

Week 13 Project :

COVID Analysis - Multi-Columns Analysis:

In [9]:

```
import datetime
import pandas as pd
```

In [10]:

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

In [11]:

```
df.head()
```

Out[11]:

	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 Date,Month and Year Column :

In [12]:

```
date = []
month = []
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[12]:

	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 [13]:

```
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[13]:

	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	

1. How many people are totally vaccinated in India in May 2021?

In [14]:

```
len_1 = len(df["country"])
for i in range(len_1):
    if(df["country"][i]=="India" and df["Year"][i] == "2021" and df["Month_Name"][i] == "May"):
        total_vaccination = df["total_vaccinations"][i].sum()
print("Total Vaccinations in India in May 2021 : ",total_vaccination)
```

Total Vaccinations in India in May 2021 : 210449895.0

2. How many people are vaccinated in Albania on 2022-01-12?

In [15]:

```
len_2 = len(df["country"])
for i in range(len_2):
    if(df["country"][i] == "Albania" and df["Year"][i] == "2021" and df["Month"][i] == "01" and df["Date"][i] == "12"):
        ppl_vaccinated = df["total_vaccinations"][i].sum()
print("People are Vaccinated in Albania on 2022-01-12 : ",ppl_vaccinated)
```

People are Vaccinated in Albania on 2022-01-12 : 128.0