SQL QUERIES

!=

Which products are not from vendor 'Jim Beam Brands'? (9052 rows)

    SELECT * FROM products WHERE vendor_name!='Jim Beam Brands';

>, >=

Which products are over 90 proof? (765 rows)

    SELECT * FROM products WHERE CAST(proof as INT) > 90;

<, <=

Which products have a case cost of less than $60? (2826 rows)

    SELECT * FROM products WHERE case_cost < 60;

IN

Which products are either Single Malt Scotches or Canadian Whiskies (based on category name)? (682 rows)

SELECT * FROM products WHERE category_name IN ('SINGLE MALT SCOTCH', 'CANADIAN WHISKIES');

LIKE, NOT LIKE

Which products have 'Whiskies' in the category name? (1606 rows)

    SELECT * FROM products WHERE category_name LIKE '%WHISK%';

Which products don't have 'Whiskies' in the category name? (8254 rows)

    SELECT * FROM products WHERE category_name NOT LIKE '%WHISK%';

    Note: to account for the full record count in the table, there are 117 records with NULL

    Values in category_name.

    SELECT * FROM PRODUCTS WHERE category_name IS NULL;

BETWEEN (includes boundary values)

Which products have a shelf_price between $4 and $10? (2701 rows)

    SELECT * FROM products WHERE shelf_price BETWEEN 4 AND 10;

Which products have a bottle_price between $4 and $10? (4011 rows)

        SELECT * FROM products WHERE CAST(bottle_price as DEC) BETWEEN 4 AND 10;

        Note: Bottle_price is a money data type, it cannot be compared to an integer.
        CAST money types to decimal for comparison to numbers.

WHERE CONDITIONS – INDEPENDENT PRACTICE

Answers:

- Which products have a case cost of more than $100?

    3730 rows

    select * from products where case_cost > 100;

- Which tequilas have a case cost of more than $100?

    422 rows

    select * from products where case_cost > 100 and category_name ilike 'TEQUILA';

- Which tequilas or scotch whiskies have a case cost of more than $100?

    687 rows

    select * from products where case_cost > 100 and category_name in ('TEQUILA', 'SCOTCH WHISKIES')

    Here's a better way to see the results:
    select item_no, category_name, item_description, case_cost from products
    where case_cost > 100 and category_name in ('TEQUILA', 'SCOTCH WHISKIES')
    order by category_name, case_cost desc;

- Which tequilas or scotch whiskies have a cast cost between $100 and $120?

    107 rows

    select * from products where case_cost between 100 and 120 and category_name in ('TEQUILA', 'SCOTCH WHISKIES');

- Which whiskies of any kind cost more than $100?

  853 rows

  select * from products where case_cost > 100 and category _name like '%WHISK%';

- Which whiskies of any kind cost between $100 and $150?

  432 rows

  select * from products where case_cost between 100 and 150 and category_name like '%WHISK%';

- Which products except tequilas cost between $100 and $120?

  976 rows

  select * from products where case_cost between 100 and 120 and category_name != 'TEQUILA';

  In this case, queries using != and NOT LIKE return the same row count.

COMBINING LOGICAL OPERATORS

- SOLUTION (29 rows)

  ```
  SELECT vendor, bottle_price, proof
  FROM products
  WHERE vendor = 305
  AND (cast(bottle_price AS decimal) <5
  OR cast(proof AS integer)>100);
  ```


AGGREGATIONS: GUIDED PRACTICE

SELECT MAX(TOTAL) FROM SALES: (ANSWER IS: 94590.72)

SELECT ROUND(AVG(CAST(state_btl_cost as DECIMAL)),2) FROM sales (ANSWER IS 9.57)

AGGREGATIONS: GUIDED PRACTICE

```
SELECT vendor, vendor_name, ROUND(AVG(CAST(bottle_price AS DEC)),2) AS avg_price
FROM products
GROUP BY vendor, vendor_name
ORDER BY 3 DESC;
271 ROWS
```

AGGREGATIONS: INDEPENDENT PRACTICE SOLUTION

```
SELECT vendor_name,
  ROUND(MAX(CAST(bottle_price AS DEC)),2) AS max_cost,
  ROUND(MIN(CAST(bottle_price AS DEC)),2) AS min_cost
FROM products
GROUP BY vendor_name
HAVING ROUND(MIN(CAST(bottle_price AS DEC)),2) > 10
ORDER BY 2 DESC
LIMIT 20;
```

AGGREGATIONS: INDEPENDENT PRACTICE DATA OUTPUT

	vendor_name text	max_cost numeric	min_cost numeric
1	Bardenheier Wine Cellars	1188.97	138.00
2	Spirit Imports Inc.	202.35	40.78
3	International Beverage ...	192.41	12.75
4	Classic Wine Imports	189.28	26.95
5	Partida Tequila	180.00	26.59
6	Post Familie Winery	140.00	140.00
7	Stephen Augustus Impo...	139.00	13.83
8	Winebow Inc.	131.90	15.56
9	Five Star Wine & Spirits	130.00	15.10
10	Wildman And Sons F.	84.33	15.17
11	High West Distillery Llc	77.50	22.00
12	Willett Distillery	71.67	17.70
13	Hillrock Estate Distillery ...	69.17	69.17
14	Asdspirits Llc	64.34	64.34
15	Tequilas Premium Inc.	62.34	33.17
16	Pacific Edge Wine & Spir...	62.17	32.92
17	Cooperspiritsinternatio...	61.00	10.50
18	Bmc Imports	60.17	26.00
19	Winery Exchange	56.56	25.84
20	Cvi Brands	49.17	15.58

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