

SQL-03 | JOINS

Lecture Queries

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```
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
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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
```

Question: Let's say we wanted to list each product name along with its product category name.

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```
SELECT * FROM  
    product  
LEFT JOIN product_category  
    ON product.product_category_id = product_category.product_category_id
```

With table aliasing:

```
SELECT  
    p.product_id,  
    p.product_name,  
    pc.product_category_id,  
    pc.product_category_name  
FROM product AS p  
    LEFT JOIN product_category AS pc  
    ON p.product_category_id = pc.product_category_id
```

Question: Get all the Customers who have not purchased anything from the market yet.

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```
SELECT c.* # select columns from customer table only
FROM customer AS c
LEFT JOIN customer_purchases AS cp
  ON c.customer_id = cp.customer_id
WHERE cp.customer_id IS NULL
```

Question: Let's say we want to write a query that returns a list of all customers who did not make a purchase on March 2, 2019.

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```
SELECT c.*, cp.market_date  
FROM customer AS c  
LEFT JOIN customer_purchases AS cp  
ON c.customer_id = cp.customer_id  
WHERE cp.market_date <> '2019-03-02'
```

Two problems with the output:

1. Some rows/ customers are missing because the market_date is NULL.
2. We are getting multiple rows for each customer which is not required.

```
SELECT DISTINCT c.*  
FROM customer AS c  
LEFT JOIN customer_purchases AS cp  
ON c.customer_id = cp.customer_id  
WHERE (cp.market_date <> '2019-03-02' OR cp.market_date IS NULL)
```

solution

Question: Let's say we want details about all booths, as well as every vendor booth assignment along with the vendor details.

Question: Let's say we want details about all farmer's market booths, as well as every vendor booth assignment for every market date.

```
SELECT
    b.booth_number,
    b.booth_type,
    vba.market_date,
    v.vendor_id,
    v.vendor_name,
    v.vendor_type
FROM booth AS b
    LEFT JOIN vendor_booth_assignments AS vba ON b.booth_number = vba.
booth_number
    LEFT JOIN vendor AS v ON v.vendor_id = vba.vendor_id
ORDER BY b.booth_number, vba.market_date
```