



>>

مش بحاول أحل أصعب SQL Questions

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بحاول مبطلش أحل

19 SQL Practice Questions & Solutions



Practice
Reflect
Repeat



#1 - Query all columns from the wine table with a limit of getting only 20 records.

```
select * FROM wine_schema.wine_table  
limit 20 ;
```

#2 - Query the following columns: Type, Name, Country, Rating from the wine table with a limit of 20 records.

```
SELECT  
Type,  
Name,  
Country,  
Rating  
FROM wine_schema.wine_table  
LIMIT 20;
```

	type varchar(10)	name varchar(200)	country varchar(50)	rating numeric(2,1)
>	Red	Pomerol 2011	France	4.2
>	Red	Lirac 2017	France	4.3
>	Red	Erta e China Rosso di Toscana	Italy	3.9
>	Red	Bardolino 2019	Italy	3.5
>	Red	Ried Scheibner Pinot Noir 2	Austria	3.9
>	Red	Gigondas (Nobles Terrasses	France	3.7
>	Red	Marion's Vineyard Pinot No	New Zealand	4.0
>	Red	Red Blend 2014	Chile	3.9
>	Red	Chianti 2015	Italy	3.6
>	Red	Tradition 2014	France	3.5
>	Red	Chianti Riserva 2013	Italy	3.9
>	Red	Descendant 2016	Australia	4.3
>	Red	Les Obriers de la Peira Terra	France	4.1
>	Red	Zenas Primitivo 2018	Italy	3.6
>	Red	Cuvée Confidence Côtes du	France	3.7
>	Red	Shiraz 2018	Australia	3.2
>	Red	Proprietor's Blend 2016	South Africa	4.2
>	Red	La Bienquerida 2016	Spain	4.3
>	Red	Cabernet Sauvignon 2015	United States	3.8
>	Red	Fulgeo Negroamaro Salento	Italy	4.0





#3 - What are the `distinct` wine types?

```
SELECT  
DISTINCT type  
FROM wine_schema.wine_table ;
```

	Q	type varchar(10)	
☐	>	White	
☐	>	Red	
☐	>	Sparkling	
☐	>	Rose	

#4 - Calculate the `number of distinct` wine types.

```
SELECT  
COUNT(DISTINCT type) AS num_wine_types  
FROM wine_schema.wine_table;
```

	Q	num_wine_types	
☐	>	4	

#5 - Calculate the `number of distinct` countries producing Sparkling wines.

```
SELECT  
count (DISTINCT (country))  
FROM wine_schema.wine_table  
where type = 'Sparkling' ;
```

	Q	count	
	>	16	





#6 - List the number of wines produced per country in descending order.

```
SELECT
count(DISTINCT(name)) as number_of_wine,
country
FROM wine_schema.wine_table
GROUP BY country
ORDER BY number_of_wine desc ;
```

number_of_wine	country
3316	Italy
2504	France
1299	Spain
1055	Germany
608	South Africa
441	Austria
375	United States
368	Chile
305	Portugal
298	Australia
277	Argentina
112	New Zealand
50	Brazil
35	Romania

#7 - What is the average price per each wine type? Round the number to 2 decimal places and order the average price result in ascending order

```
SELECT
type,
round(avg(price),2) as avg_price
FROM wine_schema.wine_table
GROUP BY type
ORDER BY avg_price ASC;
```

type	avg_price
Rose	12.53
White	20.62
Sparkling	34.80
Red	39.15





#8 - What is the average price by year? Order the result in ascending order based on the Year. Exclude NULL values in the Year column from the group-level result.

```
SELECT
avg(price),
YEAR
FROM wine_schema.wine_table
GROUP BY year
having year is not null
ORDER BY year ASC;
```

Q	avg	year integer
>	18.920000000000000	1961
>	209.60000000000000	1988
>	1046.9250000000000	1989
>	623.73500000000000	1990
>	866.59000000000000	1991
>	810.94333333333333	1992
>	650.87500000000000	1993
>	186.48500000000000	1995
>	160.06166666666667	1996
>	232.98857142857142	1997
>	94.387142857142857	1998

#9 - What are the average price and average rating by country? Order by the Country name.

```
SELECT
country,
ROUND(COALESCE(AVG(rating),0),2) AS avg_rating,
ROUND(COALESCE(AVG(price),0),2) AS avg_price
from wine_schema.wine_table
GROUP BY country
ORDER BY country;
```

country varchar(50)	avg_rating	avg_pri
Argentina	3.81	20.92
Australia	3.79	36.78
Austria	3.82	20.41
Brazil	3.51	17.40
Bulgaria	3.80	10.15
Canada	3.43	14.93
Chile	3.72	19.14
China	3.20	27.28
Croatia	4.06	21.97
Czech Republic	4.05	25.40
France	3.93	55.55





#10 - What are the average price and average rating by year for Italy? Exclude NULL values in the Year column from the raw table before grouping.

```
select
ROUND(avg(price),2) AS AVG_PRICE,
ROUND(avg(rating),2) AS AVG_RATING,
year
FROM wine_schema.wine_table
WHERE year is not null AND country = 'Italy'
GROUP BY year
order by year ;
```

avg_price	avg_rating	year
18.92	3.87	1961
925.08	4.50	1989
467.66	4.43	1997
632.64	4.70	1999
182.20	4.17	2000
25.00	4.00	2003
165.04	4.33	2004
269.16	4.43	2005
165.31	4.32	2006
69.52	4.11	2007
76.90	4.15	2008

#11 - What is the average price by country and by region in each country for the following countries: Argentina, Canada, Italy, Greece? Order the result based on the Country ascending and secondly based on the average price in a region descending.

```
SELECT
Country,
Region,
ROUND(AVG(Price),2) AS avg_price_region
FROM wine_schema.wine_table
WHERE Country IN ('Argentina', 'Canada', 'Italy', 'Greece')
GROUP BY 1, 2
ORDER BY 1, 3 DESC
```

country	region	avg_price
Argentina	La Consulta	101.52
Argentina	San Carlos	77.01
Argentina	Gualtallary	48.35
Argentina	Patagonia	25.63
Argentina	Vista Flores	24.86
Argentina	Salta	24.73
Argentina	Mendoza	23.41
Argentina	Cafayate Valley	22.14
Argentina	Tupungato	19.36
Argentina	Lujan de Cuyo	18.49
Argentina	Tunuyán	18.30





#12 - How many wines are available per each rating?

```
select
rating ,
count(DISTINCT(NAME))
FROM wine_schema.wine_table
GROUP BY rating
ORDER BY rating ;
```

rating	count
numeric(2,1)	
> 2.2	1
> 2.5	2
> 2.6	2
> 2.7	3
> 2.8	8
> 2.9	8
> 3.0	31
> 3.1	48
> 3.2	134
> 3.3	262
> 3.4	423

#13 - How many wines of each wine type were produced in each country?

```
SELECT
country ,
type ,
count(DISTINCT (name))
FROM wine_schema.wine_table
GROUP BY 1,2
ORDER BY 1 , 2 ;
```

country	type	coun
varchar(50)	varchar(10)	
Argentina	Red	220
Argentina	Rose	6
Argentina	White	51
Australia	Red	231
Australia	Sparkling	5
Australia	White	62
Austria	Red	183
Austria	Rose	10
Austria	Sparkling	17
Austria	White	231
Brazil	Red	40
..	..	..





#14 - What is the maximum price per each wine type excluding the following years - 2011, 2013, 2015, 2018)? Order by maximum price in descending order.

```
SELECT
type ,
max(price)
FROM wine_schema.wine_table
where year not in (2011 ,2013 ,2015 ,2018)
GROUP BY type
ORDER BY max(price) asc ;
```

	type varchar(10)	max
>	Rose	89.50
>	Sparkling	495.00
>	White	681.37
>	Red	3410.79

#15 - What are the names and country locations of the top 10 red wines with the highest rating?

```
SELECT Type, Name, Country, Rating
FROM wine_schema.wine_table
WHERE Type = 'Red'
ORDER BY Rating DESC
LIMIT 10
```

	type varchar(10)	name varchar(200)	country varchar(50)	rating numeric(2,1)
>	Red	Veneto Alzero Cabernet 20	Italy	4.8
>	Red	G 2015	South Africa	4.8
>	Red	L'Ermita Velles Vinyes Prior	Spain	4.8
>	Red	Toscana 2016	Italy	4.8
>	Red	Barolo Riserva Monfortino 2	Italy	4.8
>	Red	Beckstoffer Las Piedras Vine	United States	4.8
>	Red	Veneto Alzero Cabernet 20	Italy	4.7
>	Red	Unico 2006	Spain	4.7
>	Red	Pomerol 2012	France	4.7
>	Red	Brunello di Montalcino Rise	Italy	4.7





#16 - List the 10 top Wineries in France that have the highest rating excluding wines with a number of reviews below 200.

```
select winery , rating
FROM wine_schema.wine_table
where (country = 'France' and numofrating >= 200)
ORDER BY rating desc
limit 10 ;
```

winery	rating
varchar(100)	numeric(3,1)
> Château Latour	4.7
> Château Ducru-Beaucaillou	4.7
> Château Palmer	4.7
> Louis Roederer	4.7
> Château Haut-Brion	4.7
> Pétrus	4.7
> Château Mouton Rothschild	4.6
> Cos d'Estournel	4.6
> Château Clinet	4.6
> Château Cheval Blanc	4.6

#17 - Which group of wine types has the highest average rating for wines that were produced between 2000 and 2010 or between 2015 and 2020.

```
select type , avg(rating)
from wine_schema.wine_table
WHERE (Year BETWEEN 2000 AND 2010) OR (Year BETWEEN 2015 AND 2020)
GROUP BY 1
order by 2 desc
limit 1 ;
```

type	avg
varchar(10)	numeric(3,1)
> Sparkling	4.0605911330049261





#18 - What are the five top countries with the highest average rating for wines that are above the price of 20 Euro?

```
select country , avg(rating)
FROM wine_schema.wine_table
where price > 20
GROUP BY country
order by country DESC
limit 5 ;
```

country varchar(50)	avg
> United States	4.1050541516245487
> United Kingdom	4.033333333333333
> Turkey	4.050000000000000
> Switzerland	3.850000000000000
> Spain	4.1288944723618090

#19 - What are the top 20 regions that produce the highest number of wines with a minimum of 50 wines, where the price of a wine is below 300 EURO, and the number of rating reviews for the wine is more than 100?

```
SELECT Region, COUNT(Name) AS amount_wines
FROM wine_schema.wine_table
WHERE Price < 300 AND numofrating > 100
GROUP BY 1
HAVING COUNT(Name) > 50
ORDER BY 2 DESC
LIMIT 20 ;
```

region varchar(50)	amount_wines
> Rioja	269
> Champagne	218
> Stellenbosch	200
> Toscana	186
> Saint-Émilion Grand Cru	123
> Mendoza	119
> California	118
> Chianti Classico	115
> Ribera del Duero	115
> Brunello di Montalcino	114
> Terre Siciliane	99



Level 1 – the end ..



>> The best time to practice SQL isn't the night before an interview

>> It's today

Practice
Reflect
Repeat



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Uncover Your Story

Analysis is more than numbers.
What story are you trying to understand?

Understand Analyze insights

