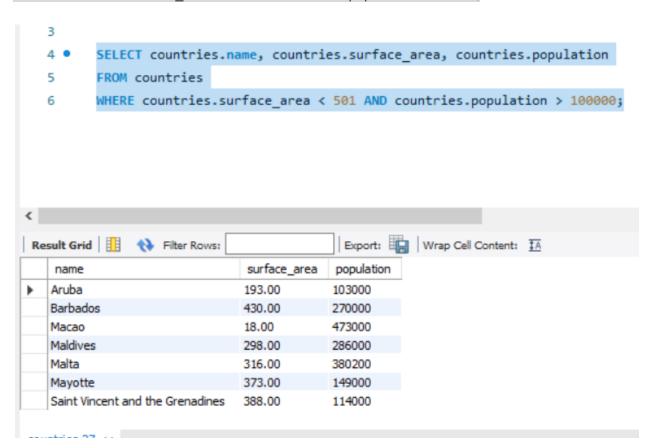
Solutions to SQL Queries (Countries)

Table aliasing is not used in these example solutions, but it is perfectly acceptable if students chose to implement this practice.

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

SELECT countries.name, countries.surface_area, countries.population FROM countries

WHERE countries.surface area < 501 AND countries.population > 100000;

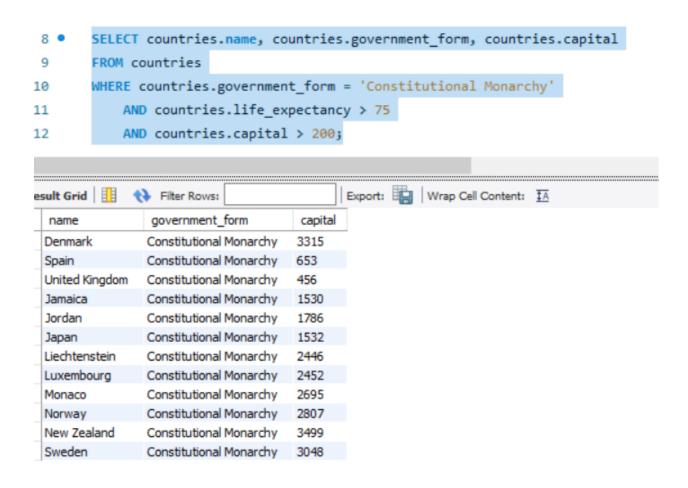


2. What query would you run to get countries with only Constitutional Monarchy with a capital greater than 200 and a life expectancy greater than 75 years? Include the country name, form of government, and capital in your results.

SELECT countries.name, countries.government_form, countries.capital
FROM countries
WHERE countries.government_form = 'Constitutional Monarchy'

AND countries.life_expectancy > 75

AND countries.capital > 200;



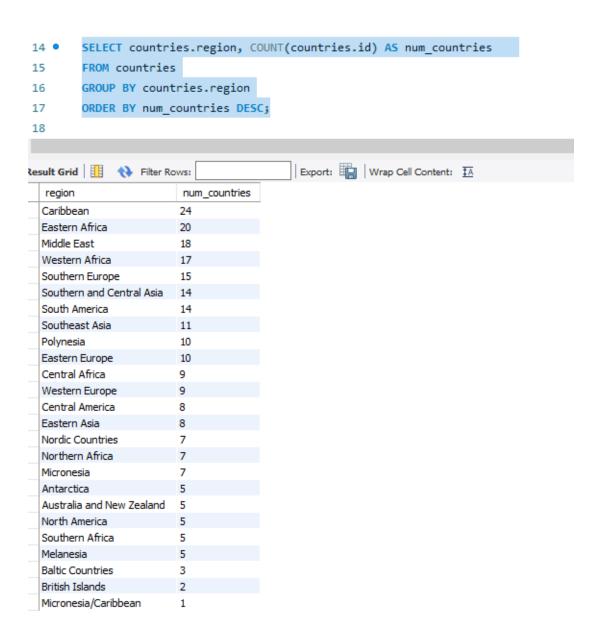
3. What query would you run to summarize the number of countries in each region? The query should display the name of the region and the number of countries. Also, the query should arrange the result by the number of countries in descending order.

SELECT countries.region, COUNT(countries.id) AS num countries

FROM countries

GROUP BY countries.region

ORDER BY num_countries DESC;



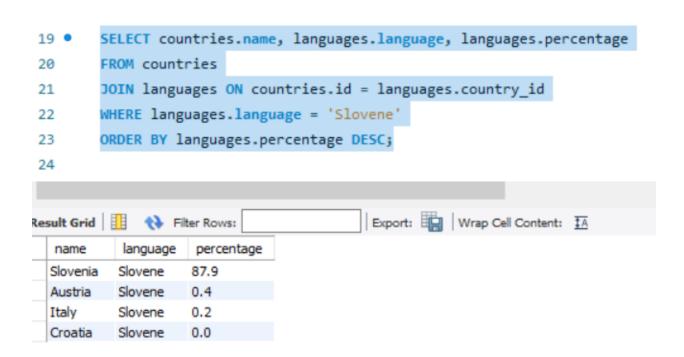
4. What query would you run to get all the countries that speak Slovene? Your query should return the name of the country, language and language percentage. Your query should arrange the result by language percentage in descending order.

SELECT countries.name, languages.language, languages.percentage FROM countries

JOIN languages ON countries.id = languages.country_id

WHERE languages.language = 'Slovene'

ORDER BY languages.percentage DESC;



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.

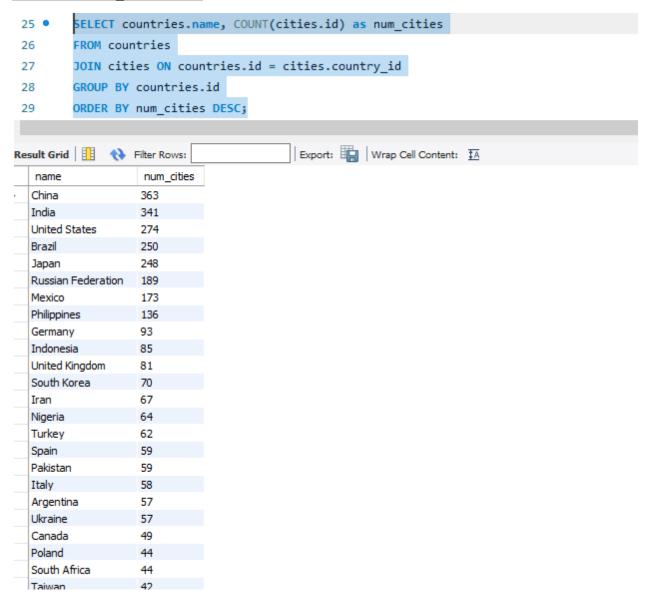
SELECT countries.name, COUNT(cities.id) as num cities

FROM countries

JOIN cities ON countries.id = cities.country id

GROUP BY countries.id

ORDER BY num_cities DESC;



Output continues...

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.

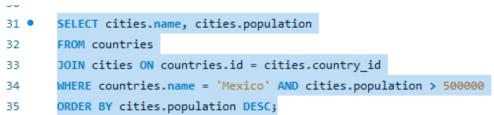
SELECT cities.name, cities.population

FROM countries

JOIN cities ON countries.id = cities.country_id

WHERE countries.name = 'Mexico' AND cities.population > 500000

ORDER BY cities.population DESC;



3	ORDER BY C	ities.popu	lation DESC	;			
Re	sult Grid 🔢 🙌 Fi	ilter Rows:		Export:		Wrap Cell Content:	‡A
	name	population					
•	Ciudad de MÃ@xico	8591309					
	Guadalajara	1647720					
	Ecatepec de Morelos	1620303					
	Puebla	1346176					
	Nezahualcóyotl	1224924					
	JuÃirez	1217818					
	Tijuana	1212232					
	León	1133576					
	Monterrey	1108499					
	Zapopan	1002239					
	Naucalpan de JuÃirez	857511					
	Mexicali	764902					
	CuliacÃin	744859					
	Acapulco de JuÃirez	721011					
	Tlalnepantla de Baz	720755					
	MÃ@rida	703324					
	Chihuahua	670208					
	San Luis PotosÃ-	669353					
	Guadalupe	668780					
	Toluca	665617					
	Aguascalientes	643360					
	Querétaro	639839					
	Morelia	619958					
	Hermosillo	608697					
	Saltillo	577352					
	Torreón	529093					
	Centro (Villahermosa)	519873					

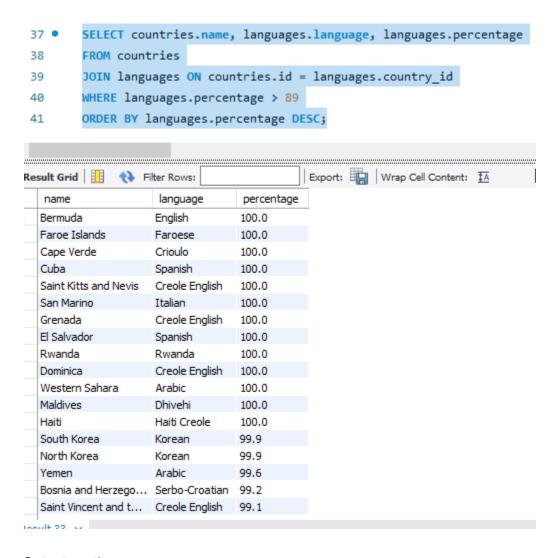
7. What query would you run to get all languages in each country with a percentage greater than 89%? Include the country name, language, and percentage. Your query should arrange the result by percentage in descending order.

SELECT countries.name, languages.language, languages.percentage FROM countries

JOIN languages ON countries.id = languages.country_id

WHERE languages.percentage > 89

ORDER BY languages.percentage DESC;



Output continues...

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

