

WEEKLY PROJECT 13

COVID Analysis-Multi Column Analysis

1)Importing libraries and dataset

In [1]:

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

In [2]:

```
df=pd.read_csv('country_vaccinations.csv')
df.head()
```

Out[2]:

	country	iso_code	date	total_vaccinations	people_vaccinated	people_fully_vaccinated	daily_vaccinations_raw	daily_vaccinations	total_vaccinations_per_hundred	people_vaccinated_per_hundred
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

2.a) Adding month column

In [3]:

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

Out[3]:

	country	iso_code	date	total_vaccinations	people_vaccinated	people_fully_vaccinated	daily_vaccinations_raw	daily_vaccinations	total_vaccinations_per_hundred	people_vaccinated_per_hundred
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

2.b)Adding year column

In [4]:

```
year=[]
for i in df['date']:
    year.append(i.split('-')[0])
df['year']=year
df.head()
```

Out[4]:

	country	iso_code	date	total_vaccinations	people_vaccinated	people_fully_vaccinated	daily_vaccinations_raw	daily_vaccinations	total_vaccinations_per_hundred	people_vaccinated_per_hundred
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

2.C)Adding date column

In [5]:

```
date_=[]
for i in df['date']:
    date_.append(i.split('-')[2])
df['date_']=date_
df.head()
```

Out[5]:

	country	iso_code	date	total_vaccinations	people_vaccinated	people_fully_vaccinated	daily_vaccinations_raw	daily_vaccinations	total_vaccinations_per_hundred	people_vaccinated_per_hundred
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

3)Number of people totally vaccinated in India in May 2021

In [6]:

```
n=len(df['country'])
for i in range(n):
    if(df['country'][i]=='India' and df['year'][i]=='2021' and df['month_name'][i]=='May'):
        c=df['total_vaccinations'][i].sum()
print("The total number of people vaccinated in India in May 2021 :",c)
```

The total number of people vaccinated in India in May 2021 : 210449895.0

4)Number of people totally vaccinated in Albania in 2022-01-12

In [10]:

```
n=len(df['country'])
for i in range(n):
    if(df['country'][i]=='Albania' and df['year'][i]=='2022' and df['month_name'][i]=='Jan' and df['date_'][i]=='12'):
        c=df['total_vaccinations'][i].sum()
print("The total number of people vaccinated in Albania in 2022-01-12 :",c)
```

The total number of people vaccinated in Albania in 2022-01-12 : nan

In []: