

WEEKLY PROJECT 10

COVID Analysis

Importing libraries and dataset

In [32]:

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

In [33]:

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

Out[33]:

	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		0.0
1	Afghanistan	AFG	2021-02-23		NaN	NaN	NaN	NaN	1367.0	NaN
2	Afghanistan	AFG	2021-02-24		NaN	NaN	NaN	NaN	1367.0	NaN
3	Afghanistan	AFG	2021-02-25		NaN	NaN	NaN	NaN	1367.0	NaN
4	Afghanistan	AFG	2021-02-26		NaN	NaN	NaN	NaN	1367.0	NaN

1)Dealing with null values

In [34]:

```
df.dropna()
```

Out[34]:

	country	iso_code	date	total_vaccinations	people_vaccinated	people_fully_vaccinated	daily_vaccinations_raw	daily_vaccinations	total_vaccinations_per_hundred	people_vaccinated_per_hundred
94	Afghanistan	AFG	2021-05-27	593313.0	479574.0	113739.0	2859.0	6487.0	1.49	
101	Afghanistan	AFG	2021-06-03	630305.0	481800.0	148505.0	4015.0	5285.0	1.58	
339	Afghanistan	AFG	2022-01-27	5081064.0	4517380.0	3868832.0	6868.0	9802.0	12.76	
433	Albania	ALB	2021-02-18	3049.0	2438.0	611.0	1348.0	254.0	0.11	
515	Albania	ALB	2021-05-11	622507.0	440921.0	181586.0	9548.0	12160.0	21.67	
...
86507	Zimbabwe	ZWE	2022-03-25	8691642.0	4814582.0	3473523.0	139213.0	69579.0	57.59	
86508	Zimbabwe	ZWE	2022-03-26	8791728.0	4886242.0	3487962.0	100086.0	83429.0	58.25	
86509	Zimbabwe	ZWE	2022-03-27	8845039.0	4918147.0	3493763.0	53311.0	90629.0	58.61	
86510	Zimbabwe	ZWE	2022-03-28	8934360.0	4975433.0	3501493.0	89321.0	100614.0	59.20	
86511	Zimbabwe	ZWE	2022-03-29	9039729.0	5053114.0	3510256.0	105369.0	103751.0	59.90	

30847 rows × 15 columns

2)Filling null values with 0

In [35]:

```
df
```

Out[35]:

	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	0.00	
1	Afghanistan	AFG	2021-02-23	NaN	NaN	NaN	NaN	1367.0	NaN	
2	Afghanistan	AFG	2021-02-24	NaN	NaN	NaN	NaN	1367.0	NaN	
3	Afghanistan	AFG	2021-02-25	NaN	NaN	NaN	NaN	1367.0	NaN	
4	Afghanistan	AFG	2021-02-26	NaN	NaN	NaN	NaN	1367.0	NaN	
...
86507	Zimbabwe	ZWE	2022-03-25	8691642.0	4814582.0	3473523.0	139213.0	69579.0	57.59	
86508	Zimbabwe	ZWE	2022-03-26	8791728.0	4886242.0	3487962.0	100086.0	83429.0	58.25	
86509	Zimbabwe	ZWE	2022-03-27	8845039.0	4918147.0	3493763.0	53311.0	90629.0	58.61	
86510	Zimbabwe	ZWE	2022-03-28	8934360.0	4975433.0	3501493.0	89321.0	100614.0	59.20	
86511	Zimbabwe	ZWE	2022-03-29	9039729.0	5053114.0	3510256.0	105369.0	103751.0	59.90	

86512 rows × 15 columns

In [36]:

```
df['country']=df['country'].fillna('0.0')
df['iso_code']=df['iso_code'].fillna('0.0')
df['date']=df['date'].fillna('0.0')
df['total_vaccinations']=df['total_vaccinations'].fillna('0.0')
df['people_vaccinated']=df['people_vaccinated'].fillna('0.0')
df['people_fully_vaccinated']=df['people_fully_vaccinated'].fillna('0.0')
df['daily_vaccinations_raw']=df['daily_vaccinations_raw'].fillna('0.0')
df['daily_vaccinations']=df['daily_vaccinations'].fillna('0.0')
df['total_vaccinations_per_hundred']=df['total_vaccinations_per_hundred'].fillna('0.0')
df['people_vaccinated_per_hundred']=df['people_vaccinated_per_hundred'].fillna('0.0')
df['people_fully_vaccinated_per_hundred']=df['people_fully_vaccinated_per_hundred'].fillna('0.0')
df['daily_vaccinations_per_million']=df['daily_vaccinations_per_million'].fillna('0.0')
df['vaccines']=df['vaccines'].fillna('0.0')
df['source_name']=df['source_name'].fillna('0.0')
df['source_website']=df['source_website'].fillna('0.0')
```

In [37]:

```
df
```

Out[37]:

	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	0.0	0.0	0.0	0.0	
1	Afghanistan	AFG	2021-02-23	0.0	0.0	0.0	0.0	1367.0	0.0	
2	Afghanistan	AFG	2021-02-24	0.0	0.0	0.0	0.0	1367.0	0.0	
3	Afghanistan	AFG	2021-02-25	0.0	0.0	0.0	0.0	1367.0	0.0	
4	Afghanistan	AFG	2021-02-26	0.0	0.0	0.0	0.0	1367.0	0.0	
...
86507	Zimbabwe	ZWE	2022-03-25	8691642.0	4814582.0	3473523.0	139213.0	69579.0	57.59	
86508	Zimbabwe	ZWE	2022-03-26	8791728.0	4886242.0	3487962.0	100086.0	83429.0	58.25	
86509	Zimbabwe	ZWE	2022-03-27	8845039.0	4918147.0	3493763.0	53311.0	90629.0	58.61	
86510	Zimbabwe	ZWE	2022-03-28	8934360.0	4975433.0	3501493.0	89321.0	100614.0	59.2	
86511	Zimbabwe	ZWE	2022-03-29	9039729.0	5053114.0	3510256.0	105369.0	103751.0	59.9	

86512 rows × 15 columns

In []:

In []: