

The provided data needs to be analyzed by a Pricing Analyst working for a pub chain called 'Pubs "R" Us'.

The task is to analyze the drinks prices and sales to gain a greater insight into how the pubs in the chain are performing.

The following four tables will be used for the analysis:

- Pubs
- Beverages
- Sales
- Ratings

INTRODUCTION

TABLES USED FOR THE ANALYSIS

pubs

pub_id	pub_name	city	state	country
1	The Red Lion	London	England	United Kingdom
2	The Dubliner	Dublin	Dublin	Ireland
3	The Cheers Bar	Boston	Massachusetts	United States
4	La Cerveceria	Barcelona	Catalonia	Spain

beverages

beverage_id	beverage_name	category	alcohol_content	price_per_unit
1	Guiness	Beer	4.2	5.99
2	Jameson	Whiskey	40	29.99
3	Mojito	Cocktail	12	8.99
4	Chardonnay	Wine	13.5	12.99
5	IPA	Beer	6.8	4.99
6	Tequila	Spirit	38	24.99

ratings

rating_id	pub_id	customer_name	rating	review
1	1	John Smith	4.5	Great pub with a wide selection of beers
2	1	Emma Johnson	4.8	Excellent service and cozy atmosphere
3	2	Michael Brown	4.2	Authentic atmosphere and great beers
4	3	Sophia Davis	4.6	The cocktails were amazing! Will definitely come back.
5	4	Oliver Wilson	4.9	The wine selection here is outstanding
6	4	Isabella Moore	4.3	Had a great time trying different spirits
7	1	Sophia Davis	4.7	Loved the pub food! Great ambience
8	2	Ethan Johnson	4.5	A good place to hang out with friends
9	2	Olivia Taylor	4.1	The whiskey tasting experience was fantastic
10	3	William Miller	4.4	Friendly staff and live music on weekends

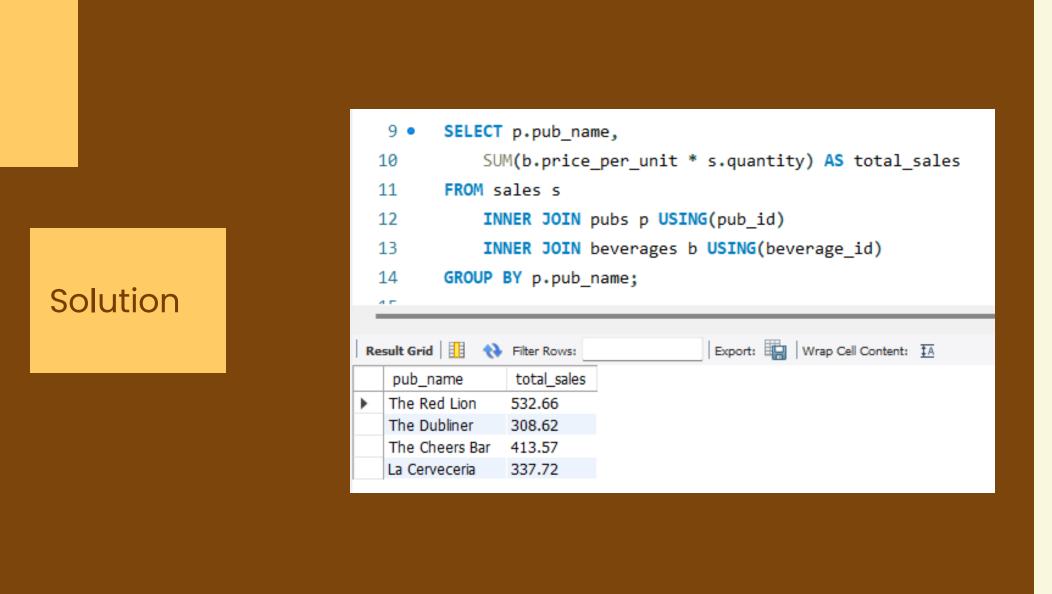
sale

sale_id	pub_id	beverage_id	quantity	transaction_date
1	1	1	10	1/5/23
2	1	2	5	1/5/23
3	2	1	8	1/5/23
4	3	3	12	2/5/23
5	4	4	3	2/5/23
6	4	6	6	3/5/23
7	2	3	6	3/5/23
8	3	1	15	3/5/23
9	3	4	7	3/5/23
10	4	1	10	4/5/23
11	1	3	5	6/5/23
12	2	2	3	9/5/23
13	2	5	9	9/5/23
14	3	6	4	9/5/23
15	4	3	7	9/5/23
16	4	4	2	9/5/23
17	1	4	6	11/5/23
18	1	6	8	11/5/23
19	2	1	12	12/5/23
20	3	5	5	13/5/23

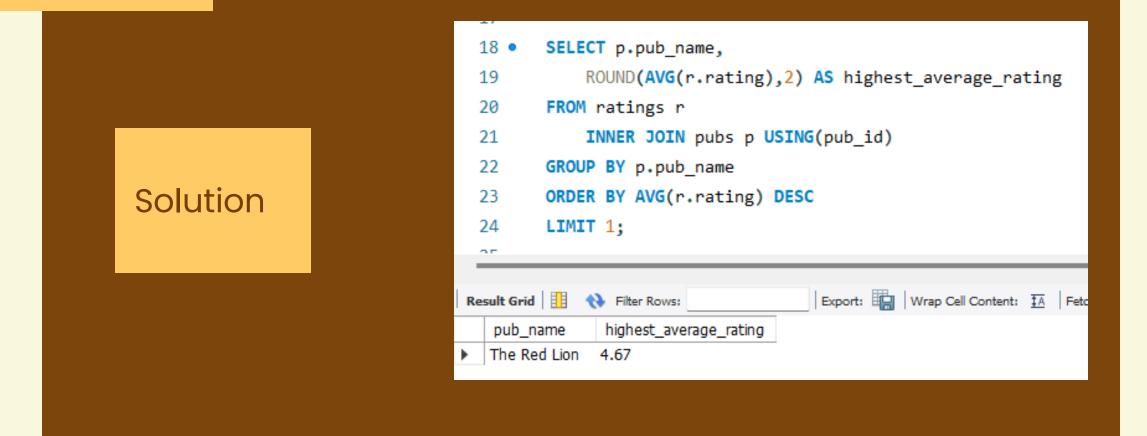
Q1. How many pubs are located in each country?



Q2. What is the total sales amount for each pub, including the beverage price and quantity sold?

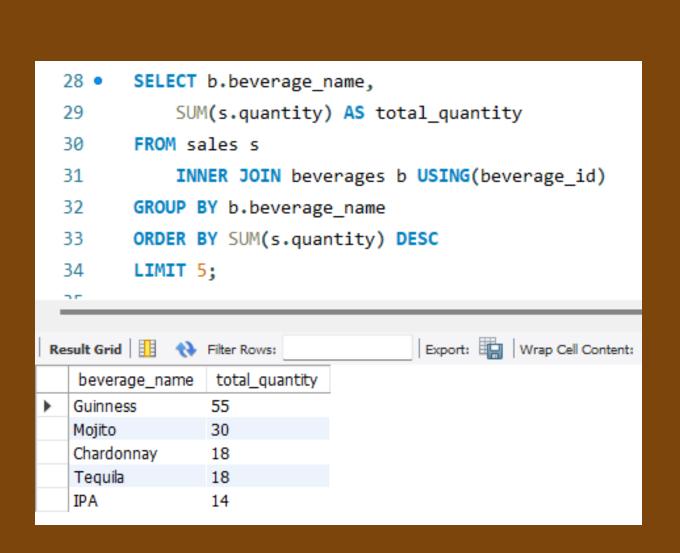


Q3. Which pub has the highest average rating?



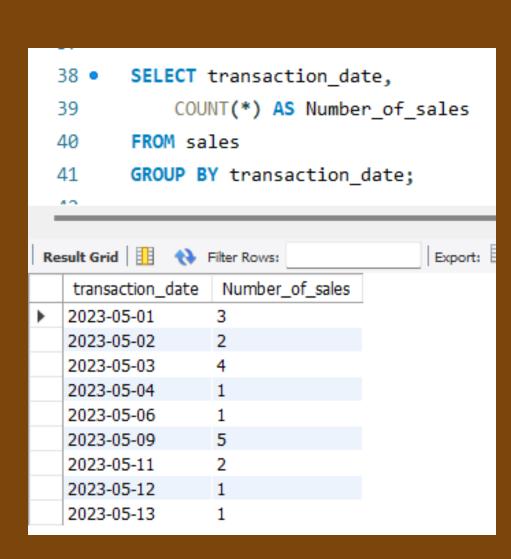
Q4. What are the top 5 beverages by sales quantity across all pubs?



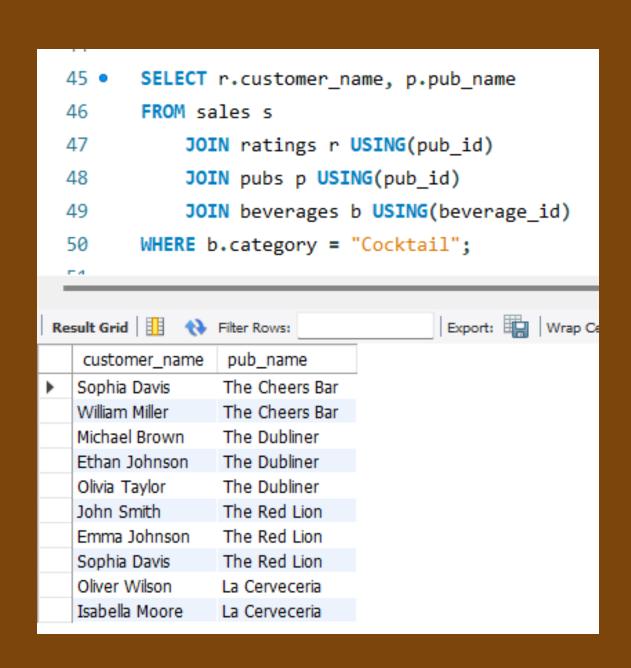


Q5. How many sales transactions occurred on each date?





Q6. Find the name of someone that had cocktails and which pub they had it in.



Q7. What is the average price per unit for each category of beverages, excluding the category 'Spirit'?



Q8. Which pubs have a rating higher than the average rating of all pubs?



```
63 • ⊜ WITH CTE AS (
            SELECT pub_id, rating,
 65
            ROUND(AVG(rating) OVER (PARTITION BY pub_id),1) AS avg_rating
 66
            FROM ratings
            GROUP BY pub_id, rating)
 67
 68
        SELECT c.pub_id AS Pub_id,
 69
            p.pub_name AS Pub_name,
            c.rating AS Rating,
 70
            c.avg_rating AS Avg_rating
 71
 72
        FROM CTE c
            INNER JOIN pubs p USING(pub_id)
 73
        WHERE c.rating > c.avg_rating;
 74
                                 Export: Wrap Cell Content: IA
Result Grid | Filter Rows:
                      Rating Avg_rating
  Pub_id Pub_name
         The Red Lion
         The Dubliner
         The Cheers Bar 4.6
         La Cerveceria 4.9
```

Q9. What is the running total of sales amount for each pub, ordered by the transaction date?

```
SELECT s.transaction_date, p.pub_name,
80
            SUM(b.price_per_unit*s.quantity) OVER (PARTITION BY p.pub_id ORDER BY s.transaction_date) AS running_total
81
       FROM sales s
82
           JOIN pubs p USING(pub_id)
83
           JOIN beverages b USING(beverage_id)
84
       ORDER BY s.transaction_date;
                                    Export: Wrap Cell Content: IA
                The Red Lion
               The Red Lion
 2023-05-01
               The Dubliner
 2023-05-02
               The Cheers Bar 107.88
 2023-05-02
               La Cerveceria
                            38.97
 2023-05-03
               The Dubliner
                           101.86
 2023-05-03
               The Cheers Bar 288.66
 2023-05-03
 2023-05-03
               La Cerveceria
 2023-05-04
               La Cerveceria
                            248.81
 2023-05-06
               The Red Lion
                            254.80
               The Dubliner
 2023-05-09
                           236.74
               The Dubliner
 2023-05-09
               The Cheers Bar 388.62
 2023-05-09
               La Cerveceria
                            337.72
 2023-05-09
               La Cerveceria
                           337.72
 2023-05-11
               The Red Lion
                            532.66
 2023-05-11
               The Red Lion
                            532.66
 2023-05-12
               The Dubliner
2023-05-13
               The Cheers Bar 413.57
```

Q10. For each country, what is the average price per unit of beverages in each category, and what is the overall average price per unit of beverages across all categories?

```
88 • ⊖ WITH ap AS (
            SELECT p.country, b.category,
90
                ROUND(AVG(b.price_per_unit),2) AS average_price
91
            FROM sales s
92
                JOIN pubs p USING(pub_id)
93
                JOIN beverages b USING(beverage_id)
94
            GROUP BY p.country, b.category),
95
           oap AS (
96
            SELECT p.country,
97
                ROUND(AVG(b.price_per_unit),2) AS Overall_average_price
98
            FROM sales s
99
                JOIN pubs p USING(pub_id)
100
                JOIN beverages b USING(beverage id)
101
            GROUP BY p.country)
102
        SELECT a.country AS country, a.category AS category,
103
            a.average_price AS Per_unit_avg_price, b.overall_average_price AS overall_average_price
104
        FROM ap a
105
            JOIN oap b USING(country);
                                 Export: Wrap Cell Content: ‡Ā
Result Grid Filter Rows:
                category Per_unit_avg_price overall_average_price
 United Kingdom
                                        16.59
               Whiskey
  United Kingdom
                                        16.59
  United Kingdom
                                        16.59
                        12.99
                                        16.59
                                        11.19
 Ireland
                Cocktail
                                        11.19
 Ireland
               Whiskey 29.99
                                        11.19
               Cocktail
                                        11.59
  United States
                                       11.59
  United States
                                        11.59
  United States
               Wine
                       24.99
                                        11.59
 United States
               Spirit
                                        13.19
 Spain
 Spain
               Cocktail
                       8.99
                                        13.19
```

Q11. For each pub, what is the percentage contribution of each category of beverages to the total sales amount, and what is the pub's overall sales amount?

```
109 • ⊖ WITH A AS (
110
             SELECT p.pub_id, p.pub_name, b.category,
111
                 SUM(b.price_per_unit*s.quantity) AS TS
112
            FROM sales s
113
                 JOIN pubs p USING(pub_id)
114
                 JOIN beverages b USING(beverage_id)
115
            GROUP BY p.pub_id, p.pub_name, b.category),
116
117
            SELECT *,
118
                 SUM(TS) OVER (PARTITION BY pub name) AS TSO
119
            FROM A)
120
        SELECT pub_id, pub_name, category, TS,
121
            ROUND(((TS/TS0)*100),2) AS Cotribution_percentage
122
        FROM B
123
        ORDER BY pub_id;
                                  Export: Wrap Cell Content: TA
Result Grid Filter Rows:
         pub_name
                        category TS
                                        Cotribution_percentage
         The Red Lion
                                59.90
         The Red Lion
                               149.95
                                44.95
         The Red Lion
                       Cocktail
         The Red Lion
                                77.94
                                       14.63
         The Red Lion
                                199.92
         The Dubliner
                                164.71 53.37
                                53.94
         The Dubliner
                       Cocktail
                       Whiskey
         The Dubliner
                                107.88
         The Cheers Bar Cocktail
                                114.80
         The Cheers Bar Wine
                                90.93
         The Cheers Bar Spirit
                                99.96
                                149.94
                                       44.40
         La Cerveceria
                      Spirit
         La Cerveceria
                                59.90
         La Cerveceria Cocktail
                               62.93
```