

FUNCIONES NUMÉRICAS, DE TIEMPO Y GENERALES

Mostrar id, nombre, continente, año de independencia y cantidad de años que llevan independizados los países de américa del sur

CONSULTA: SELECT Code, Name, Continent, IndepYear, (YEAR(CURDATE()) - IndepYear) AS años_independizados FROM country WHERE Continent = 'South America';

```
MariaDB [world]> SELECT Code, Name, Continent, IndepYear, (YEAR(CURDATE()) - IndepYear) AS años_independizados FROM country WHERE Continent = 'South America';
```

Code	Name	Continent	IndepYear	años_independizados
ARG	Argentina	South America	1816	208
BOL	Bolivia	South America	1825	199
BRA	Brazil	South America	1822	202
CHL	Chile	South America	1810	214
COL	Colombia	South America	1810	214
ECU	Ecuador	South America	1822	202
FLK	Falkland Islands	South America	NULL	NULL
GUF	French Guiana	South America	NULL	NULL
GUY	Guyana	South America	1966	58
PER	Peru	South America	1821	203
PRY	Paraguay	South America	1811	213
SUR	Suriname	South America	1975	49
URY	Uruguay	South America	1828	196
VEN	Venezuela	South America	1811	213

14 rows in set (0.001 sec)

```
MariaDB [world]>
```

Igual que el anterior, pero reemplazando valores nulos por el texto 'N/A'

CONSULTA: SELECT Code, Name, Continent, COALESCE(IndepYear,'N/A') AS IndepYear, COALESCE((YEAR(CURDATE()) - IndepYear), 'N/A') AS años_independizados FROM country WHERE Continent = 'South America';

```
MariaDB [world]> SELECT Code, Name, Continent, COALESCE(IndepYear,'N/A') AS IndepYear, COALESCE((YEAR(CURDATE()) - IndepYear), 'N/A') AS años_independizados FROM country WHERE Continent = 'South America';
```

Code	Name	Continent	IndepYear	años_independizados
ARG	Argentina	South America	1816	208
BOL	Bolivia	South America	1825	199
BRA	Brazil	South America	1822	202
CHL	Chile	South America	1810	214
COL	Colombia	South America	1810	214
ECU	Ecuador	South America	1822	202
FLK	Falkland Islands	South America	N/A	N/A
GUF	French Guiana	South America	N/A	N/A
GUY	Guyana	South America	1966	58
PER	Peru	South America	1821	203
PRY	Paraguay	South America	1811	213
SUR	Suriname	South America	1975	49
URY	Uruguay	South America	1828	196
VEN	Venezuela	South America	1811	213

14 rows in set (0.001 sec)

```
MariaDB [world]>
```

```
CONSULTA: SELECT id, Name, Population, CASE WHEN Population < 1000000 THEN
2' ELSE 'POBLACION CLASE 3' END AS poblacion_clase FROM city;
```

```
19:47
SEM MVP ~/D /Da MOD + Update Warp
~/Desktop/backup/4_semestre/modelos_de_datos/ejercicios
sudo mariadb -u root -p

| ZWE | Zimbabwe | 11669000 | POBLACION C
LASE 3 |
+-----+
239 rows in set (0.002 sec)

MariaDB [world]> SELECT id, Name, Population, CASE WHEN Population < 1000000 THEN
N 2' ELSE '
POBLACION CLASE 3' END AS poblacion_clase FROM city;
+-----+-----+-----+-----+
| id | Name | Population | poblacion_clase |
+-----+-----+-----+-----+
| 1 | KABUL | 1780000 | POBLACION CLASE 2 |
| 2 | QANDAHAR | 237500 | POBLACION CLASE 1 |
| 3 | HERAT | 186800 | POBLACION CLASE 1 |
| 4 | MAZAR-E-SHARIF | 127800 | POBLACION CLASE 1 |
| 5 | AMSTERDAM | 731200 | POBLACION CLASE 1 |
| 6 | ROTTERDAM | 593321 | POBLACION CLASE 1 |
| 7 | HAAG | 440900 | POBLACION CLASE 1 |
| 8 | UTRECHT | 234323 | POBLACION CLASE 1 |
| 9 | EINDHOVEN | 201843 | POBLACION CLASE 1 |
| 10 | TILBURG | 193238 | POBLACION CLASE 1 |
| 11 | GRONINGEN | 172701 | POBLACION CLASE 1 |
| 12 | BREDA | 160398 | POBLACION CLASE 1 |
| 13 | APELDOORN | 153491 | POBLACION CLASE 1 |
| 14 | NIJMEGEN | 152463 | POBLACION CLASE 1 |
| 15 | ENSCHEDE | 149544 | POBLACION CLASE 1 |
| 16 | HAARLEM | 148772 | POBLACION CLASE 1 |
| 17 | ALMERE | 142465 | POBLACION CLASE 1 |
| 18 | ARNHEM | 138020 | POBLACION CLASE 1 |
| 19 | ZAAANSTAD | 135621 | POBLACION CLASE 1 |
| 20 | 'S-HERTOGENBOSCH | 129170 | POBLACION CLASE 1 |
| 21 | AMERSFOORT | 126270 | POBLACION CLASE 1 |
| 22 | MAASTRICHT | 122087 | POBLACION CLASE 1 |
| 23 | DORDRECHT | 119811 | POBLACION CLASE 1 |
| 24 | LEIDEN | 117196 | POBLACION CLASE 1 |
| 25 | HAARLEMMERMEER | 110722 | POBLACION CLASE 1 |
| 26 | ZOETERMEER | 110214 | POBLACION CLASE 1 |
| 27 | EMMEN | 105853 | POBLACION CLASE 1 |
| 28 | ZWOLLE | 105819 | POBLACION CLASE 1 |
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Para los países de europa con año de independencia no nulo, generar una fecha de independencia ficticia en formato YYYY-MM-DD, de modo que MM esté entre 01 y 12, y DD entre 01 y 28

CONSULTA: SELECT Code, Name, IndepYear, CONCAT(IndepYear, '-', (FLOOR(1 + (RAND()*12))), '-', (FLOOR(1 + (RAND()*28)))) AS posible_fecha_independencia FROM country WHERE Continent = 'Europe' AND IndepYear IS NOT NULL;

Code	Name	IndepYear	posible_fecha_independencia
ALB	Albania	1912	1912-4-25
AND	Andorra	1278	1278-7-27
AUT	Austria	1918	1918-3-6
BEL	Belgium	1830	1830-5-4
BGR	Bulgaria	1908	1908-8-18
BIH	Bosnia and Herzegovina	1992	1992-4-20
BLR	Belarus	1991	1991-8-26
CHE	Switzerland	1499	1499-10-4
CZE	Czech Republic	1993	1993-5-11
DEU	Germany	1955	1955-9-18
DNK	Denmark	800	800-11-18
ESP	Spain	1492	1492-6-9
EST	Estonia	1991	1991-2-23
FIN	Finland	1917	1917-9-28
FRA	France	843	843-10-5
GBR	United Kingdom	1066	1066-5-9
GRC	Greece	1830	1830-7-18
HRV	Croatia	1991	1991-8-4
HUN	Hungary	1918	1918-10-19
IRL	Ireland	1921	1921-10-7
ISL	Iceland	1944	1944-7-7
ITA	Italy	1861	1861-7-23
LIE	Liechtenstein	1806	1806-6-22
LTU	Lithuania	1991	1991-7-8
LUX	Luxembourg	1867	1867-10-8
LVA	Latvia	1991	1991-11-15
MCO	Monaco	1861	1861-12-7
MDA	Moldova	1991	1991-4-25
MKD	Macedonia	1991	1991-5-7
MLT	Malta	1964	1964-2-23
NLD	Netherlands	1581	1581-10-11
NOR	Norway	1905	1905-7-20
POL	Poland	1918	1918-11-6
PRT	Portugal	1143	1143-5-6
ROM	Romania	1878	1878-11-24
RUS	Russian Federation	1991	1991-7-2
SMR	San Marino	885	885-10-18
SVK	Slovakia	1993	1993-11-19
SVN	Slovenia	1991	1991-7-21
SWE	Sweden	836	836-1-28
UKR	Ukraine	1991	1991-11-11
VAT	Holy See (Vatican City State)	1929	1929-3-25
YUG	Yugoslavia	1918	1918-10-9

Ejercicio 5

Para los países de europa con año de independencia no nulo, generar una fecha de independencia ficticia en formato YYYY-MM-DD, de modo que DD esté entre 01 y el módulo de dividir expectativa de vida entre 29, y MM entre 01 y el resultado del módulo entre DD y 12

CONSULTA: SELECT Code, Name, IndepYear, LifeExpectancy, CONCAT(IndepYear, '-', (FLOOR(1 + (MOD((FLOOR(1 + (MOD(LifeExpectancy, 29))))), 12))))), '-', (FLOOR(1 + (MOD(LifeExpectancy, 29)))) AS posible_fecha_independencia FROM country WHERE Continent = 'Europe' AND IndepYear IS NOT NULL AND LifeExpectancy IS NOT NULL;

Code	Name	IndepYear	LifeExpectancy	posible_fecha_independencia
ALB	Albania	1912	71.6	1912-3-14
AND	Andorra	1278	83.5	1278-3-26
AUT	Austria	1918	77.7	1918-9-20
BEL	Belgium	1830	77.8	1830-9-20
BGR	Bulgaria	1908	70.9	1908-2-13
BIH	Bosnia and Herzegovina	1992	71.5	1992-3-14
BLR	Belarus	1991	68.0	1991-12-11
CHE	Switzerland	1499	79.6	1499-11-22
CZE	Czech Republic	1993	74.5	1993-6-17
DEU	Germany	1955	77.4	1955-9-20
DNK	Denmark	800	76.5	800-8-19
ESP	Spain	1492	78.8	1492-10-21
EST	Estonia	1991	69.5	1991-1-12
FIN	Finland	1917	77.4	1917-9-20
FRA	France	843	78.8	843-10-21
GBR	United Kingdom	1066	77.7	1066-9-20
GRC	Greece	1830	78.4	1830-10-21
HRV	Croatia	1991	73.7	1991-5-16
HUN	Hungary	1918	71.4	1918-3-14
IRL	Ireland	1921	76.8	1921-8-19
ISL	Iceland	1944	79.4	1944-11-22
ITA	Italy	1861	79.0	1861-11-22
LIE	Liechtenstein	1806	78.8	1806-10-21
LTU	Lithuania	1991	69.1	1991-1-12
LUX	Luxembourg	1867	77.1	1867-9-20
LVA	Latvia	1991	68.4	1991-12-11
MCO	Monaco	1861	78.8	1861-10-21
MDA	Moldova	1991	64.5	1991-8-7
MKD	Macedonia	1991	73.8	1991-5-16
MLT	Malta	1964	77.9	1964-9-20
NLD	Netherlands	1581	78.3	1581-10-21
NOR	Norway	1905	78.7	1905-10-21
POL	Poland	1918	73.2	1918-5-16
PRT	Portugal	1143	75.8	1143-7-18
ROM	Romania	1878	69.9	1878-1-12
RUS	Russian Federation	1991	67.2	1991-11-10
SMR	San Marino	885	81.1	885-1-24
SVK	Slovakia	1993	73.7	1993-5-16
SVN	Slovenia	1991	74.9	1991-6-17
SWE	Sweden	836	79.6	836-11-22
UKR	Ukraine	1991	66.0	1991-10-9
YUG	Yugoslavia	1918	72.4	1918-4-15

42 rows in set (0.003 sec)

Al campo "independence_date" del ejercicio anterior, sumarle una cantidad aleatoria de días entre 0 y 500.

CONSULTA: SELECT Code, Name, IndepYear, LifeExpectancy, DATE_ADD(CONCAT(IndepYear, '-', (FLOOR(1 + (MOD((FLOOR(1 + (MOD(LifeExpectancy, 29))))), 12))))), '-', (FLOOR(1 + (MOD(LifeExpectancy, 29))))), INTERVAL FLOOR(RAND() * 500) DAY) AS posible_fecha_independencia FROM country WHERE Continent = 'Europe' AND IndepYear IS NOT NULL AND LifeExpectancy IS NOT NULL;

Code	Name	IndepYear	LifeExpectancy	posible_fecha_independencia
ALB	Albania	1912	71.6	1912-07-12
AND	Andorra	1278	83.5	1278-07-27
AUT	Austria	1918	77.7	1919-06-01
BEL	Belgium	1830	77.8	1831-10-27
BGR	Bulgaria	1908	70.9	1908-10-17
BIH	Bosnia and Herzegovina	1992	71.5	1992-04-12
BLR	Belarus	1991	68.0	1993-01-19
CHE	Switzerland	1499	79.6	1501-02-02
CZE	Czech Republic	1993	74.5	1994-09-30
DEU	Germany	1955	77.4	1955-11-02
DNK	Denmark	800	76.5	0801-06-17
ESP	Spain	1492	78.8	1493-11-10
EST	Estonia	1991	69.5	1991-01-30
FIN	Finland	1917	77.4	1918-11-28
FRA	France	843	78.8	0844-02-14
GBR	United Kingdom	1066	77.7	1067-06-25
GRC	Greece	1830	78.4	1830-12-03
HRV	Croatia	1991	73.7	1992-06-01
HUN	Hungary	1918	71.4	1918-12-20
IRL	Ireland	1921	76.8	1922-05-06
ISL	Iceland	1944	79.4	1946-02-23
ITA	Italy	1861	79.0	1861-11-30
LIE	Liechtenstein	1806	78.8	1807-04-07
LTU	Lithuania	1991	69.1	1991-11-26
LUX	Luxembourg	1867	77.1	1867-12-16
LVA	Latvia	1991	68.4	1993-04-03
MCO	Monaco	1861	78.8	1862-03-04
MDA	Moldova	1991	64.5	1992-03-28
MKD	Macedonia	1991	73.8	1992-02-08
MLT	Malta	1964	77.9	1965-02-05
NLD	Netherlands	1581	78.3	1582-11-13
NOR	Norway	1905	78.7	1905-11-16
POL	Poland	1918	73.2	1919-08-27
PRT	Portugal	1143	75.8	1144-04-03
ROM	Romania	1878	69.9	1879-02-15
RUS	Russian Federation	1991	67.2	1992-06-09
SMR	San Marino	885	81.1	0886-01-26
SVK	Slovakia	1993	73.7	1993-12-01
SVN	Slovenia	1991	74.9	1992-07-16
SWE	Sweden	836	79.6	0837-12-06
UKR	Ukraine	1991	66.0	1992-05-06
YUG	Yugoslavia	1918	72.4	1919-06-04

42 rows in set (0.002 sec)