

33°

Lab - AWS re/Start

Trabajar con funciones

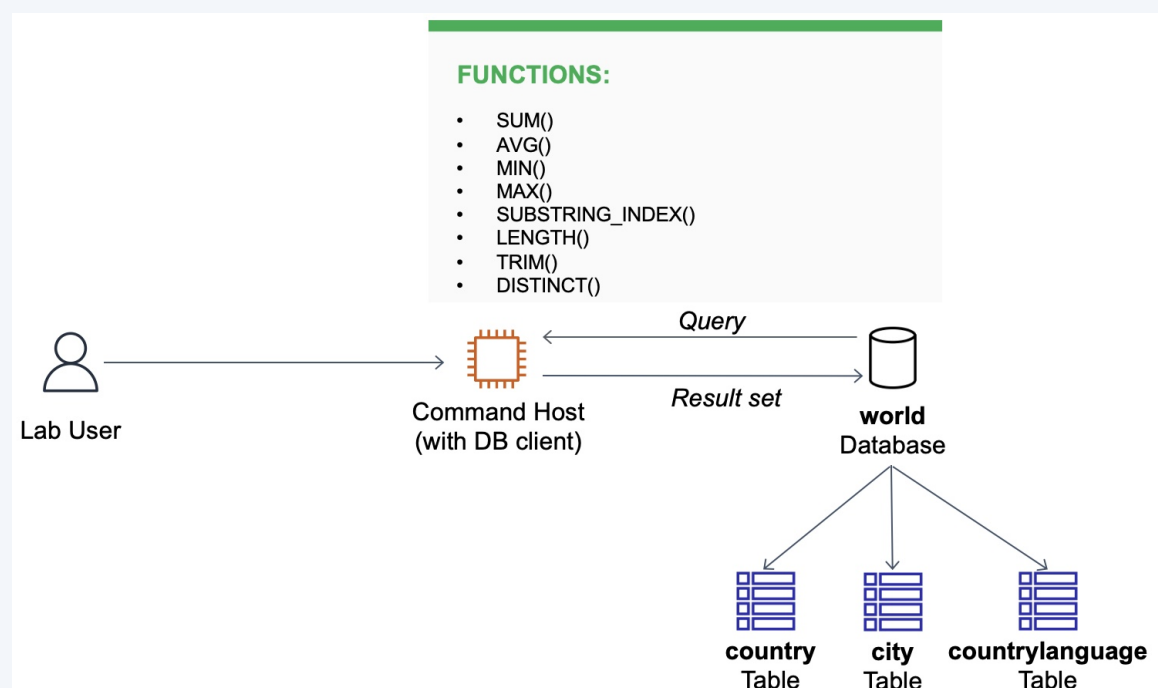




Realizando consultas a la base de datos

A continuación, se muestra los objetivos del laboratorio:

- Usar las funciones de agregación **SUM()**, **MIN()**, **MAX()** y **AVG()** para resumir datos
- Usar la función **SUBSTRING_INDEX()** para dividir las cadenas
- Usar las funciones **LENGTH()** y **TRIM()** para determinar la longitud de una cadena
- Usar la función **DISTINCT()** para filtrar los registros duplicados
- Usar las funciones en el enunciado **SELECT** y la cláusula **WHERE**



Tarea 01



En este laboratorio utilizaremos las siguientes funciones:

- **SUM()** suma todos los valores de determinado campo.
- **AVG()** genera un promedio de todos los valores de determinado campo.
- **MAX()** encuentra la fila con el valor más alto.
- **MIN()** encuentra la fila con el valor más bajo.
- **COUNT()** encuentra la cantidad de filas.
- **SUBSTRING_FUNCTION()** nos permite dividir una cadena (string).
- **LENGTH()** permite determinar cuántos caracteres tiene una cadena.
- **TRIM()** se encarga de borrar los espacios en blanco iniciales y finales.

```
MariaDB [(none)]> SELECT sum(Population), avg(Population), max(Population), min(Population), count(Population) FROM world.country;
+-----+-----+-----+-----+-----+
| sum(Population) | avg(Population) | max(Population) | min(Population) | count(Population) |
+-----+-----+-----+-----+-----+
| 6078749450 | 25434098.1172 | 1277558000 | 0 | 239 |
+-----+-----+-----+-----+-----+
1 row in set (0.002 sec)

MariaDB [(none)]> SELECT Name, Region from world.country WHERE substring_index(Region, " ", 1) = "Southern";
+-----+-----+
| Name | Region |
+-----+-----+
| Afghanistan | Southern and Central Asia |
| Albania | Southern Europe |
| Andorra | Southern Europe |
| Bangladesh | Southern and Central Asia |
| Bosnia and Herzegovina | Southern Europe |
| Bhutan | Southern and Central Asia |
| Botswana | Southern Africa |
| Spain | Southern Europe |
| Gibraltar | Southern Europe |
| Greece | Southern Europe |
| Croatia | Southern Europe |
| India | Southern and Central Asia |
| Iran | Southern and Central Asia |
| Italy | Southern Europe |
| Kazakhstan | Southern and Central Asia |
| Kyrgyzstan | Southern and Central Asia |
| Sri Lanka | Southern and Central Asia |
| Lesotho | Southern Africa |
| Maldives | Southern and Central Asia |
| Macedonia | Southern Europe |
| Malta | Southern Europe |
| Namibia | Southern Africa |
| Nepal | Southern and Central Asia |
| Pakistan | Southern and Central Asia |
| Portugal | Southern Europe |
| San Marino | Southern Europe |
| Slovenia | Southern Europe |
| Swaziland | Southern Africa |
| Tajikistan | Southern and Central Asia |
| Turkmenistan | Southern and Central Asia |
| Uzbekistan | Southern and Central Asia |
| Holy See (Vatican City State) | Southern Europe |
| Yugoslavia | Southern Europe |
| South Africa | Southern Africa |
+-----+-----+
34 rows in set (0.000 sec)
```

Tarea 01



Para detectar aquellas regiones cuyos nombres tienen menos de diez caracteres. OJO, con ayuda de **DISTINCT()** filtramos los duplicados (nos deshacemos de ellos)

```
MariaDB [(none)]> SELECT DISTINCT(Region) FROM world.country WHERE LENGTH(TRIM(Region)) < 10;
+-----+
| Region |
+-----+
| Caribbean |
| Polynesia |
| Melanesia |
+-----+
3 rows in set (0.001 sec)
```

Escriba una consulta que devuelva filas que tienen Micronesian/Caribbean como nombre en la columna de región. El resultado debe dividir la región como Micronesia y Caribbean en dos columnas separadas: una llamada Region Name 1 (Nombre de región 1) y una llamada Region Name 2 (Nombre de región 2).

```
MariaDB [(none)]> SELECT Name, substring_index(Region, "/", 1) as "Region Name 1", substring_index(region, "/", -1) as "Region Name 2" FROM world.country WHERE Region = "Micronesia/Caribbean";
+-----+-----+-----+
| Name | Region Name 1 | Region Name 2 |
+-----+-----+-----+
| United States Minor Outlying Islands | Micronesia | Caribbean |
+-----+-----+-----+
1 row in set (0.000 sec)

MariaDB [(none)]> SELECT DISTINCT(Region) FROM world.country;
+-----+
| Region |
+-----+
| Caribbean |
| Southern and Central Asia |
| Central Africa |
| Southern Europe |
| Middle East |
| South America |
| Polynesia |
| Antarctica |
| Australia and New Zealand |
| Western Europe |
| Eastern Africa |
| Western Africa |
| Eastern Europe |
| Central America |
| North America |
| Southeast Asia |
| Southern Africa |
| Eastern Asia |
| Nordic Countries |
| Northern Africa |
| Baltic Countries |
| Melanesia |
| Micronesia |
| British Islands |
| Micronesia/Caribbean |
+-----+
25 rows in set (0.001 sec)
```