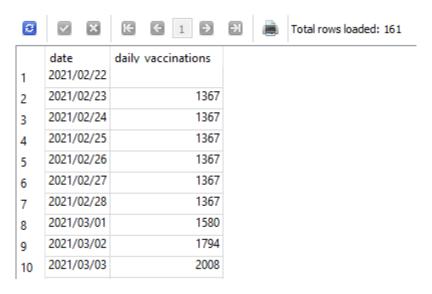
## ISYS2095 – Assessment 3 – Task D

Adam Mutimer (\$3875753)

## Task D.1

List the total number of vaccines administered in each observation date for Afghanistan



## Task D.2

Produce a dataset containing total number of COVID-19 doses administered by each country

| 8  | ✓ X K € 1 →         | Total rows loaded: 231          |
|----|---------------------|---------------------------------|
|    | Country             | Total Vaccinations Administered |
| 1  | Afghanistan         | 1442250                         |
| 2  | Africa              | 75170892                        |
| 3  | Albania             | 1238036                         |
| 4  | Algeria             | 4146091                         |
| 5  | Andorra             | 82349                           |
| 6  | Angola              | 1680059                         |
| 7  | Anguilla            | 18193                           |
| 8  | Antigua and Barbuda | 69518                           |
| 9  | Argentina           | 34430142                        |
| 10 | Armenia             | 171890                          |

```
SELECT (

SELECT location

FROM Locations

WHERE iso_code = CountryVaccinations.iso_code
)

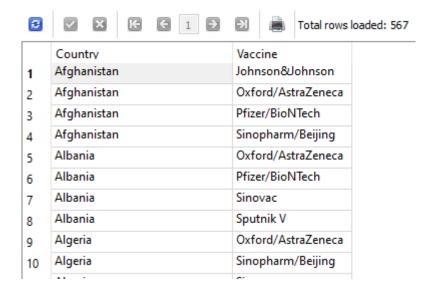
AS Country,

MAX(NULLIF(total_vaccinations, "") ) AS [Total Vaccinations
Administered]

FROM CountryVaccinations
WHERE total_vaccinations NOT NULL
GROUP BY Country
ORDER BY Country ASC;
```

Task D.3

Produce a list of all countries with the type of vaccines administered



```
SELECT (

SELECT location

FROM Locations

WHERE iso_code = LocationVaccines.iso_code
)

AS Country,
(

SELECT name

FROM Vaccines

WHERE vaccine_id = LocationVaccines.vaccine_id
)

AS Vaccine

FROM LocationVaccines

ORDER BY Country ASC;
```

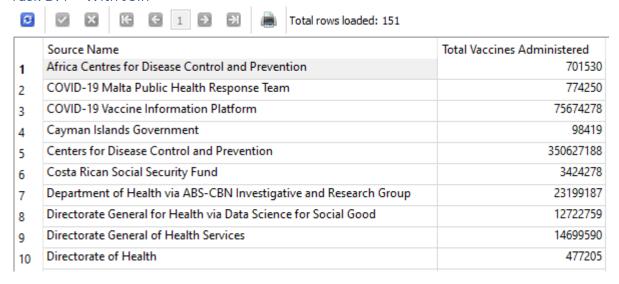
#### Task D.4

Produce report showing the total number of vaccines administered according to each data source

NOTE: Combined Duplicates only when the data source website matched

# FOR THIS TASK I WROTE TWO INDEPENDENT QURIES WHICH PERFORM THE SAME TASK HOWEVER ONE USES A JOIN AND THE OTHER DOES NOT

#### Task D.4 – With Join



```
SELECT SourceName AS [Source Name],
       SUM(TOTAL) AS [Total Vaccines Administered]
  FROM (
           SELECT Country Vaccinations. iso code,
                  MAX (NULLIF (Country Vaccinations.total vaccinations,
"") ) AS Total,
                  IFNULL(DataSource.source name, "Unknown Source -
Data Unavaliable") AS SourceName,
                  DataSource.source website AS SourceWebsite
             FROM CountryVaccinations
                  LEFT JOIN
                  DataSource ON CountryVaccinations.iso code =
DataSource.iso code
            GROUP BY Country Vaccinations.iso code
       )
GROUP BY SourceWebsite
 ORDER BY SourceName ASC;
```

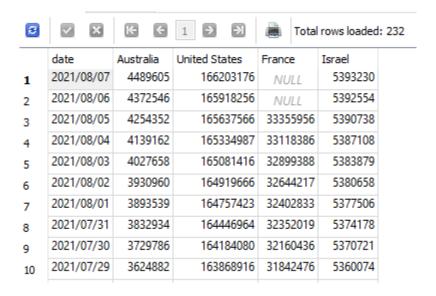
Task D.4 – Without Join

| 8  | Total rows loaded: 151  |                             |  |  |
|----|---|-----------------------------|--|--|
|    | Source Name   | Total Vaccines Administered |  |  |
| 1  | Africa Centres for Disease Control and Prevention                 | 701530                      |  |  |
| 2  | COVID-19 Malta Public Health Response Team                        | 774250                      |  |  |
| 3  | COVID-19 Vaccine Information Platform                             | 75674278                    |  |  |
| 4  | Cayman Islands Government   | 98419                       |  |  |
| 5  | Centers for Disease Control and Prevention                        | 350627188                   |  |  |
| 6  | Costa Rican Social Security Fund                                  | 3424278                     |  |  |
| 7  | Department of Health via ABS-CBN Investigative and Research Group | 23199187                    |  |  |
| 8  | Directorate General for Health via Data Science for Social Good   | 12722759                    |  |  |
| 9  | Directorate General of Health Services                            | 14699590                    |  |  |
| 10 | Directorate of Health   | 477205                      |  |  |

```
SELECT SourceName AS [Source Name],
      SUM(TOTAL) AS [Total Vaccines Administered]
  FROM (
           SELECT iso code,
                 MAX(NULLIF(total_vaccinations, "") ) AS Total,
                  IFNULL( (
                              SELECT source name
                               FROM DataSource
                              WHERE iso code =
CountryVaccinations.iso_code
                         ), "Unknown Source - Data Unavaliable") AS
SourceName,
                  (
                     SELECT source website
                       FROM DataSource
                      WHERE iso_code = CountryVaccinations.iso_code
                  )
                 AS SourceWebsite
             FROM CountryVaccinations
            GROUP BY iso code
      )
GROUP BY SourceWebsite
ORDER BY SourceName;
```

#### Task D.5

Produce a report that lists all the observation dates, and provides total number of fully vaccinated in 4 countries (Australia, United States, France, and Israel)



SEE NEXT PAGE FOR QUERY

```
SELECT CountryDailyTotals.date,
       MAX(CASE WHEN CountryDailyTotals.iso code = (
                                                        SELECT
iso code
                                                          FROM
Locations
                                                         WHERE
location = 'Australia'
           THEN CountryDailyTotals.people fully vaccinated END) AS
Australia,
       MAX(CASE WHEN CountryDailyTotals.iso code = (
                                                        SELECT
iso_code
                                                          FROM
Locations
                                                         WHERE
location = 'United States'
           THEN CountryDailyTotals.people fully vaccinated END) AS
[United States],
      MAX(CASE WHEN CountryDailyTotals.iso code = (
                                                        SELECT
iso_code
                                                          FROM
Locations
                                                         WHERE
location = 'France'
           THEN CountryDailyTotals.people fully_vaccinated END) AS
France,
       MAX(CASE WHEN CountryDailyTotals.iso code = (
                                                        SELECT
iso code
                                                          FROM
Locations
                                                         WHERE
location = 'Israel'
           THEN CountryDailyTotals.people_fully_vaccinated END) AS
Israel
 FROM CountryDailyTotals
GROUP BY CountryDailyTotals.date
ORDER BY CountryDailyTotals.date DESC;
```