



# PUB PRICING ANALYSIS

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# INTRODUCTION :

As a Pricing Analyst for 'Pubs "R" Us,' I am entrusted with the crucial task of dissecting our chain's drinks prices and sales data to unveil insights into the performance of our pubs. In a dynamic and competitive industry, understanding consumer preferences, pricing elasticity, and sales trends is paramount to maintaining a thriving business. Through meticulous analysis, I aim to provide actionable recommendations that will drive profitability and enhance customer satisfaction across our establishments.





## 1. How many pubs are located in each country?

```
SELECT  country, count(pub_name) AS total_pubs
FROM    pubs
GROUP BY country ;
```

OUTPUT

	country	total_pubs
▶	United Kingdom	1
	Ireland	1
	United States	1
	Spain	1



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

```
SELECT p.pub_name,  
SUM(s.quantity* b.price_per_unit) AS total_sales  
FROM pubs AS p  
JOIN sales AS s ON p.pub_id = s.pub_id  
JOIN beverages b ON s.beverage_id = b.beverage_id  
GROUP BY p.pub_name  
ORDER BY 2 DESC ;
```

OUTPUT

	pub_name	total_sales
►	The Red Lion	532.66
	The Cheers Bar	413.57
	La Cerveceria	337.72
	The Dubliner	308.62



### 3. Which pub has the highest average rating ??

```
SELECT r.pub_id, p.pub_name , round(avg(r.rating),2) AS avg_rating
FROM pubs AS p
JOIN ratings AS r USING(pub_id)
GROUP BY 1, 2
ORDER BY avg_rating DESC
LIMIT 1 ;
```

OUTPUT

	pub_id	pub_name	avg_rating
▶	1	The Red Lion	4.67



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

```
SELECT s.beverage_id, b.beverage_name, SUM(s.quantity) AS Total_quantity
FROM sales AS s
INNER JOIN beverages AS b USING (beverage_id)
GROUP BY 1,2
ORDER BY SUM(s.quantity) DESC
LIMIT 5 ;
```

OUTPUT

	beverage_id	beverage_name	Total_quantity
▶	1	Guinness	55
	3	Mojito	30
	4	Chardonnay	18
	6	Tequila	18
	5	IPA	14



## 5. How many sales transactions occurred on each date??

```
SELECT transaction_date, count(*) AS No_of_transaction
FROM sales
GROUP BY transaction_date
ORDER BY transaction_date DESC;
```

OUTPUT

	transaction_date	No_of_transaction
►	2023-05-13	1
	2023-05-12	1
	2023-05-11	2
	2023-05-09	5
	2023-05-06	1
	2023-05-04	1
	2023-05-03	4
	2023-05-02	2
	2023-05-01	3



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

```
SELECT r.customer_name, p.pub_name
FROM ratings AS r
JOIN pubs AS p USING (pub_id)
JOIN sales AS s USING (pub_id)
JOIN beverages AS b USING (beverage_id)
WHERE b.category = "cocktail"
;
```

OUTPUT

	customer_name	pub_name
▶	Sophia Davis	The Cheers Bar
	William Miller	The Cheers Bar
	Michael Brown	The Dubliner
	Ethan Johnson	The Dubliner
	Olivia Taylor	The Dubliner
	John Smith	The Red Lion
	Emma Johnson	The Red Lion
	Sophia Davis	The Red Lion
	Oliver Wilson	La Cerveceria
	Isabella Moore	La Cerveceria



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

```
SELECT category , Round(avg(price_per_unit),2) AS avg_price_per_unit
FROM beverages
WHERE category Not In ("Spirit")
GROUP BY category
ORDER BY avg_price_per_unit DESC ;
```

OUTPUT

	category	avg_price_per_unit
▶	Whiskey	29.99
	Wine	12.99
	Cocktail	8.99
	Beer	5.49



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

```
WITH cte as (  
  SELECT p.pub_id , p.pub_name , round(avg(r.rating),2) AS avg_rating  
  FROM pubs AS p  
  JOIN ratings AS r USING (pub_id)  
  GROUP BY 1,2 )  
  
SELECT pub_id , pub_name , avg_rating  
FROM cte  
WHERE avg_rating > (select avg(r.rating) AS avg_rating  
FROM pubs as p  
INNER JOIN ratings AS r USING (pub_id)  
) ;
```

OUTPUT

	pub_id	pub_name	avg_rating
▶	1	The Red Lion	4.67
	4	La Cerveceria	4.6



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

```
SELECT p.pub_id, p.pub_name, p.city, p.state, p.country,
       s.transaction_date,
       SUM(b.price_per_unit * s.quantity)
       OVER (PARTITION BY p.pub_id ORDER BY s.transaction_date) AS running_total
FROM pubs p
JOIN sales s ON p.pub_id = s.pub_id
JOIN beverages b ON s.beverage_id = b.beverage_id
ORDER BY p.pub_id, s.transaction_date;
```

OUTPUT

	pub_id	pub_name	city	state	country	transaction_date	running_total
▶	1	The Red Lion	London	England	United Kingdom	2023-05-01	209.85
	1	The Red Lion	London	England	United Kingdom	2023-05-01	209.85
	1	The Red Lion	London	England	United Kingdom	2023-05-06	254.80
	1	The Red Lion	London	England	United Kingdom	2023-05-11	532.66
	1	The Red Lion	London	England	United Kingdom	2023-05-11	532.66
	2	The Dubliner	Dublin	Dublin	Ireland	2023-05-01	47.92
	2	The Dubliner	Dublin	Dublin	Ireland	2023-05-03	101.86
	2	The Dubliner	Dublin	Dublin	Ireland	2023-05-09	236.74
	2	The Dubliner	Dublin	Dublin	Ireland	2023-05-09	236.74
	2	The Dubliner	Dublin	Dublin	Ireland	2023-05-12	308.62
	3	The Cheers ...	Boston	Massac...	United States	2023-05-02	107.88
	3	The Cheers ...	Boston	Massac...	United States	2023-05-03	288.66
	3	The Cheers ...	Boston	Massac...	United States	2023-05-03	288.66
	3	The Cheers ...	Boston	Massac...	United States	2023-05-09	388.62
	3	The Cheers ...	Boston	Massac...	United States	2023-05-13	413.57



10. 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?

```
SELECT
  b.beverage_name AS beverage_Name,
  p.country AS country,
  b.category AS category,
  ROUND(AVG(b.price_per_unit), 2) AS avg_price,
  ROUND((SELECT AVG(price_per_unit) FROM beverages), 2) AS overall_average_price_per_unit
FROM pubs AS p
LEFT JOIN sales AS s
  ON s.pub_id = p.pub_id
LEFT JOIN beverages AS b
  ON b.beverage_id = s.beverage_id
GROUP BY beverage_name, country, category;
```

OUTPUT

	beverage_Name	country	category	avg_price	overall_average_price_per_unit
►	Guinness	United Kingdom	Beer	5.99	14.66
	Jameson	United Kingdom	Whiskey	29.99	14.66
	Mojito	United Kingdom	Cocktail	8.99	14.66
	Chardonnay	United Kingdom	Wine	12.99	14.66
	Tequila	United Kingdom	Spirit	24.99	14.66
	Guinness	Ireland	Beer	5.99	14.66
	Mojito	Ireland	Cocktail	8.99	14.66
	Jameson	Ireland	Whiskey	29.99	14.66
	IPA	Ireland	Beer	4.99	14.66
	Mojito	United States	Cocktail	8.99	14.66



11. 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?

```
WITH CTE_1 AS (  
    SELECT p.pub_id, p.pub_name, b.category,  
           SUM(b.price_per_unit*s.quantity) AS TS  
    FROM sales s  
    JOIN pubs p USING(pub_id)  
    JOIN beverages b USING(beverage_id)  
    GROUP BY p.pub_id, p.pub_name, b.category),  
CTE_2 AS (  
    SELECT *,  
           SUM(TS) OVER (PARTITION BY pub_name) AS TSO  
    FROM CTE_1)  
  
SELECT pub_id, pub_name, category, TS,  
       ROUND(((TS/TSO)*100),2) AS Cotribution_percentage  
FROM CTE_2  
ORDER BY pub_id;
```

OUTPUT

	pub_id	pub_name	category	TS	Cotribution_percentage
▶	1	The Red Lion	Beer	59.90	11.25
	1	The Red Lion	Whiskey	149.95	28.15
	1	The Red Lion	Cocktail	44.95	8.44
	1	The Red Lion	Wine	77.94	14.63
	1	The Red Lion	Spirit	199.92	37.53
	2	The Dubliner	Beer	164.71	53.37
	2	The Dubliner	Cocktail	53.94	17.48
	2	The Dubliner	Whiskey	89.97	29.15
	3	The Cheers Bar	Cocktail	107.88	26.09
	3	The Cheers Bar	Beer	114.80	27.76
	3	The Cheers Bar	Wine	90.93	21.99
	3	The Cheers Bar	Spirit	99.96	24.17
	4	La Cerveceria	Wine	64.95	19.23
	4	La Cerveceria	Spirit	149.94	44.40
	4	La Cerveceria	Beer	59.90	17.74





THANK YOU

