

## Queries

### Query 1

```
SELECT      l.location AS 'Country Name(CN)', date AS  
'Administered Vaccine on OD(VOD)',v.daily_vaccinations AS 'Total Adminstered Vaccines'  
FROM        Location l JOIN Vaccinations v ON l.iso_code = v.iso_code;
```

### Results

```
1 /* Queries*/  
2  
3  
4 /*Query 1*/  
5 SELECT l.location AS 'Country Name(CN)',date AS 'Administered Vaccine on OD(VOD)',v.daily_vaccinations AS 'Total Adminstered Vaccines'  
6 FROM Location l JOIN Vaccinations v  
7     ON l.iso_code = v.iso_code  
8  
9 -----
```

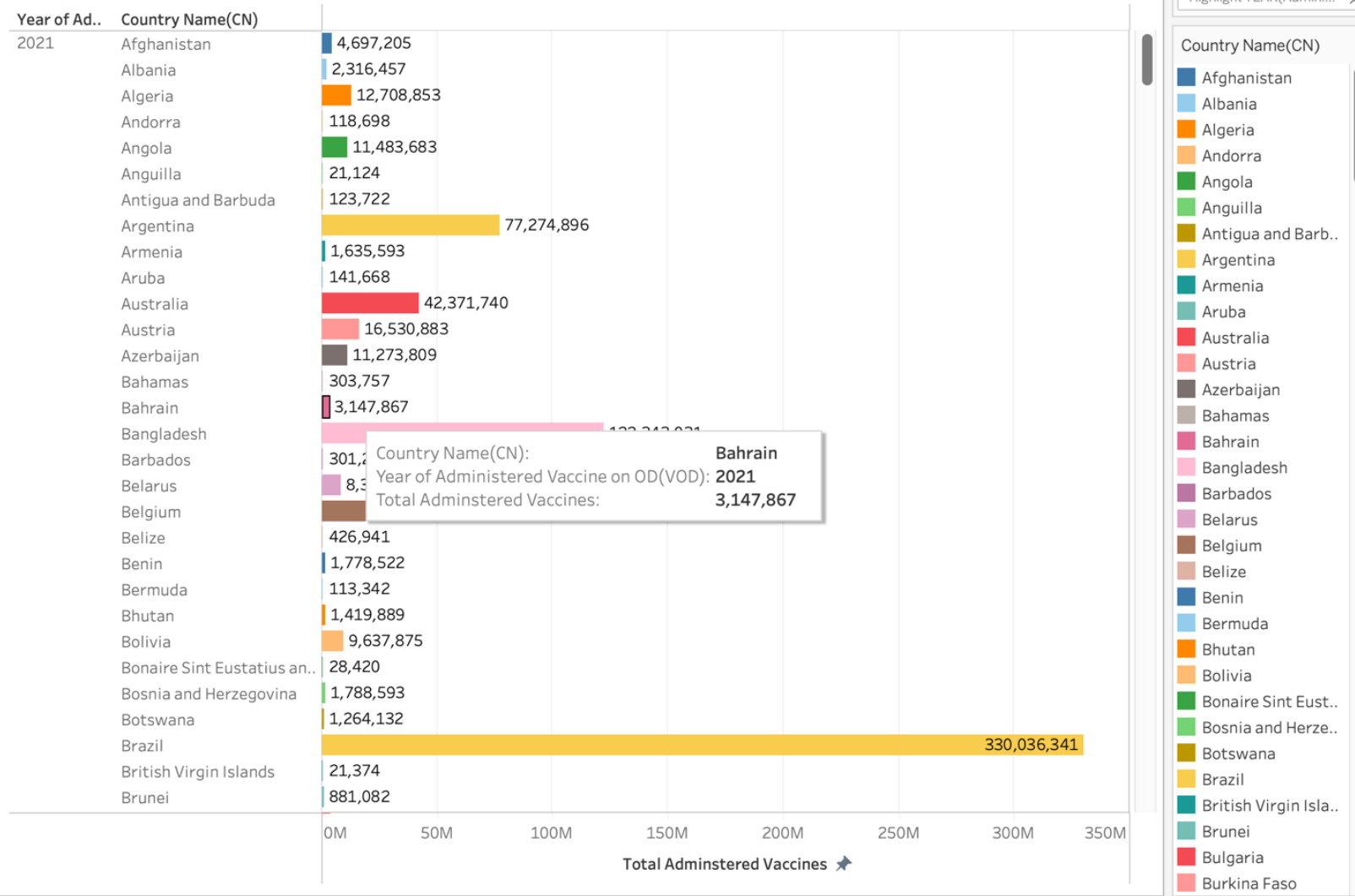
Grid view Form view

Total rows loaded: 124305

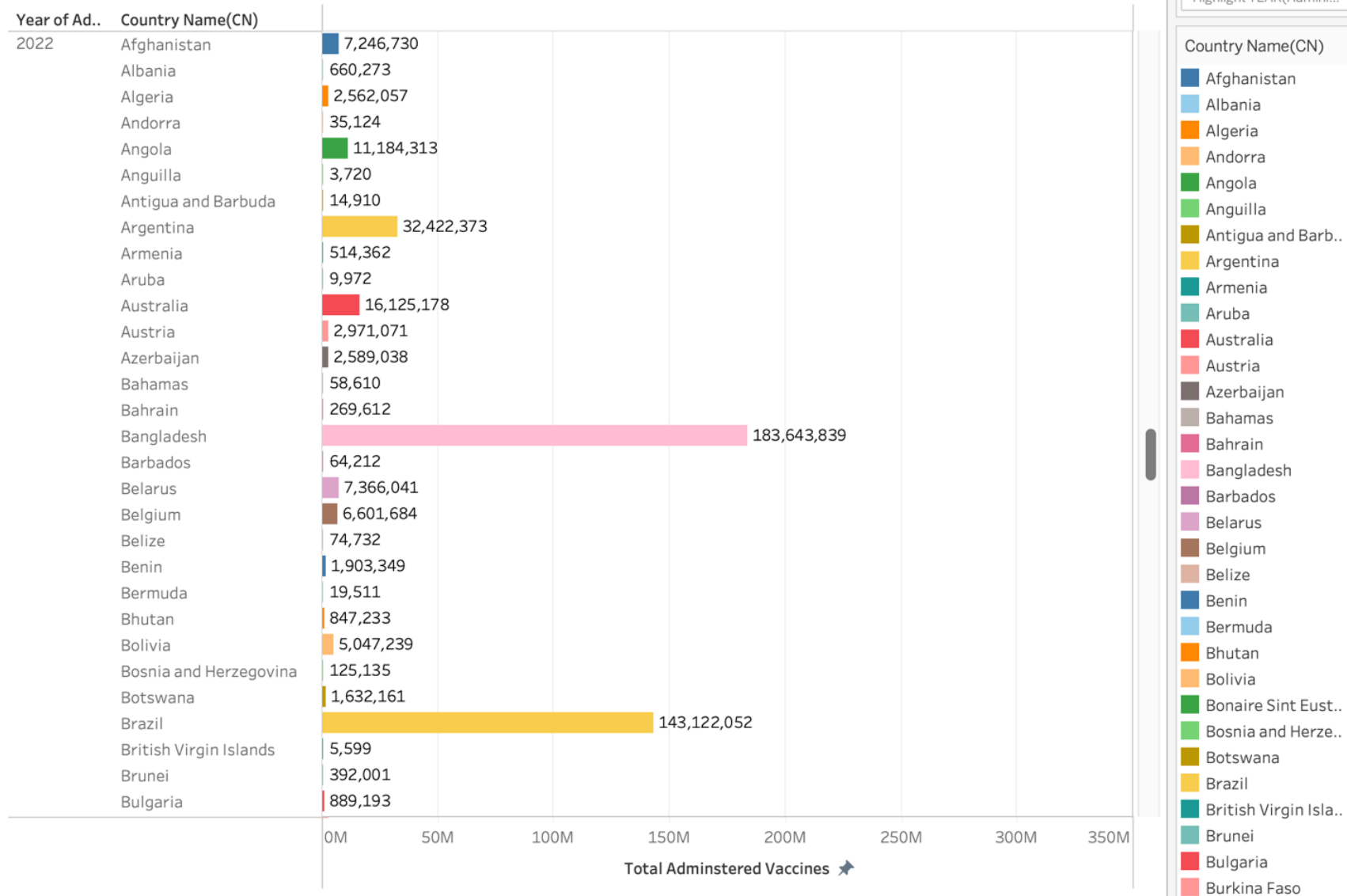
	Country Name(CN)	Administered Vaccine on OD(VOD)	Total Adminstered Vaccines
1	Afghanistan	22/2/2021	
2	Afghanistan	23/2/2021	1367
3	Afghanistan	24/2/2021	1367
4	Afghanistan	25/2/2021	1367
5	Afghanistan	26/2/2021	1367
6	Afghanistan	27/2/2021	1367
7	Afghanistan	28/2/2021	1367
8	Afghanistan	1/3/2021	1580
9	Afghanistan	2/3/2021	1794
10	Afghanistan	3/3/2021	2008
11	Afghanistan	4/3/2021	2221
12	Afghanistan	5/3/2021	2435
13	Afghanistan	6/3/2021	2649
14	Afghanistan	7/3/2021	2862
15	Afghanistan	8/3/2021	2862
16	Afghanistan	9/3/2021	2862
17	Afghanistan	10/3/2021	2862

## Data Visualization

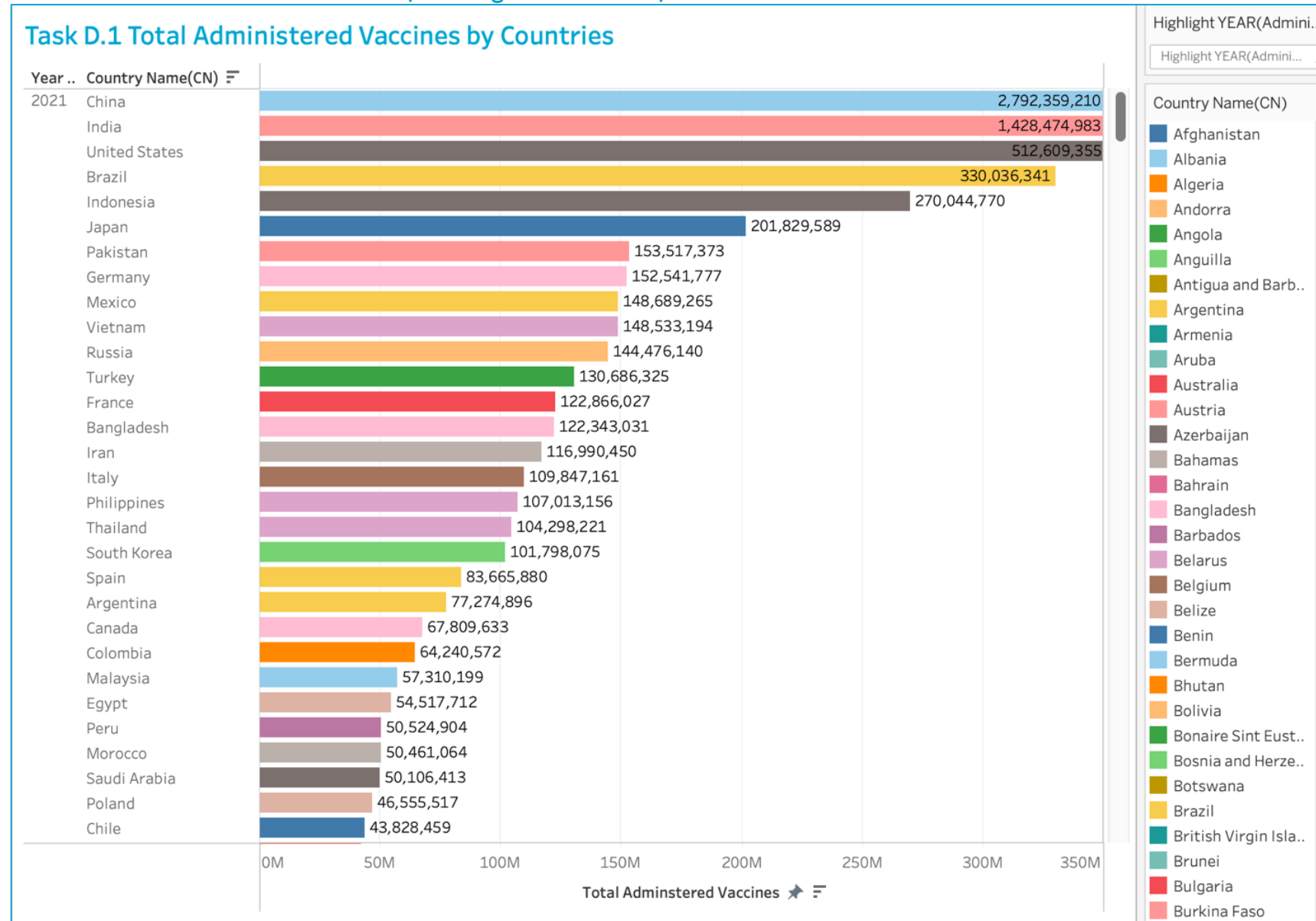
### Task D.1 Total Administered Vaccines by Countries



## Task D.1 Total Administered Vaccines by Countries

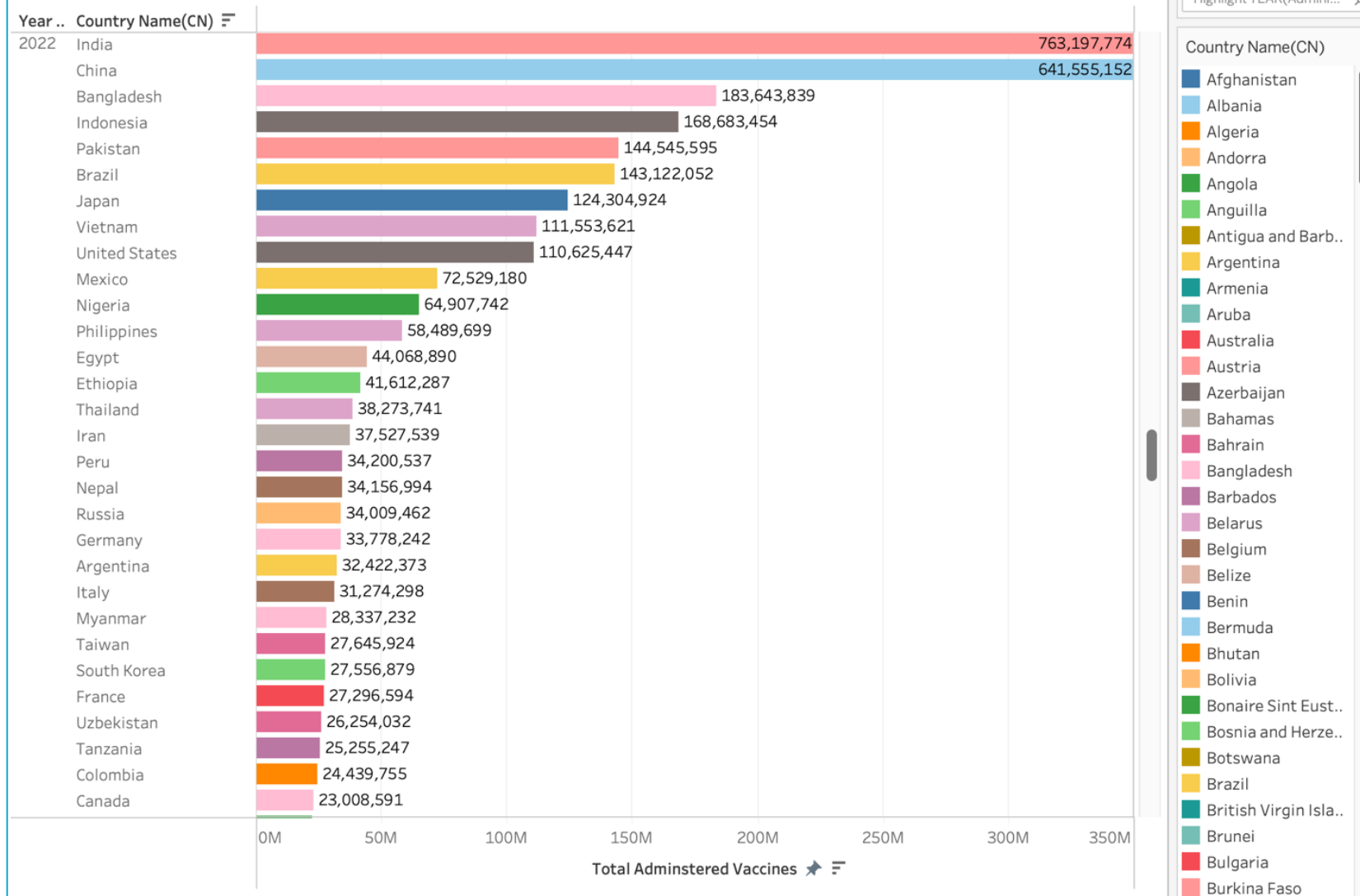


## 2021 - Total Administered Vaccines (from highest to lowest)



## 2022 - Total Administered Vaccines (from highest to lowest)

### Task D.1 Total Administered Vaccines by Countries



## Query 2 - cumulative numbers of COVID-19 doses administered

```
SELECT      l.location AS Country , MAX(NULLIF(total_vaccinations, "")) AS 'Cumulative
Doses'
FROM        Location l JOIN Vaccinations v ON l.iso_code = v.iso_code
WHERE       v.total_vaccinations NOT NULL AND Country NOT NULL
GROUP BY    Country
ORDER BY    Country ASC;
```

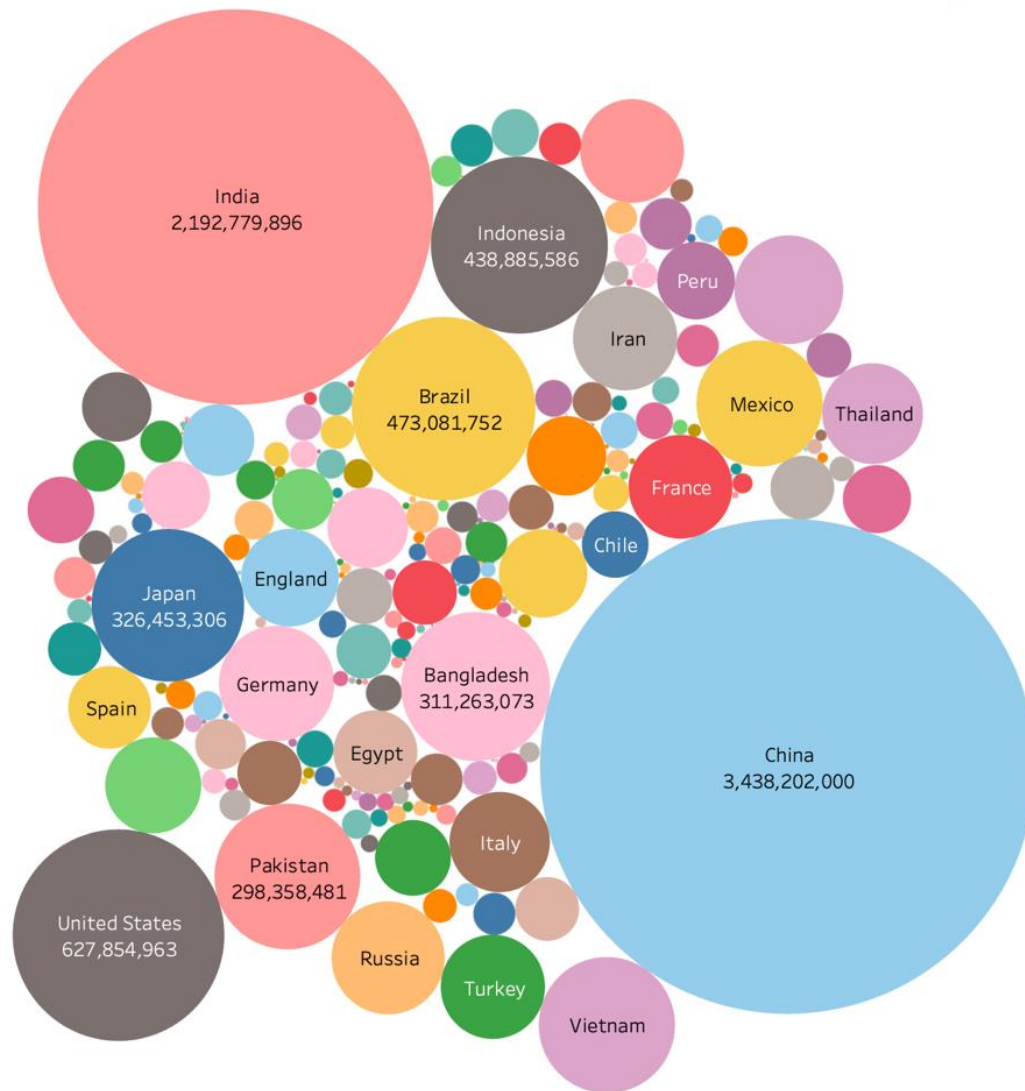
## Results

```
10 -----
11
12 /*Query 2* cumulative numbers of COVID-19 doses administered*/
13 SELECT l.location AS Country , MAX(NULLIF(total_vaccinations, "")) AS 'Cumulative Doses'
14 FROM Location l JOIN Vaccinations v
15     ON l.iso_code = v.iso_code
16 WHERE v.total_vaccinations NOT NULL AND Country NOT NULL
17 GROUP BY Country
18 ORDER BY Country ASC;
19 -----
20
```

		Grid view Form view	
		Total rows loaded: 223	
	Country	Cumulative Doses	
1	Afghanistan	11951964	
2	Albania	2978248	
3	Algeria	15267442	
4	Andorra	154216	
5	Angola	22696229	
6	Anguilla	24412	
7	Antigua and Barbuda	136512	
8	Argentina	109744741	
9	Armenia	2150112	
10	Aruba	173591	
11	Australia	58494109	
12	Austria	19558872	
13	Azerbaijan	13857111	
14	Bahamas	362109	
15	Bahrain	3472387	

## Data Visualization

### Task D.2 Cumulative Numbers of COVID-19 Doses Administered by Country.



Country

- 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 Eustatiu..
- Bosnia and Herzegovi..
- Botswana
- Brazil
- British Virgin Islands
- Brunei
- Bulgaria
- Burkina Faso
- Burundi
- Cambodia
- Cameroon

### Query 3

```
SELECT      l.location AS Country, vc.vaccine_name AS Vaccine
FROM        (Location l Join VaccineLocation vl ON l.iso_code = vl.iso_code)
            Join Vaccines vc on vl.vaccine_id = vc.vaccine_id
ORDER BY    Country ASC;
```

### Results

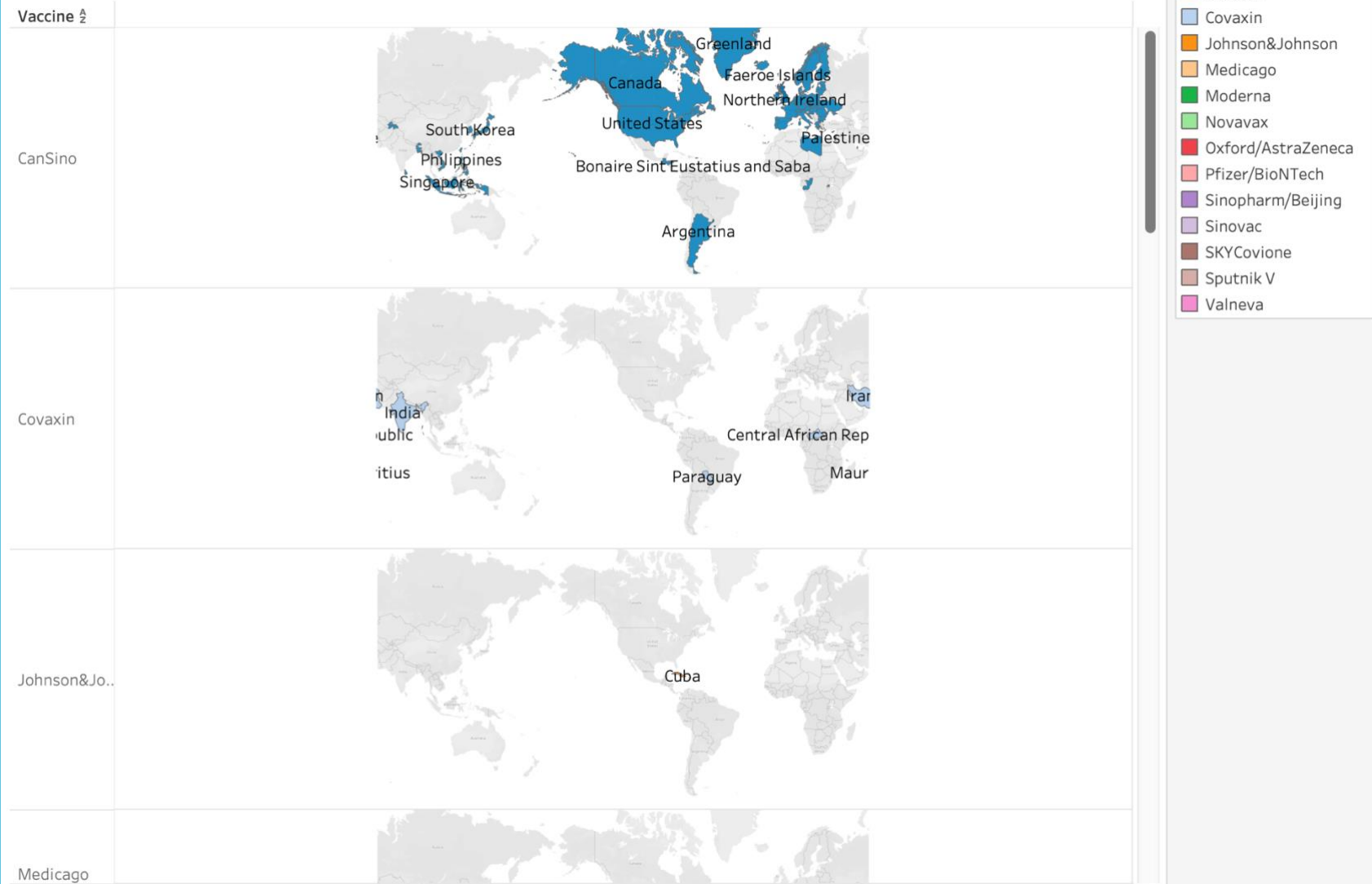
```
20 -----
21
22 /*Query 3*/
23 SELECT l.location AS Country, vc.vaccine_name AS Vaccine
24 FROM (Location l Join VaccineLocation vl ON l.iso_code = vl.iso_code)
25      Join Vaccines vc on vl.vaccine_id = vc.vaccine_id
26
27 ORDER BY Country ASC;
28
29 -----
30
```

		Grid view	Form view
		Total rows loaded: 563	
	Country	Vaccine	
1	Afghanistan	Valneva	
2	Afghanistan	Oxford/AstraZeneca	
3	Afghanistan	Sinopharm/Beijing	
4	Afghanistan	Sputnik V	
5	Albania	Oxford/AstraZeneca	
6	Albania	Sinopharm/Beijing	
7	Albania	Pfizer/BioNTech	
8	Albania	Moderna	
9	Algeria	Oxford/AstraZeneca	
10	Algeria	Sputnik V	
11	Algeria	Pfizer/BioNTech	
12	Algeria	Moderna	
13	Andorra	Oxford/AstraZeneca	
14	Andorra	Sinopharm/Beijing	
15	Angola	Oxford/AstraZeneca	

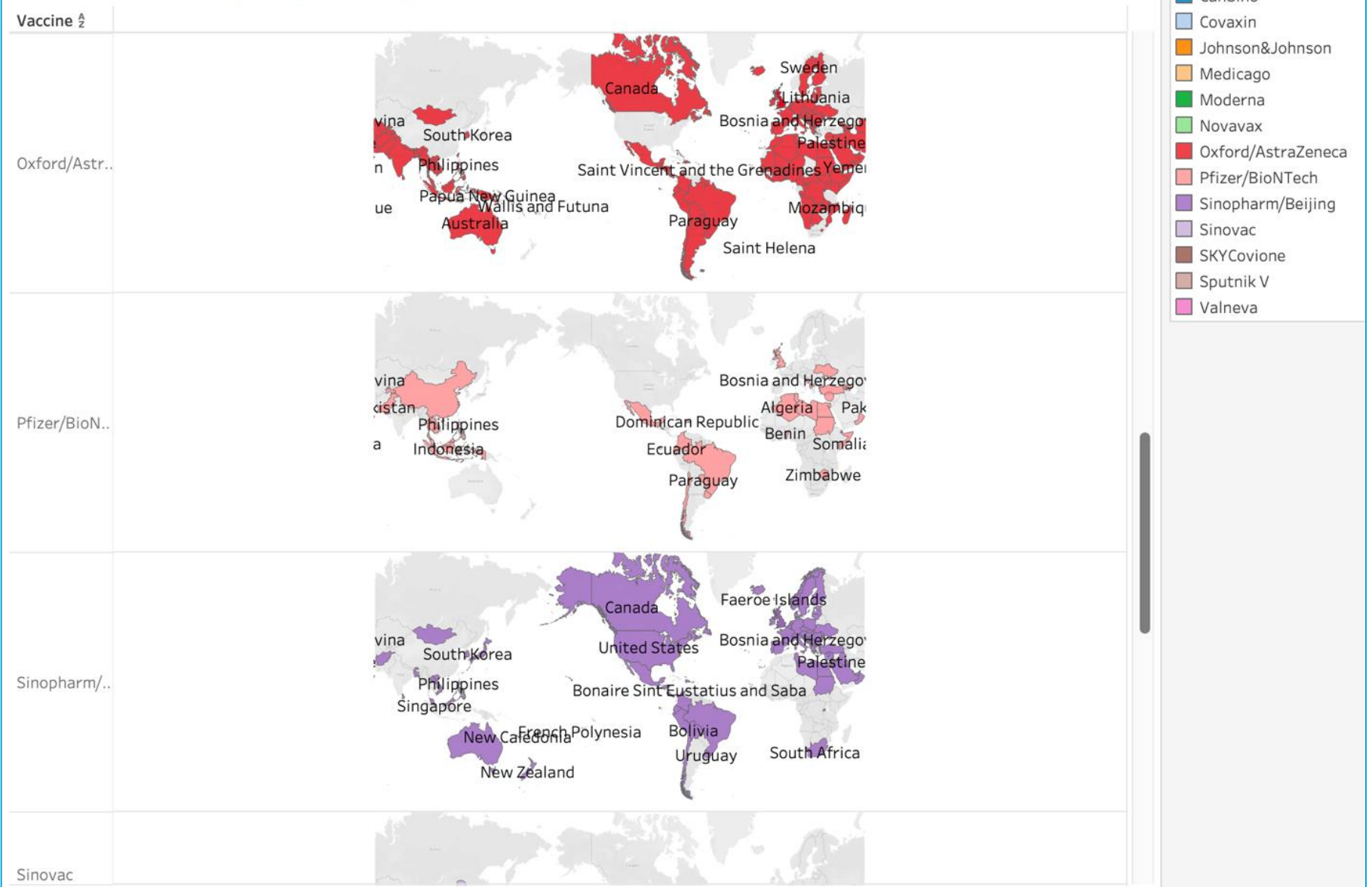


## Data Visualization

### Task D.3 Vaccine Type by Country



## Task D.3 Vaccine Type by Country



## Query 4

```
SELECT      sourcename||" ( "||sourcewebsite ||" )" AS 'Source Name(URL)',
            SUM(Total_vaccines_administered) AS 'Total Vaccines Administered'
FROM (
    SELECT s.source_name AS sourcename, s.source_website AS sourcewebsite,
           v.iso_code, MAX (IIF (v.total_vaccinations != "",v.total_vaccinations, NULL) ) AS
           Total_vaccines_administered
    FROM Vaccinations v LEFT JOIN Source s ON v.iso_code = s.iso_code
    WHERE s.source_name NOT NULL
    GROUP BY v.iso_code
)
GROUP BY sourcewebsite
ORDER BY sourcename ASC;
```

## Results

Query History	
<pre>29 30 /*Query 4*/ 31 SELECT sourcename  " ( "  sourcewebsite   " )" AS 'Source Name(URL)', 32        SUM(Total_vaccines_administered) AS 'Total Vaccines Administered' 33 FROM ( 34     SELECT s.source_name AS sourcename, s.source_website AS sourcewebsite, v.iso_code, 35            MAX (IIF (v.total_vaccinations != "",v.total_vaccinations, NULL) ) AS Total_vaccines_administered 36     FROM Vaccinations v LEFT JOIN Source s ON v.iso_code = s.iso_code 37     WHERE s.source_name NOT NULL 38     GROUP BY v.iso_code 39 ) 40 GROUP BY sourcewebsite 41 ORDER BY sourcename ASC; 42</pre>	
Grid view Form view	
Total rows loaded: 91	
Source Name(URL)	Total Vaccines Administered
1 COVID-19 Malta Public Health Response Team ( <a href="https://github.com/COVID19-Malta/COVID19-...">https://github.com/COVID19-Malta/COVID19-...</a> )	1335951
2 COVID-19 Vaccine Information Platform ( <a href="https://covid19asi.saglik.gov.tr/">https://covid19asi.saglik.gov.tr/</a> )	152404335
3 Centers for Disease Control and Prevention ( <a href="https://data.cdc.gov/Vaccinations/COVID-19-...">https://data.cdc.gov/Vaccinations/COVID-19-...</a> )	627854963
4 Directorate General of Health Services ( <a href="http://103.247.238.92/webportal/pages/covid19-...">http://103.247.238.92/webportal/pages/covid19-...</a> )	311263073
5 Directorate of Health ( <a href="https://www.covid.is/tolulegar-upplysingar-boluefni">https://www.covid.is/tolulegar-upplysingar-boluefni</a> )	805469
6 European CDC ( <a href="https://info.gesundheitsministerium.gvat/data/...">https://info.gesundheitsministerium.gvat/data/...</a> )	19558872
7 European CDC, via Marino van Zelst ( <a href="https://www.ecdc.europa.eu/en/publications-data/data-...">https://www.ecdc.europa.eu/en/publications-data/data-...</a> )	61692128
8 Extraordinary commissioner for the Covid-19 emergency ( <a href="https://raw.githubusercontent.com/...">https://raw.githubusercontent.com/...</a> )	141254143
9 Federal Office of Public Health ( <a href="https://opendata.swiss/en/dataset/covid-19-schweiz?...">https://opendata.swiss/en/dataset/covid-19-schweiz?...</a> )	16022622
10 Federal Office of Public Health ( <a href="https://opendata.swiss/en/dataset/covid-19-schweiz?detGeo=...">https://opendata.swiss/en/dataset/covid-19-schweiz?detGeo=...</a> )	71469
11 Finnish Institute for Health and Welfare ( <a href="https://sampo.thl.fi/pivot/prod/en/vaccreg/cov19cov/...">https://sampo.thl.fi/pivot/prod/en/vaccreg/cov19cov/...</a> )	12863230
12 Food and Health Bureau ( <a href="https://data.gov.hk/en-data/dataset/hk-fhb-fhb-covid19-vaccination-...">https://data.gov.hk/en-data/dataset/hk-fhb-fhb-covid19-vaccination-...</a> )	19608518
13 Government of Aruba ( <a href="https://www.government.aw">https://www.government.aw</a> )	173591
14 Government of Australia via CovidBaseAU ( <a href="https://covidbaseau.com/">https://covidbaseau.com/</a> )	58494109

## Data Visualization

### Task D.4 Total Administered Vaccines by SourceName (URL)

Source Name(URL)		SUM(Total Vaccines Administered)
Centers for Disease Control and Prevention ( <a href="https://data.cdc.gov/Vaccinations/COVID-19-Vaccination-Trends-in-the-Un..">https://data.cdc.gov/Vaccinations/COVID-19-Vaccination-Trends-in-the-Un..</a> )	627,854,963	4,407
COVID-19 Malta Public Health Response Team ( <a href="https://github.com/COVID19-Malta/COVID19-Cases">https://github.com/COVID19-Malta/COVID19-Cases</a> )	1,335,951	3,438,202,000
COVID-19 Vaccine Information Platform ( <a href="https://covid19asi.saglik.gov.tr/">https://covid19asi.saglik.gov.tr/</a> )	152,404,335	
Directorate General of Health Services ( <a href="http://103.247.238.92/webportal/pages/covid19-vaccination-update.php">http://103.247.238.92/webportal/pages/covid19-vaccination-update.php</a> )	311,263,073	
Directorate of Health ( <a href="https://www.covid.is/tolulegar-upplysingar-boluefni">https://www.covid.is/tolulegar-upplysingar-boluefni</a> )	805,469	
European CDC ( <a href="https://info.gesundheitsministerium.gv.at/data/COVID19_vaccination_doses_timeline_v202206.csv">https://info.gesundheitsministerium.gv.at/data/COVID19_vaccination_doses_timeline_v202206.csv</a> )	19,558,872	
European CDC, via Marino van Zelst ( <a href="https://www.ecdc.europa.eu/en/publications-data/data-covid-19-vaccination-eu-e..">https://www.ecdc.europa.eu/en/publications-data/data-covid-19-vaccination-eu-e..</a> )	61,692,128	
Extraordinary commissioner for the Covid-19 emergency ( <a href="https://raw.githubusercontent.com/italia/covid19-opendata-..">https://raw.githubusercontent.com/italia/covid19-opendata-..</a> )	141,254,143	
Federal Office of Public Health ( <a href="https://opendata.swiss/en/dataset/covid-19-schweiz?detGeo=CH">https://opendata.swiss/en/dataset/covid-19-schweiz?detGeo=CH</a> )	16,022,622	
Federal Office of Public Health ( <a href="https://opendata.swiss/en/dataset/covid-19-schweiz?detGeo=FL">https://opendata.swiss/en/dataset/covid-19-schweiz?detGeo=FL</a> )	71,469	
Finnish Institute for Health and Welfare ( <a href="https://sampo.thl.fi/pivot/prod/en/vaccreg/cov19cov/fact_cov19cov">https://sampo.thl.fi/pivot/prod/en/vaccreg/cov19cov/fact_cov19cov</a> )	12,863,230	
Food and Health Bureau ( <a href="https://data.gov.hk/en-data/dataset/hk-fhb-fhbcovid19-vaccination-rates-over-time-by-age">https://data.gov.hk/en-data/dataset/hk-fhb-fhbcovid19-vaccination-rates-over-time-by-age</a> )	19,608,518	
Government of Aruba ( <a href="https://www.government.aw">https://www.government.aw</a> )	173,591	
Government of Australia via CovidBaseAU ( <a href="https://covidbaseau.com/">https://covidbaseau.com/</a> )	58,494,109	
Government of Azerbaijan ( <a href="https://koronavirusinfo.az">https://koronavirusinfo.az</a> )	13,857,111	
Government of Curacao ( <a href="https://bakuna.cw/">https://bakuna.cw/</a> )	255,837	
Government of Ecuador via Ecuacovid ( <a href="https://github.com/andrab/ecuacovid">https://github.com/andrab/ecuacovid</a> )	37,260,948	
Government of Gibraltar ( <a href="https://twitter.com/GibraltarGov/status/1517138573614477315">https://twitter.com/GibraltarGov/status/1517138573614477315</a> )	119,855	
Government of Greenland ( <a href="https://corona.nun.gl">https://corona.nun.gl</a> )	79,745	
Government of Guernsey ( <a href="https://covid19.gov.gg/guidance/vaccine/stats">https://covid19.gov.gg/guidance/vaccine/stats</a> )	157,708	
Government of Hungary ( <a href="https://koronavirus.gov.hu/cikkek/6-millio-419-ezer-beoltott-12-636-az-uj-fertozott-es-elhun..">https://koronavirus.gov.hu/cikkek/6-millio-419-ezer-beoltott-12-636-az-uj-fertozott-es-elhun..</a> )	16,530,488	
Government of India ( <a href="https://dashboard.cowin.gov.in/">https://dashboard.cowin.gov.in/</a> )	2,192,779,896	
Government of Israel ( <a href="https://datadashboard.health.gov.il/COVID-19/general">https://datadashboard.health.gov.il/COVID-19/general</a> )	18,239,170	
Government of Jersey ( <a href="https://www.gov.je/Datasets/ListOpenData?ListName=COVID19Weekly&amp;clean=true">https://www.gov.je/Datasets/ListOpenData?ListName=COVID19Weekly&amp;clean=true</a> )	250,253	
Government of Kazakhstan ( <a href="https://www.coronavirus2020.kz/">https://www.coronavirus2020.kz/</a> )	20,918,681	
Government of Luxembourg ( <a href="https://data.public.lu/en/datasets/donnees-covid19/#_">https://data.public.lu/en/datasets/donnees-covid19/#_</a> )	1,350,776	
Government of Macao ( <a href="https://www.ssm.gov.mo/docs/19164/19164_7e53f06c68fc467d8e3e3374d09bcc1a_000_.pdf">https://www.ssm.gov.mo/docs/19164/19164_7e53f06c68fc467d8e3e3374d09bcc1a_000_.pdf</a> )	1,507,144	
Government of Malaysia ( <a href="https://github.com/MoH-Malaysia/covid19-public">https://github.com/MoH-Malaysia/covid19-public</a> )	72,160,624	
Government of Montenegro ( <a href="https://www.covidodgovor.me/">https://www.covidodgovor.me/</a> )	679,171	
Government of Saint Helena ( <a href="https://www.sainthelena.gov.sh/2021/news/preliminary-data-from-the-covid-19-vaccina..">https://www.sainthelena.gov.sh/2021/news/preliminary-data-from-the-covid-19-vaccina..</a> )	7,892	
Government of Serbia ( <a href="https://vakcinacija.gov.rs/">https://vakcinacija.gov.rs/</a> )	8,534,688	
Government of Singapore ( <a href="https://data.gov.sg/dataset/covid-19-vaccination">https://data.gov.sg/dataset/covid-19-vaccination</a> )	14,708,332	
Government of Suriname ( <a href="https://laatjevaccinieren.sr/">https://laatjevaccinieren.sr/</a> )	505,699	

## Query 5

```
SELECT CountryDailyVaccination.date As Date ,

MAX (IIF( CountryDailyVaccination.iso_code IN
        (
            SELECT iso_code
            FROM Location
            WHERE lower(location) LIKE 'australia'
        ),CountryDailyVaccination.people_fully_vaccinated,0)) AS 'Australia',

MAX (IIF( CountryDailyVaccination.iso_code IN
        (
            SELECT iso_code
            FROM Location
            WHERE lower(location) LIKE 'united states'
        ), CountryDailyVaccination.people_fully_vaccinated, 0)) AS 'United States',

MAX (IIF( CountryDailyVaccination.iso_code IN
        (
            SELECT iso_code
            FROM Location
            WHERE lower(location) LIKE 'germany'
        ), CountryDailyVaccination.people_fully_vaccinated,0)) AS 'Germany',

MAX (IIF( CountryDailyVaccination.iso_code IN
        (
            SELECT iso_code
            FROM Location
            WHERE lower(location) LIKE 'italy'
        ),CountryDailyVaccination.people_fully_vaccinated, 0)) AS 'Italy'

FROM CountryDailyVaccination
WHERE CountryDailyVaccination.date LIKE '%2022%'
GROUP BY CountryDailyVaccination.date
ORDER BY CountryDailyVaccination.date ASC;
```

## Results

```
44 -----
45 /*Query 5*/
46
47 SELECT CountryDailyVaccination.date AS Date ,
48
49     MAX (IIF( CountryDailyVaccination.iso_code IN
50     (
51         SELECT iso_code
52         FROM Location
53         WHERE lower(location) LIKE 'australia'
54     ),CountryDailyVaccination.people_fully_vaccinated,0)) AS 'Australia',
55
56     MAX (IIF( CountryDailyVaccination.iso_code IN
57     (
58         SELECT iso_code
59         FROM Location
60         WHERE lower(location) LIKE 'united states'
61     ), CountryDailyVaccination.people_fully_vaccinated, 0)) AS 'United States',
62
63     MAX (IIF( CountryDailyVaccination.iso_code IN
64     (
65         SELECT iso_code
66         FROM Location
67         WHERE lower(location) LIKE 'germany'
68     ), CountryDailyVaccination.people_fully_vaccinated,0)) AS 'Germany',
69
70     MAX (IIF( CountryDailyVaccination.iso_code IN
71     (
72         SELECT iso_code
73         FROM Location
74         WHERE lower(location) LIKE 'italy'
75     ),CountryDailyVaccination.people_fully_vaccinated, 0)) AS 'Italy'
76
77 FROM CountryDailyVaccination
78 WHERE CountryDailyVaccination.date LIKE '%2022%'
79 GROUP BY CountryDailyVaccination.date
80 ORDER BY CountryDailyVaccination.date ASC;
81
```



```

45 /*Query 5*/
46
47 SELECT CountryDailyVaccination.date As Date ,
48
49     MAX (IIF( CountryDailyVaccination.iso_code IN
50     (
51         SELECT iso_code
52         FROM Location
53         WHERE lower(location) LIKE 'australia'
54     ),CountryDailyVaccination.people_fully_vaccinated,0)) AS 'Australia',
55

```

Grid view Form view






1

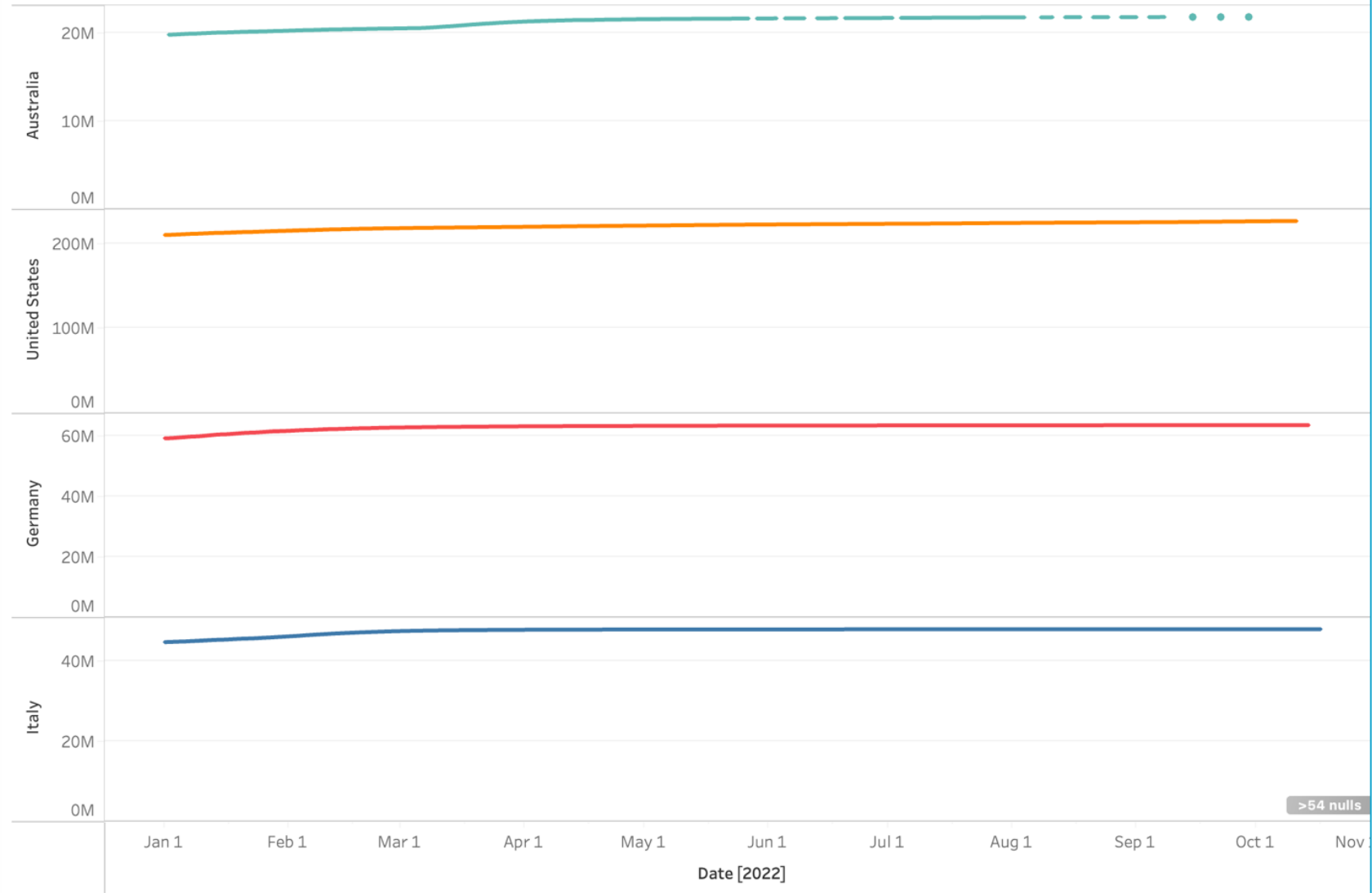


Total rows loaded: 290

	Date	Australia	United States	Germany	Italy	
1	1/1/2022	0	209826836	59135414	44752395	
2	1/10/2022	0	225911561	63468754	47966662	
3	1/2/2022	20228401	214799163	61590217	46174160	
4	1/3/2022	20490408	217805415	62684099	47499174	
5	1/4/2022	21260487	219370609	63088317	47824675	
6	1/5/2022	21528799	220857797	63229569	47896756	
7	1/6/2022	21616911	222085884	63313849	47924798	
8	1/7/2022	21673357	222972698	63368015	47939260	
9	1/8/2022	21732054	223899931	63408809	47951057	
10	1/9/2022	21764309	224727908	63441598	47960017	
11	10/1/2022	19928352	211456768	59835798	45109005	
12	10/10/2022	0	226196432	63476037	47968171	
13	10/2/2022	20339977	216047150	62084187	46739933	
14	10/3/2022	20626131	218345571	62853752	47654706	
15	10/4/2022	21378262	219841900	63141988	47853712	
16	10/5/2022	21561125	221233653	63262843	47906736	

## Data Visualization

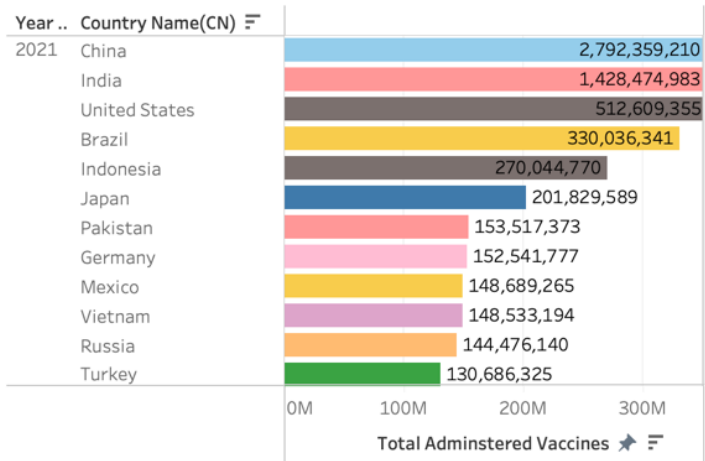
Task D.5 Fully Vaccinated People in Australia, United States, Germany, and Italy by Date



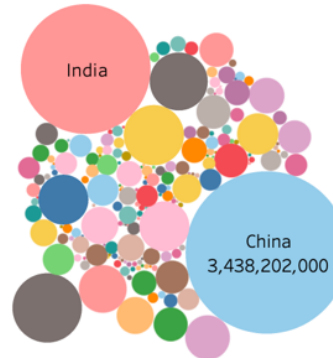


## Dashboard for A Global Database of Covid-19 Vaccinations

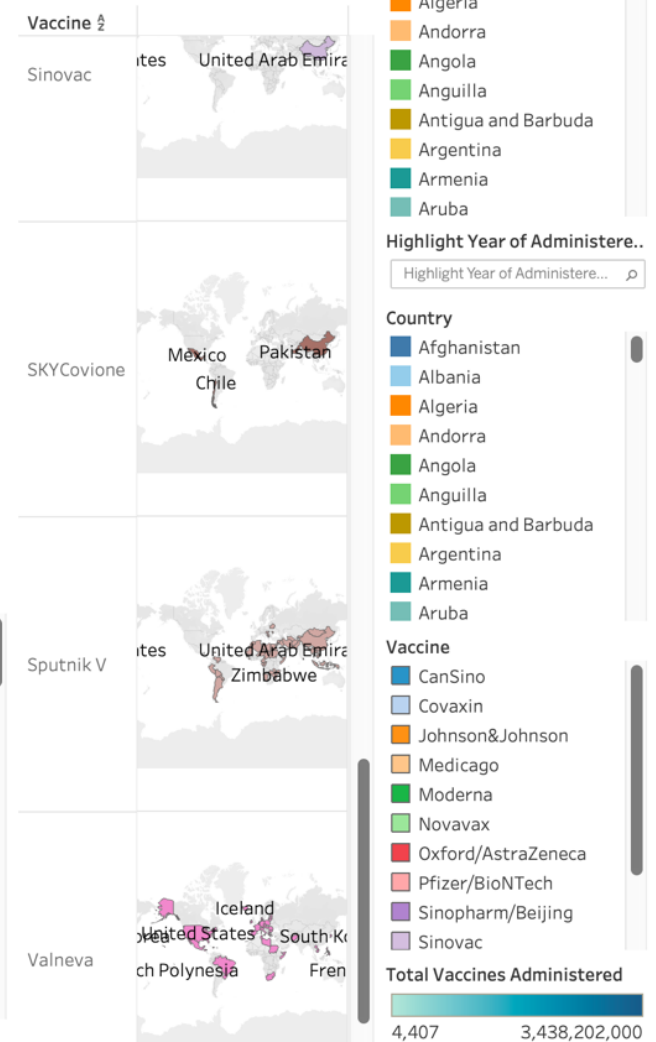
### Task D.1 Total Administered Vaccines by Countries



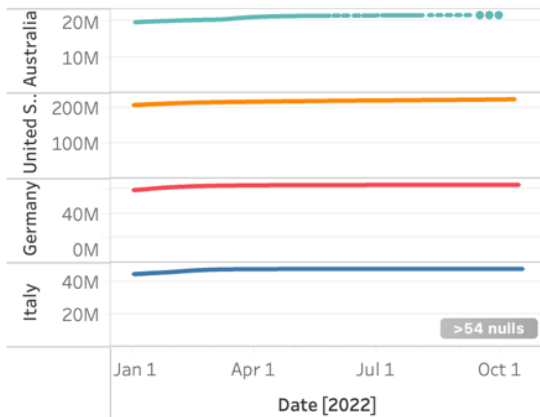
### Task D.2 Cumulative Numbers of COVID-19 Doses Administered by Country.



### Task D.3 Vaccine Type by Country



### Task D.5 Fully Vaccinated People in Australia, United States, Germany, and Italy by Date



### Task D.4 Total Administered Vaccines by SourceName (URL)

