

SQL PORTFOLIO - VICTOR OJO

Database Query & Analysis Skills

Tools Used: MySQL Workbench
Database: richlist (billionaires dataset)

Query1:Basic Select

The screenshot shows the MySQL Workbench interface with the following details:

- File Bar:** File, Edit, View, Query, Database, Server, Tools, Scripting, Help.
- Navigator:** Shows the database schema with the **richlist** database selected, containing **billionaires** and **geography** tables.
- Query Editor:** Title: Query 1, SQL: `SELECT * FROM billionaires LIMIT 15;`, Result Grid shows the top 15 rows of the billionaires table.
- Result Grid:** Columns: rank, finalWorth, category, personName, age, country, city, source, industries. Rows 1-10 are displayed.
- Output:** Shows the same 10 rows from the result grid.
- Help:** A note says "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

rank	finalWorth	category	personName	age	country	city	source	industries
1	211000	Fashion & Retail	Bernard Arnault & family	74	France	Paris	LVMH	Fashion & Retail
2	180000	Automotive	Elon Musk	51	United States	Austin	Tesla, SpaceX	Automotive
3	114000	Technology	Jeff Bezos	59	United States	Medina	Amazon	Technology
4	107000	Technology	Larry Ellison	78	United States	Lanai	Oracle	Technology
5	106000	Finance & Investments	Warren Buffett	89	United States	Omaha	Berkshire Hathaway	Finance & Investments
6	104000	Technology	Bill Gates	64	United States	Medina	Microsoft	Technology
7	94500	Media & Entertainment	Michael Bloomberg	81	United States	New York	Bloomberg LP	Media & Entertainment
8	93000	Telecom	Carlos Slim Helu & family	83	Mexico	Mexico City	Telecom	Telecom
9	83400	Diversified	Mukesh Ambani	65	India	Mumbai	Diversified	Diversified
10	80700	Technology	Steve Ballmer	67	United States	Hunts Point	Microsoft	Technology

This query retrieves records from the billionaires table.

Query2: DISTINCT query

The screenshot shows the MySQL Workbench interface. In the top navigation bar, 'Query 1' is selected and contains the SQL query: `SELECT DISTINCT(country) FROM billionaires;`. The results grid below shows a list of countries: France, United States, Mexico, India, Spain, China, Canada, Germany, Switzerland, Belgium, and Austria. The 'Result Grid' tab is active. On the right side of the interface, there is a 'SQLAdditions' panel with a message: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

This query retrieves unique country names from the billionaires table, eliminating duplicate entries.

Query3: SUB QUERY

The screenshot shows the MySQL Workbench interface. In the top navigation bar, 'Query 1' is selected and contains the SQL query: `SELECT personName, finalworth, (SELECT AVG(finalworth) FROM billionaires) FROM billionaires;`. The results grid below shows a list of billionaires with their names, final net worth, and the average net worth of all billionaires. The 'Result Grid' tab is active. On the right side of the interface, there is a 'SQLAdditions' panel with a message: "Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help."

personName	finalworth	(SELECT AVG(finalworth) FROM billionaires)
Bernard Arnault & family	211000	14821.8947
Elon Musk	180000	14821.8947
Jeff Bezos	114000	14821.8947
Larry Ellison	107000	14821.8947
Warren Buffett	106000	14821.8947
Bill Gates	104000	14821.8947
Michael Bloomberg	94500	14821.8947
Carlos Slim Helu & family	93000	14821.8947
Mukesh Ambani	83400	14821.8947
Steve Ballmer	80700	14821.8947
François Bettencourt	80500	14821.8947

This query finds all billionaires whose net worth is above the average net worth of all billionaires using a nested SELECT statement.

Query4: Case Query

The screenshot shows the MySQL Workbench interface with a query editor titled "Query 1". The SQL code is:

```
1 • SELECT personName,finalworth,
2     CASE
3         WHEN finalworth < 10000 THEN 'low'
4         WHEN finalworth BETWEEN 10000 AND 30000 THEN 'medium'
5         ELSE 'high'
6     END
7
8     AS wealth_level
9     From billionaires
```

The result grid displays the following data:

personName	finalworth	wealth_level
Bernard Arnault & family	211000	high
Elon Musk	180000	high
Jeff Bezos	114000	high
Larry Ellison	107000	high
Warren Buffett	106000	high
Bill Gates	104000	high
Michael Bloomberg	94500	high
Carlos Slim Helu & family	93000	high
Mukesh Ambani	83400	high
Steve Ballmer	80700	high
Francoise Bettencourt...	80500	high

This query categorizes billionaires into wealth levels (Low, Medium, High) based on their net worth using conditional logic.

Query5:

The screenshot shows the MySQL Workbench interface with a query editor titled "Query 1". The SQL code is:

```
1 • SELECT * FROM billionaires
2     INNER JOIN geography
3     ON billionaires.country = geography.Country_Name;
```

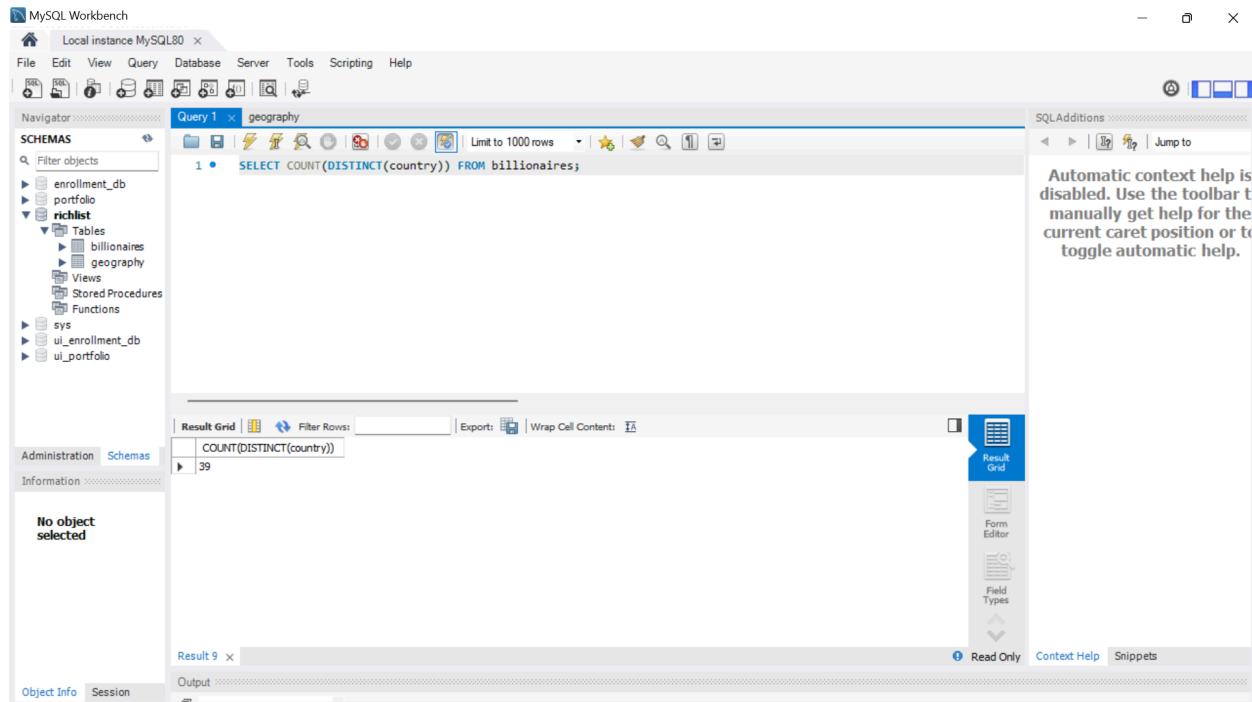
The result grid displays the following data:

rank	finalWorth	category	personName	age	country	city	source	industries
8	93000	Telecom	Carlos Slim Helu & family	83	Mexico	Mexico City	Telecom	Telecom
9	83400	Diversified	Mukesh Ambani	65	India	Mumbai	Diversified	Diversified
13	77300	Fashion & Retail	Amancio Ortega	87	Spain	La Coruna	Zara	Fashion & Retail
15	68000	Food & Beverage	Zhong Shanshan	68	China	Hangzhou	Beverages, pharmaceuticals	Food & Beverage
22	54400	Media & Entertainment	David Thomson & family	65	Canada	Toronto	Media	Media & Entertain
24	47200	Diversified	Gautam Adani	60	India	Ahmedabad	Infrastructure, commodities	Diversified
26	45000	Technology	Zhang Yiming	39	China	Beijing	TikTok	Technology
27	42900	Fashion & Retail	Dieter Schwarz	83	Germany	Nordrhein-Westfalen	Retail	Fashion & Retail
29	39100	Logistics	Klaus-Michael Kuehne	65	Switzerland	Schindellegi	Shipping	Logistics
30	38900	Food & Beverage	Giovanni Ferrero	58	Belgium	Brussels	Nutella, chocolates	Food & Beverage
34	35300	Technology	Ma Huateng	51	China	Shenzhen	Internet media	Technology
37	34700	Food & Beverage	Mark Mateschitz	30	Austria	Salzburg	Red Bull	Food & Beverage
38	33400	Automotive	Robin Zeng	54	China	Ningde	Batteries	Automotive
39	32600	Fashion & Retail	Tadashi Yanai & family	74	Japan	Tokyo	Fashion retail	Fashion & Retail
40	32100	Diversified	Len Blavatnik	65	United Kingdom	London	Music, chemicals	Diversified
43	31200	Logistics	Gianluigi Aponte	82	Switzerland	Geneva	Shipping	Logistics
43	31200	Logistics	Rafaela Aponte-Diamant	78	Switzerland	Geneva	Shipping	Logistics

This query joins the "billionaires" and "geography" tables to retrieve detailed information about each billionaire, including their rank, final worth, category, name, age, country, city, source, and industries.

This query combines the billionaires and geography tables to display each billionaire's name alongside their continent using a JOIN operation.

Query6: Count Query



The screenshot shows the MySQL Workbench interface. The top menu bar includes File, Edit, View, Query, Database, Server, Tools, Scripting, and Help. The left sidebar, titled 'Navigator', shows the database schema with 'richlist' expanded, revealing 'Tables' containing 'billionaires' and 'geography', and other objects like 'Views', 'Stored Procedures', and 'Functions'. The main query editor window, titled 'Query 1', contains the SQL command: `SELECT COUNT(DISTINCT(country)) FROM billionaires;`. Below the query, the results are displayed in a grid, showing a single row with the value '39'. The right sidebar, titled 'SQLAdditions', has a note: 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.' The bottom of the interface shows tabs for 'Object Info' and 'Session'.

This query counts the total number of countries in the database.

Query7: Average Query

The screenshot shows the MySQL Workbench interface. In the top navigation bar, 'File', 'Edit', 'View', 'Query', 'Database', 'Server', 'Tools', 'Scripting', and 'Help' are visible. The 'Query 1' tab is active, displaying the SQL query: `SELECT AVG(finalworth) FROM billionaires;`. The results grid shows one row with the value `14821.8947`. The 'Result Grid' tab is selected. On the right side, the 'SQLAdditions' panel contains a note: 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.'

This query calculates the average net worth of all billionaires in the database.

Query8: REGEXP

The screenshot shows the MySQL Workbench interface. In the top navigation bar, 'File', 'Edit', 'View', 'Query', 'Database', 'Server', 'Tools', 'Scripting', and 'Help' are visible. The 'Query 1' tab is active, displaying the SQL query: `SELECT * FROM billionaires WHERE country REGEXP '^U';`. The results grid shows 25 rows of billionaire data where the country name starts with 'U'. The 'Result Grid' tab is selected. On the right side, the 'SQLAdditions' panel contains a note: 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.'

rank	finalWorth	category	personName	age	country	city	source	industries	se
2	180000	Automotive	Elon Musk	51	United States	Austin	Tesla, SpaceX	Automotive	TR
3	114000	Technology	Jeff Bezos	59	United States	Medina	Amazon	Technology	TR
4	107000	Technology	Larry Ellison	78	United States	United States	Oracle	Technology	TR
5	106000	Finance & Investments	Warren Buffett	92	United States	Omaha	Berkshire Hathaway	Finance & Investments	TR
6	104000	Technology	Bill Gates	67	United States	Medina	Microsoft	Technology	TR
7	94500	Media & Entertainment	Michael Bloomberg	81	United States	New York	Bloomberg LP	Media & Entertainment	TR
10	80700	Technology	Steve Ballmer	67	United States	Hunts Point	Microsoft	Technology	TR
12	79200	Technology	Larry Page	50	United States	Palo Alto	Google	Technology	TR
14	76000	Technology	Sergey Brin	49	United States	Los Altos	Google	Technology	TR
16	64400	Technology	Mark Zuckerberg	38	United States	Palo Alto	Facebook	Technology	TR
17	59000	Diversified	Charles Koch & Fa...	87	United States	Wichita	Koch Industries	Diversified	FA
19	59000	Diversified	Julia Koch & family	60	United States	New York	Koch Industries	Diversified	FA
19	58800	Fashion & Retail	Jim Walton	74	United States	Bentonville	Walmart	Fashion & Retail	FA
20	57600	Fashion & Retail	Rob Walton & family	78	United States	Bentonville	Walmart	Fashion & Retail	FA
21	56700	Fashion & Retail	Alice Walton	73	United States	Fort Worth	Walmart	Fashion & Retail	FA
23	50100	Technology	Michael Dell	58	United States	Austin	Dell Technologies	Technology	TR
25	45100	Fashion & Retail	Phil Knight & family	85	United States	Hillsboro	Nike	Fashion & Retail	TR

This query uses pattern matching to find all billionaires from countries that start with the letter 'U' (like United States, United Kingdom).