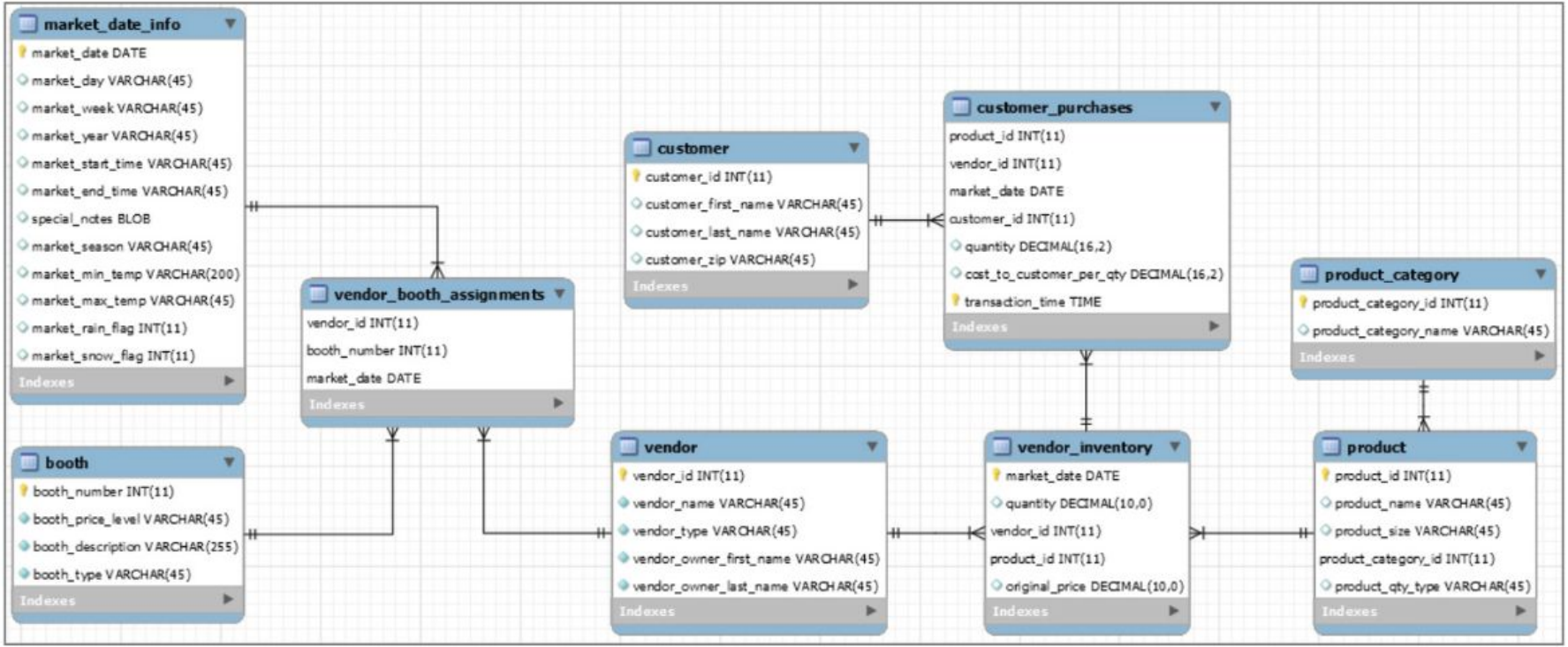
SQL-01 | Basic Keywords and Functions

Lecture Queries

Schema


market_date_info
market_date DATE
market_day VARCHAR(45)
market_week VARCHAR(45)
market_year VARCHAR(45)
market_start_time VARCHAR(45)
market_end_time VARCHAR(45)
special_notes BLOB
market_season VARCHAR(45)
market_min_temp VARCHAR(200)
market_max_temp VARCHAR(45)
market_rain_flag INT(11)
market_snow_flag INT(11)
Indexes
vendor_booth_assignments
vendor_id INT(11)
booth_number INT(11)
market_date DATE
Indexes
customer
customer_id INT(11)
customer_first_name VARCHAR(45)
customer_last_name VARCHAR(45)
customer_zip VARCHAR(45)
Indexes
customer_purchases
product_id INT(11)
vendor_id INT(11)
market_date DATE
customer_id INT(11)
quantity DECIMAL(16,2)
cost_to_customer_per_qty DECIMAL(16,2)
transaction_time TIME
Indexes
product_category
product_category_id INT(11)
product_category_name VARCHAR(45)
Indexes
booth
booth_number INT(11)
booth_price_level VARCHAR(45)
booth_description VARCHAR(255)
booth_type VARCHAR(45)
Indexes
vendor
vendor_id INT(11)
vendor_name VARCHAR(45)
vendor_type VARCHAR(45)
vendor_owner_first_name VARCHAR(45)
vendor_owner_last_name VARCHAR(45)
Indexes
vendor_inventory
market_date DATE
quantity DECIMAL(10,0)
vendor_id INT(11)
product_id INT(11)
original_price DECIMAL(10,0)
Indexes
product
product_id INT(11)
product_name VARCHAR(45)
product_size VARCHAR(45)
product_category_id INT(11)
product_qty_type VARCHAR(45)
Indexes

Question: Get all the products available in the market.

Question: Get all the products available in the market.

```
SELECT * FROM farmers_market.product;
```

Question: Explore vendor_booth_assignments.

List down 10 rows of farmer’s market vendor booth assignments, displaying the market date, vendor ID, and booth number from the vendor_booth_assignments table.

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List down 10 rows of farmer’s market vendor booth assignments, displaying the market date, vendor ID, and booth number from the vendor_booth_assignments table.

```
SELECT market_date, vendor_id, booth_number
  FROM farmers_market.vendor_booth_assignments
  LIMIT 10
```

Question: In the customer purchases, we have quantity and cost per qty separate, query the total amount that the customer has paid along with date, customer id, vendor_id, qty, cost per qty and the total amt.?

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```
SELECT
	market_date,
	customer_id,
	vendor_id,
	quantity,
	cost_to_customer_per_qty,
	quantity * cost_to_customer_per_qty
 FROM farmers_market.customer_purchases
 LIMIT 10
```

Rounding off:

```
SELECT
	market_date,
	customer_id,
	vendor_id,
	ROUND(quantity *
cost_to_customer_per_qty, 2) AS price
 FROM
farmers_market.customer_purchases
 LIMIT 10
```

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.

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.

```
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.

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.

```
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) and 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: Details of all the purchases made by customer_id 4 at vendor_id 7, along with the total_amt.

Question: Details of all the purchases made by customer_id 4 at vendor_id 7, along with the total_amt.

```
SELECT
    market_date,
    customer_id,
    vendor_id,
    quantity * cost_to_customer_per_qty AS price
 FROM farmers_market.customer_purchases
 WHERE
    customer_id = 4
    AND vendor_id = 7
```

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.

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_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].

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.”

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

Question: Analyze purchases 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: Find out which vendors primarily sell fresh produce and which don’t.

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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- 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
```