## **COVID Analysis - Country Specific**

### **Import libraries**

```
In [1]:
import pandas as pd
 import numpy as np
```

#### **Loading dataset**

```
In [2]:
 df = pd.read_csv('country_vaccination_preprocessed.csv')
 df.head()
```

```
Out[2]:
           country iso_code
                                date total_vaccinations people_vaccinated people_fully_vaccinated d
                               2021-
    0 Afghanistan
                         AFG
                                               593313.0
                                                                   479574.0
                                                                                            113739.0
                               05-27
                               2021-
       Afghanistan
                                               630305.0
                                                                   481800.0
                                                                                            148505.0
                               06-03
                               2022-
    2 Afghanistan
                         AFG
                                              5081064.0
                                                                  4517380.0
                                                                                           3868832.0
                               01-27
                               2021-
    3
           Albania
                         ALB
                                                 3049.0
                                                                     2438.0
                                                                                                611.0
                               02-18
                               2021-
           Albania
                         ALB
                                               622507.0
                                                                   440921.0
                                                                                            181586.0
                               05-11
```

```
In [3]: # converting float to int type of column total vaccinations
 df['total vaccinations'] = df['total_vaccinations'].apply( lambda x : int(x))
```

```
In [4]: def dataframe(df):
     df = pd.DataFrame()
     df ['month'] = df.index
     df_['total_vaccinations'] = df.values
     return df_
```

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

```
In [5]: # collection of data for year 2021
 df_2021 = df[df['year'] == 2021]
 # Getting sum of total vaccinations group by months
 df_monthly = df_2021.groupby('month_name').sum()['total_vaccinations']
 # final output
 dataframe(df_monthly)
```

Out[5]:		month	total_vaccinations
	0	Apr	19699996461
	1	Aug	78662644326
	2	Dec	139866584933
	3	Feb	4021300388
	4	Jan	1137932000
	5	Jul	60594470534
	6	Jun	44355139362
	7	Mar	10542733392
	8	May	31736246143
	9	Nov	124433009695
	10	Oct	110493873823
	11	Sep	98931099432