



La pandemia de COVID-19 ha impulsado la creación de bases de datos globales que rastrean el número de vacunaciones en todo el mundo. Estas bases de datos contienen información importante para tomar decisiones informadas sobre la distribución y la asignación de recursos. A través de consultas de datos, se pueden realizar análisis en tiempo real de la eficacia de las campañas de vacunación, evaluar la rapidez de la distribución y determinar las áreas geográficas que necesitan una mayor atención. Las consultas a estas bases de datos también pueden ayudar a rastrear el progreso hacia la inmunidad colectiva y el control de la propagación del virus.



VectorStock®
VectorStock.com/32782219

A continuación, realizaremos una serie de consultas y análisis para conocer el avance en las campañas de vacunación de diferentes países al rededor del mundo.

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



2. a) ¿Qué país usa qué vacunas?

country	J & J	AstraZeneca	Pfizer	Sinopharm	Sinovac	Sputnik V	Moderna	Cansino	Novavax	Sputnik Light	Covaxin	Sinopharm Wuhan	ZF2001	Abdalla	Soberana Plus	Soberana 02	COVIRanBarakat	FAKHRAVAC	Razi Covpars	SpikeGen	QazVac	EpiVacCorona	Medigen	Turkovac
Afghanistan																								
Albania																								
Algeria																								
Andorra																								
Angola																								
Anguilla																								
Antigua and Barbuda																								
Argentina																								
Armenia																								
Aruba																								
Australia																								
Austria																								
Azerbaijan																								
Bahamas																								
Bahrain																								
Bangladesh																								
Barbados																								
Belarus																								
Belgium																								
Belize																								
Benin																								
Bermuda																								
Bhutan																								
Bolivia																								
Bonaire Sint Eustatius and Saba																								

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



Instituto Politécnico Nacional

Escuela Superior de Cómputo

UA: Data Mining



country	J & J	Astrazeneca	Pfizer	Sinopharm	Sinovac	Sputnik V	Moderna	Cansino	Novavax	Sputnik Light	Covaxin	Sinopharm Wuhan	ZF2001	Abdalla	Soberana Plus	Soberana 02	COVIRanBarakat	FAKHRAVAC	Razi Covpars	SpikoGen	Qazvac	EpiVacc Corona	Medigen	Turkovac
Bosnia and Herzegovina																								
Botswana																								
Brazil																								
British Virgin Islands																								
Brunei																								
Bulgaria																								
Burkina Faso																								
Burundi																								
Cambodia																								
Cameroon																								
Canada																								
Cape Verde																								
Cayman Islands																								
Central African Republic																								
Chad																								
Chile																								
China																								
Colombia																								
Comoros																								
Congo																								
Cook Islands																								
Costa Rica																								
Cote d'Ivoire																								
Croatia																								
Cuba																								
Curacao																								
Cyprus																								

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



Instituto Politécnico Nacional

Escuela Superior de Cómputo

UA: Data Mining



country	J & J	Astrazeneca	Pfizer	Sinopharm	Sinovac	Sputnik V	Moderna	Cansino	Novavax	Sputnik Light	Covaxin	Sinopharm Wuhan	ZF2001	Abdalla	Soberana Plus	Soberana 02	COVIRanBarakat	FAKHRAVAC	Razi Covpars	SpikoGen	Qazvac	EpiVacCorona	Medigen	Turkovac
Czechia																								
Democratic Republic of Congo																								
Denmark																								
Djibouti																								
Dominica																								
Dominican Republic																								
Ecuador																								
Egypt																								
El Salvador																								
England																								
Equatorial Guinea																								
Estonia																								
Eswatini																								
Ethiopia																								
Faeroe Islands																								
Falkland Islands																								
Fiji																								
Finland																								
France																								
French Polynesia																								
Gabon																								
Gambia																								
Georgia																								
Germany																								
Ghana																								
Gibraltar																								
Greece																								

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	J & J	Astrazeneca	Pfizer	Sinopharm	Sinovac	Sputnik V	Moderna	Cansino	Novavax	Sputnik Light	Covaxin	Sinopharm Wuhan	ZF2001	Abdala	Soberana Plus	Soberana 02	COVIRAN Barekat	FAKHR AVAC	Razi Covpars	SpikoGen	Qazvac	EpiVac Corona	Medigen	Turkovac
Greenland																								
Grenada																								
Guatemala																								
Guernsey																								
Guinea																								
Guinea-Bissau																								
Guyana																								
Haiti																								
Honduras																								
Hong Kong																								
Hungary																								
Iceland																								
India																								
Indonesia																								
Iran																								
Iraq																								
Ireland																								
Isle of Man																								
Israel																								
Italy																								
Jamaica																								
Japan																								
Jersey																								
Jordan																								
Kazakhstan																								
Kenya																								
Kiribati																								
Kosovo																								

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	J & J	AstraZeneca	Pfizer	Sinopharm	Sinovac	Sputnik V	Moderna	Cansino	Novavax	Sputnik Light	Covaxin	Sinopharm Wuhan	ZF2001	Abdalla	Soberana Plus	Soberana 02	COVIRanBarakat	FAKHRAVAC	Razi Covpars	SpikoGen	Qazvac	EpiVacCorona	Medigen	Turkovac
Kuwait																								
Kyrgyzstan																								
Laos																								
Latvia																								
Lebanon																								
Lesotho																								
Liberia																								
Libya																								
Liechtenstein																								
Lithuania																								
Luxembourg																								
Macao																								
Madagascar																								
Malawi																								
Malaysia																								
Maldives																								
Mali																								
Malta																								
Mauritania																								
Mauritius																								
Mexico																								
Moldova																								
Monaco																								
Mongolia																								
Montenegro																								
Montserrat																								
Morocco																								
Mozambique																								

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	J & J	AstraZeneca	Pfizer	Sinopharm	Sinovac	Sputnik V	Moderna	Cansino	Novavax	Sputnik Light	Covaxin	Sinopharm Wuhan	ZF2001	Abdalla	Soberana Plus	Soberana 02	COVIRanBarakat	FAKHRAVAC	Razi Covpars	SpikoGen	Qazvac	EpiVacc Corona	Medigen	Turkovac
Myanmar																								
Namibia																								
Nauru																								
Nepal																								
Netherlands																								
New Caledonia																								
New Zealand																								
Nicaragua																								
Niger																								
Nigeria																								
Niue																								
North Macedonia																								
Northern Cyprus																								
Northern Ireland																								
Norway																								
Oman																								
Pakistan																								
Palestine																								
Panama																								
Papua New Guinea																								
Paraguay																								
Peru																								
Philippines																								
Pitcairn																								
Poland																								
Portugal																								
Qatar																								
Romania																								

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



Instituto Politécnico Nacional

Escuela Superior de Cómputo

UA: Data Mining



country	J & J	Astrazeneca	Pfizer	Sinopharm	Sinovac	Sputnik V	Moderna	Cansino	Novavax	Sputnik Light	Covaxin	Sinopharm Wuhan	ZF2001	Abdalla	Soberana Plus	Soberana 02	COVIRanBarakat	FAKHRAVAC	Razi Covpars	SpikoGen	Qazvac	EpiVacc Corona	Medigen	Turkovac
Russia																								
Rwanda																								
Saint Helena																								
Saint Kitts and Nevis																								
Saint Lucia																								
Saint Vincent and the Grenadines																								
Samoa																								
San Marino																								
Sao Tome and Principe																								
Saudi Arabia																								
Scotland																								
Senegal																								
Serbia																								
Seychelles																								
Sierra Leone																								
Singapore																								
Sint Maarten (Dutch part)																								
Slovakia																								
Slovenia																								
Solomon Islands																								
Somalia																								
South Africa																								
South Korea																								
South Sudan																								
Spain																								
Sri Lanka																								

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	J & J	Astrazeneca	Pfizer	Sinopharm	Sinovac	Sputnik V	Moderna	Cansino	Novavax	Sputnik Light	Covaxin	Sinopharm Wuhan	ZF2001	Abdalla	Soberana Plus	Soberana 02	COVIRanBarakat	FAKHRAVAC	Razi Covpars	SpikoGen	Qazvac	EpiVacc Corona	Medigen	Turkovac
Sudan																								
Suriname																								
Sweden																								
Switzerland																								
Syria																								
Taiwan																								
Tajikistan																								
Tanzania																								
Thailand																								
Timor																								
Togo																								
Tokelau																								
Tonga																								
Trinidad and Tobago																								
Tunisia																								
Turkey																								
Turkmenistan																								
Turks and Caicos Islands																								
Tuvalu																								
Uganda																								
Ukraine																								
United Arab Emirates																								
United Kingdom																								
United States																								
Uruguay																								
Uzbekistan																								
Vanuatu																								

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	J & J	AstraZeneca	Pfizer	Sinopharm	Sinovac	Sputnik V	Moderna	Cansino	Novavax	Sputnik Light	Covaxin	Sinopharm Wuhan	ZF2001	Abdala	Soberana Plus	Soberana 02	COVIRanBarakat	FAKHRAVAC	Razi Covpars	SpikeGen	Qazvac	EpiVacCorona	Medigen	Turkovac
Venezuela																								
Vietnam																								
Wales																								
Wallis and Futuna																								
Yemen																								
Zambia																								
Zimbabwe																								

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



2. b) Total de personas vacunadas por país

country	Sum(total_vaccinations)
China	709,452,663,700.00
India	323,440,305,798.00
United States	155,013,867,208.00
Brazil	79,067,174,395.00
Indonesia	45,214,622,016.00
Germany	38,982,830,332.00
United Kingdom	36,851,641,768.00
Turkey	33,923,100,933.00
France	32,177,039,372.00
Japan	30,302,126,928.00
Italy	29,713,054,032.00
Mexico	28,515,470,375.00
Russia	28,384,562,707.00
South Korea	21,831,406,035.00
Thailand	20,018,354,320.00
Argentina	18,678,951,288.00
Canada	18,228,269,647.00
Vietnam	17,914,499,152.00
Pakistan	15,677,886,338.00
Spain	13,863,240,572.00
Malaysia	13,297,513,692.00
Bangladesh	13,205,078,414.00
Chile	11,769,621,615.00
Saudi Arabia	11,456,838,033.00
Poland	11,131,817,028.00
Iran	10,694,796,486.00
Peru	10,520,125,027.00
Colombia	10,384,422,784.00
Australia	9,733,094,247.00
Philippines	8,736,435,778.00
Cambodia	6,972,078,336.00
Sri Lanka	6,644,313,808.00
Cuba	6,405,165,573.00
Ecuador	6,187,581,735.00
Belgium	5,762,415,299.00
Israel	5,743,375,433.00
Taiwan	5,591,280,901.00

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Sum(total_vaccinations)
United Arab Emirates	5,469,038,086.00
Morocco	4,852,617,579.00
Greece	4,449,067,007.00
Ukraine	4,357,666,978.00
Romania	4,238,875,187.00
South Africa	4,133,433,811.00
Portugal	3,794,914,767.00
Switzerland	3,695,330,150.00
Kazakhstan	3,585,428,930.00
Dominican Republic	3,559,094,012.00
Singapore	3,164,195,328.00
Denmark	3,032,077,468.00
Uzbekistan	2,796,712,521.00
Hong Kong	2,676,384,608.00
Norway	2,560,999,408.00
Ireland	2,468,578,495.00
Nepal	2,460,335,069.00
Azerbaijan	2,364,582,887.00
Bolivia	2,228,459,475.00
Tunisia	2,041,177,133.00
Uruguay	1,979,930,902.00
Guatemala	1,954,565,774.00
New Zealand	1,834,291,254.00
Egypt	1,780,807,471.00
Ethiopia	1,645,964,643.00
Zimbabwe	1,589,014,934.00
Kenya	1,550,029,163.00
Qatar	1,358,902,402.00
Jordan	1,184,104,194.00
Croatia	1,138,056,630.00
Netherlands	1,116,703,932.00
Lithuania	1,114,103,234.00
Serbia	1,093,215,957.00
Mongolia	1,091,192,283.00
Myanmar	1,063,018,789.00
Lebanon	979,310,269.00
Bulgaria	922,195,972.00

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Sum(total_vaccinations)
Finland	870,145,578.00
El Salvador	862,583,748.00
Bahrain	778,833,949.00
Hungary	776,460,890.00
Sweden	741,237,578.00
Slovenia	736,766,851.00
Nigeria	733,673,302.00
Latvia	623,488,904.00
Austria	596,758,436.00
Iraq	500,007,948.00
Estonia	487,453,125.00
Kyrgyzstan	446,783,893.00
Paraguay	423,464,599.00
Venezuela	422,856,844.00
Mozambique	411,953,045.00
Angola	388,740,243.00
Georgia	374,537,207.00
Trinidad and Tobago	316,754,503.00
Moldova	314,178,746.00
Laos	304,325,044.00
Malta	297,379,346.00
Albania	295,540,465.00
Malawi	266,138,742.00
Costa Rica	265,394,163.00
Luxembourg	263,977,751.00
Slovakia	254,729,712.00
Panama	251,726,034.00
Guinea	251,098,019.00
Honduras	247,616,846.00
Algeria	238,946,062.00
Uganda	226,304,447.00
Rwanda	204,740,103.00
Libya	203,838,898.00
Zambia	202,357,387.00
Kuwait	198,964,320.00
Belarus	198,340,415.00
Jamaica	185,315,300.00

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Sum(total_vaccinations)
Maldives	185,031,910.00
Nicaragua	178,434,850.00
Tajikistan	171,225,805.00
Cyprus	165,253,700.00
Macao	150,758,003.00
Oman	139,430,382.00
Montenegro	139,401,891.00
North Macedonia	128,128,280.00
Afghanistan	118,041,426.00
Ghana	95,856,469.00
Bhutan	77,837,458.00
Barbados	76,587,881.00
Suriname	69,986,069.00
Mauritania	69,654,195.00
Senegal	62,562,518.00
Brunei	61,927,129.00
Guyana	58,297,983.00
Iceland	51,942,584.00
Mauritius	47,037,337.00
Sudan	46,008,871.00
Fiji	41,785,670.00
Togo	40,463,126.00
Syria	38,980,975.00
Aruba	38,528,732.00
Armenia	34,983,105.00
Somalia	32,208,616.00
Mali	29,264,946.00
Isle of Man	28,099,653.00
Namibia	27,031,086.00
Tanzania	26,064,182.00
Cameroon	25,256,245.00
Botswana	25,047,730.00
Benin	24,937,864.00
Equatorial Guinea	23,507,999.00
Belize	21,555,588.00
Niger	20,285,215.00
Burkina Faso	18,752,087.00

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Sum(total_vaccinations)
Gibraltar	17,848,912.00
Liechtenstein	16,368,068.00
Sierra Leone	16,243,279.00
Turkmenistan	15,213,698.00
Eswatini	14,411,103.00
Bosnia and Herzegovina	13,550,064.00
Madagascar	13,409,440.00
Guinea-Bissau	13,232,962.00
Saint Lucia	12,874,687.00
New Caledonia	11,619,229.00
Congo	11,103,412.00
French Polynesia	10,745,478.00
Central African Republic	10,566,686.00
Yemen	10,546,907.00
Comoros	10,226,002.00
Papua New Guinea	9,997,902.00
Cayman Islands	8,639,957.00
Faeroe Islands	8,612,023.00
Bahamas	8,527,171.00
Seychelles	8,319,724.00
Chad	7,169,222.00
Gabon	6,915,494.00
Antigua and Barbuda	6,840,405.00
Liberia	6,636,702.00
Gambia	6,484,672.00
Greenland	6,166,081.00
Lesotho	6,163,451.00
South Sudan	6,021,857.00
Samoa	5,115,019.00
Haiti	4,984,467.00
Solomon Islands	4,853,407.00
Bermuda	4,511,282.00
San Marino	3,863,380.00
Dominica	3,454,276.00
Grenada	3,055,000.00
Andorra	2,447,643.00
Vanuatu	2,225,477.00

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Sum(total_vaccinations)
Tonga	1,974,092.00
Djibouti	1,825,263.00
British Virgin Islands	1,109,320.00
Kiribati	1,017,407.00
Monaco	867,304.00
Anguilla	806,657.00
Cook Islands	457,151.00
Burundi	129,486.00
Nauru	119,130.00
Montserrat	95,908.00
Tuvalu	51,528.00
Saint Helena	24,233.00
Falkland Islands	14,163.00
Niue	11,055.00
Tokelau	3,857.00

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



2. c) Promedio de personas vacunadas al día con respecto a su población

country	Population (2020)	Mean(daily_vaccination)	Vaccinated Population Percentage
Niue	1628	43.8000	2.6904
Falkland Islands	3497	84.8000	2.4249
Bhutan	773069	12522.0467	1.6198
Saint Helena	6080	93.6000	1.5395
Gibraltar	33689	369.0964	1.0956
Nauru	10836	117.7500	1.0867
Tokelau	1360	13.6667	1.0049
Cuba	11325391	113501.5571	1.0022
Seychelles	98453	909.5976	0.9239
Cook Islands	17567	147.0000	0.8368
San Marino	33944	244.5614	0.7205
Tuvalu	11817	84.5000	0.7151
Brunei	438202	2918.0575	0.6659
Malta	441750	2902.8203	0.6571
Iceland	341628	2116.5390	0.6195
South Korea	51276977	304251.1515	0.5933
Uruguay	3475842	20316.6228	0.5845
Andorra	77287	447.8537	0.5795
Greenland	56787	328.9219	0.5792
United Arab Emirates	9910892	57341.7717	0.5786
Chile	19144605	110743.1413	0.5785
China	1440297825	8304600.9115	0.5766
Isle of Man	85112	490.1081	0.5758
Cayman Islands	65854	378.2981	0.5744
Qatar	2889284	16531.8605	0.5722
Faeroe Islands	48896	279.3182	0.5712
Taiwan	23824369	134650.4714	0.5652
New Zealand	4829021	26856.6904	0.5562
Mauritius	1272140	6997.1714	0.5500
Australia	25550683	140490.5379	0.5499
Kiribati	119760	657.7857	0.5493
Cambodia	16758448	91228.1165	0.5444
Tonga	105901	575.5238	0.5435
Portugal	10191409	55258.2581	0.5422
Malaysia	32436963	172594.2462	0.5321

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Population (2020)	Mean(daily_vaccination)	Vaccinated Population Percentage
Uzbekistan	33551824	175361.5041	0.5227
Vietnam	97490013	506941.3007	0.5200
Singapore	5858322	30461.3068	0.5200
Bermuda	62237	320.4262	0.5148
Japan	126407422	646660.8288	0.5116
El Salvador	6491923	32844.2294	0.5059
Hong Kong	7507523	37390.0658	0.4980
Samoa	198643	984.0882	0.4954
Italy	60446035	297057.9650	0.4914
Denmark	5795780	28224.4017	0.4870
Thailand	69830779	336091.5415	0.4813
Peru	33050211	158889.8929	0.4808
Belgium	11598451	55675.9272	0.4800
Ireland	4947267	23709.4368	0.4792
Mongolia	3287242	15749.6246	0.4791
Finland	5542237	26551.6789	0.4791
France	65298930	310496.2763	0.4755
Bahrain	1711057	8131.8269	0.4753
Spain	46757980	219931.3758	0.4704
Canada	37799407	177226.5478	0.4689
Argentina	45267449	211860.8571	0.4680
United Kingdom	67948282	314714.1633	0.4632
Iran	84176929	388172.0598	0.4611
Saudi Arabia	34905942	160638.8649	0.4602
Sri Lanka	21428970	98504.3296	0.4597
Macao	650846	2991.7909	0.4597
Sweden	10110233	46409.2727	0.4590
Luxembourg	627704	2879.5596	0.4587
Netherlands	17141544	78352.3226	0.4571
Austria	9015361	41041.7937	0.4552
Maldives	542151	2445.3910	0.4511
Monaco	39290	176.4400	0.4491
Israel	8678517	38966.7957	0.4490
Germany	83830972	376157.5339	0.4487
Brazil	212821986	949756.5641	0.4463
Fiji	897573	3924.4286	0.4372
Norway	5428594	23670.8172	0.4360

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Population (2020)	Mean(daily_vaccination)	Vaccinated Population Percentage
Ecuador	17688599	76628.0883	0.4332
Greece	10413936	45096.4096	0.4330
Hungary	9655983	41247.6975	0.4272
Nicaragua	6638075	28305.8611	0.4264
Costa Rica	5102158	21402.7761	0.4195
Liechtenstein	38147	156.8374	0.4111
Laos	7293542	29917.8144	0.4102
Cyprus	1208886	4838.7305	0.4003
Turkey	84495243	334897.3799	0.3964
Morocco	36985624	146511.8767	0.3961
Colombia	50976248	201032.1071	0.3944
Switzerland	8665615	33830.6494	0.3904
Aruba	106845	416.2153	0.3896
Dominican Republic	10866667	40681.3695	0.3744
Lithuania	2715340	9779.5208	0.3602
United States	331341050	1191726.8213	0.3597
Antigua and Barbuda	98069	351.0000	0.3579
Venezuela	28421581	101384.1111	0.3567
Belize	398845	1370.7541	0.3437
Turkmenistan	6046292	20684.5000	0.3421
Rwanda	13005303	44435.4921	0.3417
Anguilla	15026	51.3333	0.3416
Kazakhstan	18815231	63450.8311	0.3372
Azerbaijan	10154978	34187.7672	0.3367
Belarus	9448772	31397.2857	0.3323
North Macedonia	2083359	6911.8301	0.3318
Kuwait	4281320	14056.1842	0.3283
Philippines	109830324	359723.1321	0.3275
Panama	4326296	14153.3263	0.3271
Latvia	1882408	6126.3326	0.3255
Estonia	1326693	4313.6368	0.3251
Indonesia	274021604	881345.8483	0.3216
Tajikistan	9573310	30590.6346	0.3195
Pakistan	221612785	705051.3886	0.3181
New Caledonia	285972	909.6491	0.3181
Poland	37839255	119901.8845	0.3169
French Polynesia	281191	889.1964	0.3162

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Population (2020)	Mean(daily_vaccination)	Vaccinated Population Percentage
Mexico	129166028	406878.9847	0.3150
Trinidad and Tobago	1400283	4384.8851	0.3131
Slovenia	2078989	6507.7593	0.3130
Honduras	9931333	30586.5873	0.3080
Nepal	29225196	88781.6720	0.3038
India	1382345085	4193127.9532	0.3033
Bangladesh	164972348	495728.5514	0.3005
Croatia	4100719	12161.4986	0.2966
Paraguay	7147553	21119.7366	0.2955
Myanmar	54473253	160045.7000	0.2938
Mozambique	31398811	91307.1064	0.2908
Suriname	587541	1696.2944	0.2887
Slovakia	5460109	15674.9375	0.2871
British Virgin Islands	30266	86.7714	0.2867
Tunisia	11839918	33890.8502	0.2862
Russia	145945524	415223.3660	0.2845
Barbados	287437	803.4706	0.2795
Guyana	787215	2195.6364	0.2789
Botswana	2359585	6570.7091	0.2785
Montenegro	628080	1714.5126	0.2730
Bolivia	11700207	31556.3857	0.2697
Dominica	72017	190.9878	0.2652
Jordan	10220604	26340.2475	0.2577
Comoros	872695	2222.2667	0.2546
Albania	2877239	7286.7692	0.2533
Serbia	8731081	22014.9241	0.2521
Vanuatu	308337	776.1111	0.2517
Montserrat	4993	11.9412	0.2392
Eswatini	1162233	2718.7576	0.2339
Bahamas	393893	906.1800	0.2301
Armenia	2964219	6771.6190	0.2284
Guatemala	17971382	40974.4957	0.2280
Bosnia and Herzegovina	3277152	7003.1000	0.2137
Egypt	102659126	214599.7361	0.2090
Oman	5128058	10244.5977	0.1998
Ukraine	43686577	86612.2747	0.1983
Georgia	3987805	7662.8486	0.1922

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Population (2020)	Mean(daily_vaccination)	Vaccinated Population Percentage
Romania	19214608	36781.2901	0.1914
Lebanon	6819976	13010.3342	0.1908
Grenada	112614	200.4848	0.1780
Solomon Islands	689671	1126.3000	0.1633
Lesotho	2145194	3461.8750	0.1614
Angola	33032075	50999.6349	0.1544
Kyrgyzstan	6542426	9593.9339	0.1466
Libya	6887247	10030.8901	0.1456
Zimbabwe	14899771	21371.4169	0.1434
Iraq	40372771	57045.4912	0.1413
Bulgaria	6939018	9732.4815	0.1403
Moldova	4032294	5488.3308	0.1361
Jamaica	2963429	3951.1694	0.1333
Guinea	13191279	17576.4000	0.1332
South Africa	59436725	78058.1895	0.1313
Saint Lucia	183774	238.1229	0.1296
Guinea-Bissau	1975718	2534.5122	0.1283
Ghana	31181428	39475.0303	0.1266
Mauritania	4669775	5746.9538	0.1231
Togo	8310934	9689.5806	0.1166
Liberia	5077411	5334.3913	0.1051
Benin	12175480	12164.1111	0.0999
Algeria	43984569	43109.8696	0.0980
Equatorial Guinea	1410419	1339.6667	0.0950
Kenya	53968739	49916.7660	0.0925
Namibia	2548663	2150.4069	0.0844
Ethiopia	115434444	86327.2684	0.0748
Central African Republic	4843954	3586.8929	0.0740
Sierra Leone	8004158	5670.6563	0.0708
Syria	17571053	11334.8462	0.0645
Gabon	2234448	1370.8750	0.0614
Zambia	18468257	10162.2974	0.0550
Congo	5540555	2640.7097	0.0477
Uganda	45974931	19057.0508	0.0415
Senegal	16816539	6746.2762	0.0401
Djibouti	990447	396.5263	0.0400
Sudan	44019263	17499.1071	0.0398

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Population (2020)	Mean(daily_vaccination)	Vaccinated Population Percentage
Somalia	15965848	6254.2115	0.0392
Gambia	2427782	946.7778	0.0390
Burkina Faso	20997293	7401.9583	0.0353
Niger	24346468	8541.4783	0.0351
Tanzania	60012400	20404.0000	0.0340
Nigeria	206984347	68411.4630	0.0331
Malawi	19211425	6241.2617	0.0325
Mali	20346106	6354.7660	0.0312
Afghanistan	39074280	11741.6889	0.0300
Cameroon	26655083	4672.7222	0.0175
Madagascar	27808395	4653.8462	0.0167
Papua New Guinea	8975531	1306.7027	0.0146
South Sudan	11216250	1464.6222	0.0131
Yemen	29935468	3267.8571	0.0109
Haiti	11426356	1083.8393	0.0095
Chad	16502877	1506.5750	0.0091
Burundi	11948454	81.5000	0.0007

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



4. a) Continente al que pertenece cada país

country	Continente
Afghanistan	Asia
Albania	Europa
Algeria	África
Andorra	Europa
Angola	África
Anguilla	América
Antigua and Barbuda	América
Argentina	América
Armenia	Asia
Aruba	América
Australia	Australia y Oceanía
Austria	Europa
Azerbaijan	Asia
Bahamas	América
Bahrain	Asia
Bangladesh	Asia
Barbados	América
Belarus	Europa
Belgium	Europa
Belize	América
Benin	África
Bermuda	América
Bhutan	Asia
Bolivia	América
Bonaire Sint Eustatius and Saba	
Bosnia and Herzegovina	Europa
Botswana	África
Brazil	América
British Virgin Islands	
Brunei	Asia
Bulgaria	Europa
Burkina Faso	África
Burundi	África
Cambodia	Asia
Cameroon	África
Canada	América

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Continente
Cape Verde	África
Cayman Islands	América
Central African Republic	África
Chad	África
Chile	América
China	Asia
Colombia	América
Comoros	África
Congo	África
Cook Islands	Australia y Oceanía
Costa Rica	América
Cote d'Ivoire	África
Croatia	Europa
Cuba	América
Curacao	
Cyprus	Asia
Czechia	Europa
Democratic Republic of Congo	África
Denmark	Europa
Djibouti	África
Dominica	América
Dominican Republic	América
Ecuador	América
Egypt	África
El Salvador	América
England	
Equatorial Guinea	África
Estonia	Europa
Eswatini	África
Ethiopia	África
Faeroe Islands	Europa
Falkland Islands	América
Fiji	Australia y Oceanía
Finland	Europa
France	Europa
French Polynesia	Australia y Oceanía
Gabon	África

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Continente
Gambia	África
Georgia	Asia
Germany	Europa
Ghana	África
Gibraltar	Europa
Greece	Europa
Greenland	América
Grenada	América
Guatemala	América
Guernsey	Europa
Guinea	África
Guinea-Bissau	África
Guyana	América
Haiti	América
Honduras	América
Hong Kong	Asia
Hungary	Europa
Iceland	Europa
India	Asia
Indonesia	Asia
Iran	Asia
Iraq	Asia
Ireland	Europa
Isle of Man	Europa
Israel	Asia
Italy	Europa
Jamaica	América
Japan	Asia
Jersey	Europa
Jordan	Asia
Kazakhstan	Asia
Kenya	África
Kiribati	Australia y Oceanía
Kosovo	
Kuwait	Asia
Kyrgyzstan	Asia
Laos	Asia

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



Instituto Politécnico Nacional
Escuela Superior de Cómputo
UA: Data Mining



country	Continente
Latvia	Europa
Lebanon	Asia
Lesotho	África
Liberia	África
Libya	África
Liechtenstein	Europa
Lithuania	Europa
Luxembourg	Europa
Macao	Asia
Madagascar	África
Malawi	África
Malaysia	Asia
Maldives	Asia
Mali	África
Malta	Europa
Mauritania	África
Mauritius	África
Mexico	América
Moldova	Europa
Monaco	Europa
Mongolia	Asia
Montenegro	Europa
Montserrat	América
Morocco	África
Mozambique	África
Myanmar	Asia
Namibia	África
Nauru	Australia y Oceanía
Nepal	Asia
Netherlands	Europa
New Caledonia	Australia y Oceanía
New Zealand	Australia y Oceanía
Nicaragua	América
Niger	África
Nigeria	África
Niue	Australia y Oceanía
North Macedonia	Europa

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



Instituto Politécnico Nacional
Escuela Superior de Cómputo
UA: Data Mining



country	Continente
Northern Cyprus	
Northern Ireland	
Norway	Europa
Oman	Asia
Pakistan	Asia
Palestine	Asia
Panama	América
Papua New Guinea	Australia y Oceanía
Paraguay	América
Peru	América
Philippines	Asia
Pitcairn	Australia y Oceanía
Poland	Europa
Portugal	Europa
Qatar	Asia
Romania	Europa
Russia	Europa
Rwanda	África
Saint Helena	África
Saint Kitts and Nevis	América
Saint Lucia	América
Saint Vincent and the Grenadines	América
Samoa	Australia y Oceanía
San Marino	Europa
Sao Tome and Principe	África
Saudi Arabia	Asia
Scotland	
Senegal	África
Serbia	Europa
Seychelles	África
Sierra Leone	África
Singapore	Asia
Sint Maarten (Dutch part)	
Slovakia	Europa
Slovenia	Europa
Solomon Islands	Australia y Oceanía
Somalia	África

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Continente
South Africa	África
South Korea	Asia
South Sudan	
Spain	Europa
Sri Lanka	Asia
Sudan	África
Suriname	América
Sweden	Europa
Switzerland	Europa
Syria	Asia
Taiwan	Asia
Tajikistan	Asia
Tanzania	África
Thailand	Asia
Timor	Asia
Togo	África
Tokelau	Australia y Oceanía
Tonga	Australia y Oceanía
Trinidad and Tobago	América
Tunisia	África
Turkey	Asia
Turkmenistan	Asia
Turks and Caicos Islands	América
Tuvalu	Australia y Oceanía
Uganda	África
Ukraine	Europa
United Arab Emirates	Asia
United Kingdom	Europa
United States	América
Uruguay	América
Uzbekistan	Asia
Vanuatu	Australia y Oceanía
Venezuela	América
Vietnam	Asia
Wales	
Wallis and Futuna	Australia y Oceanía
Yemen	Asia

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Continente
Zambia	África
Zimbabwe	África

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



4. b) Total de vacunas aplicadas a cada continente

continente	Personas vacunadas	Personas vacunadas por completo	Total de vacunaciones
América	188,063,607,586.00	147,176,869,188.00	357,980,137,059.00
Asia	386,576,359,314.00	272,116,535,146.00	1,332,307,693,985.00
Australia y Oceanía	5,896,306,250.00	4,752,053,756.00	11,657,727,968.00
Europa	118,791,955,146.00	101,719,075,633.00	241,907,394,702.00
África	13,387,730,741.00	8,656,696,599.00	21,825,053,998.00

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



4. c) Cantidad y lista de vacunas para: EUA

country	vaccine	Sum(total_vaccinations)
United States	Johnson&Johnson	141,039,962,940.00
United States	Moderna	143,861,102,253.00
United States	Pfizer/BioNTech	143,861,102,253.00

4. c) Cantidad y lista de vacunas para: Argentina

location	vaccine	Sum(total_vaccinations)
Argentina	CanSino	18,670,327,423.00
Argentina	Moderna	18,678,951,288.00
Argentina	Oxford/AstraZeneca	18,678,951,288.00
Argentina	Pfizer/BioNTech	18,640,324,795.00
Argentina	Sinopharm/Beijing	18,678,951,288.00
Argentina	Sputnik V	18,678,951,288.00

4. c) Cantidad y lista de vacunas para: Alemania

location	Sum(total_vaccinations)	Unique concatenate(vaccine)
Germany	194,914,151,660.00	Johnson&Johnson, Moderna, Novavax, Oxford/AstraZeneca, Pfizer/BioNTech

4. c) Cantidad y lista de vacunas para: Japón

location	Sum(total_vaccinations)	Unique concatenate(vaccine)
Japan	7,605,911,821.00	Pfizer/BioNTech, Moderna

4. c) Cantidad y lista de vacunas para: Uruguay

location	Sum(total_vaccinations)	Unique concatenate(vaccine)
Uruguay	5,939,792,706.00	Oxford/AstraZeneca, Pfizer/BioNTech, Sinovac

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



4. d) Porcentaje de personas vacunadas por país según su población

country	Population (2020)	Sum(total_vaccinations)
China	1440297825	709452663700
India	1382345085	323440305798
United States	331341050	155013867208
Brazil	212821986	79067174395
Indonesia	274021604	45214622016
Germany	83830972	38982830332
United Kingdom	67948282	36851641768
Turkey	84495243	33923100933
France	65298930	32177039372
Japan	126407422	30302126928
Italy	60446035	29713054032
Mexico	129166028	28515470375
Russia	145945524	28384562707
South Korea	51276977	21831406035
Thailand	69830779	20018354320
Argentina	45267449	18678951288
Canada	37799407	18228269647
Vietnam	97490013	17914499152
Pakistan	221612785	15677886338
Spain	46757980	13863240572
Malaysia	32436963	13297513692
Bangladesh	164972348	13205078414
Chile	19144605	11769621615
Saudi Arabia	34905942	11456838033
Poland	37839255	11131817028
Iran	84176929	10694796486
Peru	33050211	10520125027
Colombia	50976248	10384422784
Australia	25550683	9733094247
Philippines	109830324	8736435778
Cambodia	16758448	6972078336
Sri Lanka	21428970	6644313808
Cuba	11325391	6405165573
Ecuador	17688599	6187581735
Belgium	11598451	5762415299
Israel	8678517	5743375433

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



Instituto Politécnico Nacional
Escuela Superior de Cómputo
UA: Data Mining



country	Population (2020)	Sum(total_vaccinations)
Taiwan	23824369	5591280901
United Arab Emirates	9910892	5469038086
Morocco	36985624	4852617579
Greece	10413936	4449067007
Ukraine	43686577	4357666978
Romania	19214608	4238875187
South Africa	59436725	4133433811
Portugal	10191409	3794914767
Switzerland	8665615	3695330150
Kazakhstan	18815231	3585428930
Dominican Republic	10866667	3559094012
Singapore	5858322	3164195328
Denmark	5795780	3032077468
Uzbekistan	33551824	2796712521
Hong Kong	7507523	2676384608
Norway	5428594	2560999408
Ireland	4947267	2468578495
Nepal	29225196	2460335069
Azerbaijan	10154978	2364582887
Bolivia	11700207	2228459475
Tunisia	11839918	2041177133
Uruguay	3475842	1979930902
Guatemala	17971382	1954565774
New Zealand	4829021	1834291254
Egypt	102659126	1780807471
Ethiopia	115434444	1645964643
Zimbabwe	14899771	1589014934
Kenya	53968739	1550029163
Qatar	2889284	1358902402
Jordan	10220604	1184104194
Croatia	4100719	1138056630
Netherlands	17141544	1116703932
Lithuania	2715340	1114103234
Serbia	8731081	1093215957
Mongolia	3287242	1091192283
Myanmar	54473253	1063018789
Lebanon	6819976	979310269

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Population (2020)	Sum(total_vaccinations)
Bulgaria	6939018	922195972
Finland	5542237	870145578
El Salvador	6491923	862583748
Bahrain	1711057	778833949
Hungary	9655983	776460890
Sweden	10110233	741237578
Slovenia	2078989	736766851
Nigeria	206984347	733673302
Latvia	1882408	623488904
Austria	9015361	596758436
Iraq	40372771	500007948
Estonia	1326693	487453125
Kyrgyzstan	6542426	446783893
Paraguay	7147553	423464599
Venezuela	28421581	422856844
Mozambique	31398811	411953045
Angola	33032075	388740243
Georgia	3987805	374537207
Trinidad and Tobago	1400283	316754503
Moldova	4032294	314178746
Laos	7293542	304325044
Malta	441750	297379346
Albania	2877239	295540465
Malawi	19211425	266138742
Costa Rica	5102158	265394163
Luxembourg	627704	263977751
Slovakia	5460109	254729712
Panama	4326296	251726034
Guinea	13191279	251098019
Honduras	9931333	247616846
Algeria	43984569	238946062
Uganda	45974931	226304447
Rwanda	13005303	204740103
Libya	6887247	203838898
Zambia	18468257	202357387
Kuwait	4281320	198964320
Belarus	9448772	198340415

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Population (2020)	Sum(total_vaccinations)
Jamaica	2963429	185315300
Maldives	542151	185031910
Nicaragua	6638075	178434850
Tajikistan	9573310	171225805
Cyprus	1208886	165253700
Macao	650846	150758003
Oman	5128058	139430382
Montenegro	628080	139401891
North Macedonia	2083359	128128280
Afghanistan	39074280	118041426
Ghana	31181428	95856469
Bhutan	773069	77837458
Barbados	287437	76587881
Suriname	587541	69986069
Mauritania	4669775	69654195
Senegal	16816539	62562518
Brunei	438202	61927129
Guyana	787215	58297983
Iceland	341628	51942584
Mauritius	1272140	47037337
Sudan	44019263	46008871
Fiji	897573	41785670
Togo	8310934	40463126
Syria	17571053	38980975
Aruba	106845	38528732
Armenia	2964219	34983105
Somalia	15965848	32208616
Mali	20346106	29264946
Isle of Man	85112	28099653
Namibia	2548663	27031086
Tanzania	60012400	26064182
Cameroon	26655083	25256245
Botswana	2359585	25047730
Benin	12175480	24937864
Equatorial Guinea	1410419	23507999
Belize	398845	21555588
Niger	24346468	20285215

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Population (2020)	Sum(total_vaccinations)
Burkina Faso	20997293	18752087
Gibraltar	33689	17848912
Liechtenstein	38147	16368068
Sierra Leone	8004158	16243279
Turkmenistan	6046292	15213698
Eswatini	1162233	14411103
Bosnia and Herzegovina	3277152	13550064
Madagascar	27808395	13409440
Guinea-Bissau	1975718	13232962
Saint Lucia	183774	12874687
New Caledonia	285972	11619229
Congo	5540555	11103412
French Polynesia	281191	10745478
Central African Republic	4843954	10566686
Yemen	29935468	10546907
Comoros	872695	10226002
Papua New Guinea	8975531	9997902
Cayman Islands	65854	8639957
Faeroe Islands	48896	8612023
Bahamas	393893	8527171
Seychelles	98453	8319724
Chad	16502877	7169222
Gabon	2234448	6915494
Antigua and Barbuda	98069	6840405
Liberia	5077411	6636702
Gambia	2427782	6484672
Greenland	56787	6166081
Lesotho	2145194	6163451
South Sudan	11216250	6021857
Samoa	198643	5115019
Haiti	11426356	4984467
Solomon Islands	689671	4853407
Bermuda	62237	4511282
San Marino	33944	3863380
Dominica	72017	3454276
Grenada	112614	3055000
Andorra	77287	2447643

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



country	Population (2020)	Sum(total_vaccinations)
Vanuatu	308337	2225477
Tonga	105901	1974092
Djibouti	990447	1825263
British Virgin Islands	30266	1109320
Kiribati	119760	1017407
Monaco	39290	867304
Anguilla	15026	806657
Cook Islands	17567	457151
Burundi	11948454	129486
Nauru	10836	119130
Montserrat	4993	95908
Tuvalu	11817	51528
Saint Helena	6080	24233
Falkland Islands	3497	14163
Niue	1628	11055
Tokelau	1360	3857

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



4. e) Países líderes en vacunación por continente

continente	country	Sum(total_vaccinations)
Asia	China	709,452,663,700.00
	England	31,037,114,023.00
Australia y Oceanía	French Polynesia	10,745,478.00
Europa	Norway	2,560,999,408.00
África	Seychelles	8,319,724.00
América	United States	155,013,867,208.00

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



4. f) Vacunas aplicadas por trimestre en: Senegal

Trimestre	Sum(daily_vaccinations)
Cuarto trimestre 2021	117,269.00
Primer trimestre 2021	243,033.00
Primer trimestre 2022	572,891.00
Segundo trimestre 2021	431,736.00
Tercer trimestre 2021	1,135,785.00

4. f) Vacunas aplicadas por trimestre en: Alemania

Trimestre	Sum(daily_vaccinations)
Cuarto trimestre 2020	142,596.00
Cuarto trimestre 2021	41,313,736.00
Primer trimestre 2021	13,244,274.00
Primer trimestre 2022	22,944,840.00
Segundo trimestre 2021	60,121,677.00
Tercer trimestre 2021	34,136,870.00

4. f) Vacunas aplicadas por trimestre en: Japon

Trimestre	Sum(daily_vaccinations)
Cuarto trimestre 2021	38,471,339.00
Primer trimestre 2021	884,705.00
Primer trimestre 2022	52,151,290.00
Segundo trimestre 2021	45,969,879.00
Tercer trimestre 2021	114,262,490.00

4. f) Vacunas aplicadas por trimestre en: EUA

Trimestre	Sum(daily_vaccinations)
Cuarto trimestre 2020	4,136,753.00
Cuarto trimestre 2021	115,343,057.00
Primer trimestre 2021	158,191,761.00
Primer trimestre 2022	46,897,696.00
Segundo trimestre 2021	173,868,920.00
Tercer trimestre 2021	61,673,419.00

4. f) Vacunas aplicadas por trimestre en: Australia

Trimestre	Sum(daily_vaccinations)
Cuarto trimestre 2021	15,203,266.00
Primer trimestre 2021	590,794.00

Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



Trimestre	Sum(daily_vaccinations)
Primer trimestre 2022	13,722,792.00
Segundo trimestre 2021	6,848,610.00
Tercer trimestre 2021	19,706,429.00

Tarea #3

Vacunas

Autores:

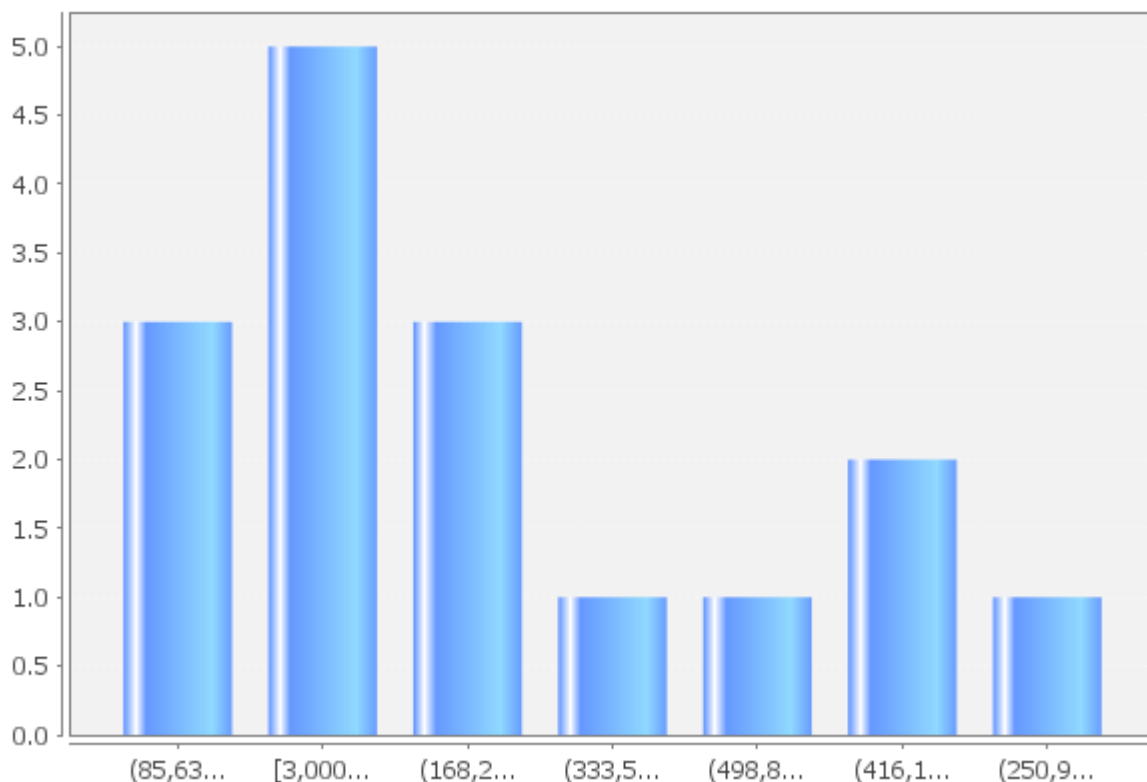
Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro



5. i) Vacunas aplicadas diariamente mes tras mes en China

Mes	Sum(daily_vaccinations)
Del 01 Diciembre del 2020 al 01 de Enero del 2021	3,000,000.00
Del 01 de Abril al 01 de Mayo del 2021	132,826,860.00
Del 01 de Agosto al 01 de Septiembre del 2021	428,975,427.00
Del 01 de Diciembre del 2021 al 01 de Enero del 2022	313,936,999.00
Del 01 de Enero al 01 de Febrero del 2021	18,794,325.00
Del 01 de Enero al 01 de Febrero del 2022	195,840,001.00
Del 01 de Febrero al 01 de Marzo del 2021	27,893,435.00
Del 01 de Febrero al 01 de Marzo del 2022	121,300,713.00
Del 01 de Julio al 01 de Agosto del 2021	416,799,142.00
Del 01 de Junio al 01 de Julio del 2021	581,455,146.00
Del 01 de Marzo al 01 de Abril del 2021	55,563,168.00
Del 01 de Marzo al 01 de Abril del 2022	137,842,571.00
Del 01 de Mayo al 01 de Junio del 2021	364,184,997.00
Del 01 de Noviembre al 01 de Diciembre del 2021	222,856,428.00
Del 01 de Octubre al 01 de Noviembre del 2021	56,364,715.00
Del 01 de Septiembre al 01 de Octubre del 2021	172,708,569.00

5. j) Vacunas aplicadas diariamente mes tras mes en China



Tarea #3

Vacunas

Autores:

Flores Ponce Alan Marcelo
García Cruz Octavio Arturo
Sampayo Hernández Mauro