

# James Jones, 11-07-2022

1. What query would you run to get all the countries with a Surface Area below 501 and a Population greater than 100,000? Include the country name, surface area, and population in your results.

The screenshot shows a database query editor with a dark theme. The query is as follows:

```
128 USE world;
129
130 # 1
131 SELECT countries.name, countries.surface_area, countries.population
132 FROM countries
133 WHERE countries.surface_area < 501 AND countries.population > 100000;
134
```

Below the query, the 'Result Grid' is displayed, showing the results of the query. The grid has three columns: 'name', 'surface\_area', and 'population'. The results are as follows:

name	surface_area	population
Aruba	193.00	103000
Barbados	430.00	270000
Macao	18.00	473000
Maldives	298.00	286000
Malta	316.00	380200
Mayotte	373.00	149000
Saint Vincent and the Grenadines	388.00	114000

The interface includes a 'Filter Rows' search bar, an 'Export' button, and a sidebar with icons for 'Result Grid', 'Form Editor', 'Field Types', 'Query Stats', and 'Execution Plan'. The status bar at the bottom indicates 'countries 19' and 'Read Only'.

2. What query would you run to get countries with only a Constitutional Monarchy with a capital greater than 200 and a life expectancy greater than 75 years? Include the country name, form of government, and capital in your results.

[illegible]

3. What query would you run to summarize the number of countries in each region?  
The query should display the name of the region and the number of countries.  
Also, the query should arrange the result by the number of countries in descending order.

The screenshot shows a database query editor with a dark theme. The query editor at the top contains the following SQL query:

```
139  
140 # 3  
141 SELECT countries.region, COUNT(countries.name)  
142 FROM countries  
143 GROUP BY countries.region  
144 ORDER BY COUNT(countries.name) DESC;  
145
```

Below the query editor, the results are displayed in a grid. The grid has two columns: 'region' and 'COUNT(countries.name)'. The results are sorted in descending order of the count. The first row shows 'Caribbean' with a count of 24. The last row shows 'Micronesia/Caribbean' with a count of 1.

region	COUNT(countries.name)
Caribbean	24
Eastern Africa	20
Middle East	18
Western Africa	17
Southern Europe	15
Southern and Central Asia	14
South America	14
Southeast Asia	11
Polynesia	10
Eastern Europe	10
Central Africa	9
Western Europe	9
Central America	8
Eastern Asia	8
Nordic Countries	7
Northern Africa	7
Micronesia	7
Antarctica	5
Australia and New Zealand	5
North America	5
Southern Africa	5
Melanesia	5
Baltic Countries	3
British Islands	2
Micronesia/Caribbean	1

The interface includes a 'Result Grid' tab, a 'Filter Rows' search bar, and an 'Export' button. The status bar at the bottom indicates 'Result 21' and 'Read Only'.

4. What query would you run to get all the countries that speak Slovene? Your query should return the name of the country, language, and language percentage. Your query should arrange the result by language percentage in descending order.

The screenshot shows a database query editor interface. The query is as follows:

```
146 # 4
147 SELECT countries.name, languages.language, languages.percentage
148 FROM countries
149 JOIN languages ON countries.id = languages.country_id
150 WHERE languages.language = "Slovene"
151 ORDER BY languages.percentage DESC;
152
```

The results are displayed in a table with the following columns: name, language, and percentage. The results are sorted by percentage in descending order.

name	language	percentage
Slovenia	Slovene	87.9
Austria	Slovene	0.4
Italy	Slovene	0.2
Croatia	Slovene	0.0

The interface also includes a sidebar with various tools like Form Editor, Field Types, Query Stats, and Execution Plan. The bottom status bar indicates "Result 22" and "Read Only".

5. What query would you run to display the total number of cities for each country?  
Your query should return the name of the country and the total number of cities.  
Your query should arrange the result by the number of cities in descending order.

The screenshot shows a database query editor interface. At the top, there's a toolbar with various icons and a "Limit to 1000 rows" button. Below the toolbar, the SQL query is entered in a text area:

```
153 # 5
154 SELECT countries.name, COUNT(cities.id) AS city_count
155 FROM countries
156 JOIN cities ON countries.id = cities.country_id
157 GROUP BY countries.name
158 ORDER BY city_count DESC;
159
```

Below the query editor, the "Result Grid" is displayed, showing the results of the query. The grid has two columns: "name" and "city\_count". The results are sorted in descending order of city count. The first few rows are:

name	city_count
United States	274
Brazil	250
Japan	248
Russian Federation	189
Mexico	173
Philippines	136
Germany	93
Indonesia	85
United Kingdom	81
South Korea	70
Iran	67
Nigeria	64
Turkey	62
Spain	59
Pakistan	59
Italy	58
Argentina	57
Ukraine	57
Canada	49
Poland	44
South Africa	44
Taiwan	42
Venezuela	41
France	40
Colombia	38
Egypt	37
Chile	29
Romania	29

At the bottom of the interface, there's a "Result 23" label and a "Read Only" status indicator.

6. What query would you run to get all the cities in Mexico with a population of greater than 500,000? Your query should arrange the result by population in descending order.

The screenshot shows a database query editor interface. The top section displays a SQL query that selects city names and populations from a 'cities' table, joining it with a 'countries' table to filter for Mexico and cities with a population greater than 500,000. The results are ordered by population in descending order. Below the query, the 'Result Grid' shows a list of cities in Mexico, sorted by population. The interface includes a search bar, a 'Filter Rows' button, and an 'Export' button. The bottom status bar indicates 'Result 24' and 'Read Only'.

```
159
160 # 6
161 SELECT cities.name, cities.population
162 FROM countries
163 JOIN cities ON countries.id = cities.country_id
164 WHERE countries.name = "Mexico" AND cities.population > 500000
165 ORDER BY cities.population DESC;
```

name	population
Ciudad de México	8591309
Guadalajara	1647720
Ecatepec de Morelos	1620303
Puebla	1346176
Nezahualcóyotl	1224924
Juárez	1217818
Tijuana	1212232
León	1133576
Monterrey	1108499
Zapopan	1002239
Naucalpan de Juárez	857511
Mexicali	764902
Culiacán	744859
Acapulco de Juárez	721011
Tlalnepantla de Baz	720755
Mérida	703324
Chihuahua	670208
San Luis Potosí	669353
Guadalupe	668780
Toluca	665617
Aguascalientes	643360
Querétaro	639839
Morelia	619958
Hermosillo	608697
Saltillo	577352
Torreón	529093
Centro (Villahermosa)	519873

Result 24 Read Only

7. What query would you run to get all languages in each country with a percentage greater than 89%? Include the country name, language, and percentage. Your query should arrange the result by percentage in descending order.

Limit to 1000 rows

```
166
167 # 7
168 • SELECT countries.name, languages.language, languages.percentage
169 FROM countries
170 JOIN languages ON countries.id = languages.country_id
171 WHERE languages.percentage > 89
172 ORDER BY languages.percentage DESC;
```

100% 1:166

Result Grid Filter Rows: Search Export:

	name	language	percentage
▶	Grenada	Creole English	100.0
▶	Faroe Islands	Faroese	100.0
▶	San Marino	Italian	100.0
▶	El Salvador	Spanish	100.0
▶	Haiti	Haiti Creole	100.0
▶	Rwanda	Rwanda	100.0
▶	Western Sahara	Arabic	100.0
▶	Bermuda	English	100.0
▶	Maldives	Dhivehi	100.0
▶	Dominica	Creole English	100.0
▶	Cape Verde	Crioulo	100.0
▶	Saint Kitts and...	Creole English	100.0
▶	Cuba	Spanish	100.0
▶	North Korea	Korean	99.9
▶	South Korea	Korean	99.9
▶	Yemen	Arabic	99.6
▶	Bosnia and He...	Serbo-Croatian	99.2
▶	Saint Vincent a...	Creole English	99.1
▶	Japan	Japanese	99.1
▶	Colombia	Spanish	99.0
▶	Portugal	Portuguese	99.0
▶	Kiribati	Kiribati	98.9
▶	Madagascar	Malagasy	98.9
▶	Egypt	Arabic	98.8
▶	Hungary	Hungarian	98.5
▶	Greece	Greek	98.5
▶	Ireland	English	98.4
▶	Somalia	Somali	98.3
▶	Togo	Togo	98.2

Result 25

Read Only

Result Grid  
Form Editor  
Field Types  
Query Stats  
Execution Plan

8. What query would you run to get all the cities of Argentina inside the Buenos Aires district and have a population greater than 500,000? The query should return the Country Name, City Name, District, and Population.

Limit to 1000 rows

Open a script file in this editor | ages.percentage DESC;

```
173
174 # 8
175 • SELECT countries.name AS country, cities.name AS city, cities.district, cities.population
176 FROM countries
177 JOIN cities ON countries.id = cities.country_id
178 WHERE cities.district = "Buenos Aires" AND cities.population > 500000;
```

100% 71:178

Result Grid Filter Rows: Search Export:

country	city	district	population
Argentina	La Matanza	Buenos Aires	1266461
Argentina	Lomas de Zamora	Buenos Aires	622013
Argentina	Quilmes	Buenos Aires	559249
Argentina	Almirante Brown	Buenos Aires	538918
Argentina	La Plata	Buenos Aires	521936
Argentina	Mar del Plata	Buenos Aires	512880

Result 26 Read Only

Result Grid Form Editor Field Types Query Stats Execution Plan