'Fresh'.**

**Question: List down all the Product details where product\_category contains 'Fresh'.**

```
select * from product
where product_category_id in
      (select product_category_id
      from product_category
      where product_category_name like '%fresh%');
```

**Question: Wanted to know the Vendor details who is bringing maximum quantity in a day.**



**Question: Wanted to know the Vendor details who is bringing maximum quantity in a day.**

```
select * from vendor where vendor_id in (  
    select distinct vendor_id from vendor_inventory  
    where quantity in (select max(quantity) from vendor_inventory)  
);
```

Question: Find out which vendors primarily sell fresh produce.

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: 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.

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```
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
```