

Week 15 Project :

COVID Analysis - Country Specific :

In [47]:

```
import pandas as pd
import datetime
import numpy as np
```

In [48]:

```
df = pd.read_csv("country_vaccinations.csv")
```

In [49]:

```
df.head()
```

Out[49]:

	country	iso_code	date	total_vaccinations	people_vaccinated	people_fully_vaccinated	daily_vaccinations_raw	daily_vaccinations	total_vaccinations_per_hundred	people_vaccinated_per_hundred	people_fully_vaccinated_p
0	Afghanistan	AFG	2021-02-22	0.0	0.0	NaN	NaN	NaN	0.0	0.0	
1	Afghanistan	AFG	2021-02-23	NaN	NaN	NaN	NaN	1367.0	NaN	NaN	
2	Afghanistan	AFG	2021-02-24	NaN	NaN	NaN	NaN	1367.0	NaN	NaN	
3	Afghanistan	AFG	2021-02-25	NaN	NaN	NaN	NaN	1367.0	NaN	NaN	
4	Afghanistan	AFG	2021-02-26	NaN	NaN	NaN	NaN	1367.0	NaN	NaN	

Add Month,Date and Year Column:

In [50]:

```
month = []
date = []
year = []
for i in df['date']:
    date.append(i.split("-")[2])
    year.append(i.split('-')[0])
    month.append(i.split('-')[1])
df["Date"] = date
df["Month"] = month
df["Year"] = year
df.head()
```

Out[50]:

	country	iso_code	date	total_vaccinations	people_vaccinated	people_fully_vaccinated	daily_vaccinations_raw	daily_vaccinations	total_vaccinations_per_hundred	people_vaccinated_per_hundred	people_fully_vaccinated_p
0	Afghanistan	AFG	2021-02-22	0.0	0.0	NaN	NaN	NaN	0.0	0.0	
1	Afghanistan	AFG	2021-02-23	NaN	NaN	NaN	NaN	1367.0	NaN	NaN	
2	Afghanistan	AFG	2021-02-24	NaN	NaN	NaN	NaN	1367.0	NaN	NaN	
3	Afghanistan	AFG	2021-02-25	NaN	NaN	NaN	NaN	1367.0	NaN	NaN	
4	Afghanistan	AFG	2021-02-26	NaN	NaN	NaN	NaN	1367.0	NaN	NaN	

Add Month\_Name Column :

In [51]:

```
month_name = []
for i in df["date"]:
    date = int(i.split("-")[2])
    month = int(i.split('-')[1])
    year = int(i.split('-')[0])
    a = (datetime.date(year,month,date).strftime('%b'))
    month_name.append(a)
df["Month_Name"] = month_name
df.head()
```

Out[51]:

	country	iso_code	date	total_vaccinations	people_vaccinated	people_fully_vaccinated	daily_vaccinations_raw	daily_vaccinations	total_vaccinations_per_hundred	people_vaccinated_per_hundred	people_fully_vaccinated_p
0	Afghanistan	AFG	2021-02-22	0.0	0.0	NaN	NaN	NaN	0.0	0.0	
1	Afghanistan	AFG	2021-02-23	NaN	NaN	NaN	NaN	1367.0	NaN	NaN	
2	Afghanistan	AFG	2021-02-24	NaN	NaN	NaN	NaN	1367.0	NaN	NaN	
3	Afghanistan	AFG	2021-02-25	NaN	NaN	NaN	NaN	1367.0	NaN	NaN	
4	Afghanistan	AFG	2021-02-26	NaN	NaN	NaN	NaN	1367.0	NaN	NaN	

Find Monthly number of total vaccination from Jan to Dec in 2021:

In [52]:

```
len_ = len(df["country"])
list1 = ["Jan", "Feb", "Mar", "Apr", "May", "Jun", "Jul", "Aug", "Sep", "Oct", "Nov", "Dec"]
for j in list1:
    for i in range(len_):
        if(df["Month_Name"][i] == j and df["Year"][i] == "2021"):
            a = df["total_vaccinations"][i].sum()
            print(j,"-",a)
print("These are the Monthly number of total vaccination from Jan to Dec in 2021.")
```

Jan - 417147.0

Feb - 19100.0

Mar - 92426.0

Apr - 92426.0

May - 1020056.0

Jun - 1332416.0

Jul - 2433070.0

Aug - 4219824.0

Sep - 5346026.0

Oct - 5911588.0

Nov - 6611942.0

Dec - 7264791.0

These are the Monthly number of total vaccination from Jan to Dec in 2021.