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

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

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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```sql
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: 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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```sql
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
```