```
In [5]: import numpy as np
          import pandas as pd
          import matplotlib.pyplot as plt
          import seaborn as sns
          %matplotlib inline
 In [6]: train_df=pd.read_csv(r'C:\Users\cool_adarsh\Downloads\train-csv2.csv')
          C:\Users\cool_adarsh\AppData\Local\Temp\ipykernel_2880\1205194078.py:1: DtypeWarning: Columns (1) have mixed types. Specify dtype option on import or set low_memory=False.
            train_df=pd.read_csv(r'C:\Users\cool_adarsh\Downloads\train-csv2.csv')
In [12]: test_df=pd.read_csv(r'C:\Users\cool_adarsh\Downloads\test-csv2.csv')
In [13]: train_df.head(20)
              Id County Province_State Country_Region Population
Out[13]:
                                                                Weight
                                                                             Date
                                                                                          Target TargetValue
           0 1
                    NaN
                                 NaN
                                           Afghanistan 27657145 0.058359 2020-01-23 ConfirmedCases
                                                                                                        0
                                 NaN
                                                      27657145 0.583587 2020-01-23
                                                                                                         0
          1 2
                                           Afghanistan
           2 3
                    NaN
                                 NaN
                                                      27657145  0.058359  2020-01-24  ConfirmedCases
                                                                                                         0
                                           Afghanistan
                                 NaN
                                           Afghanistan 27657145 0.583587 2020-01-24
                                                                                        Fatalities
           3
                    NaN
                                                      27657145  0.058359  2020-01-25  ConfirmedCases
                                                                                                         0
           4
              5
                                 NaN
                                           Afghanistan
           5 6
                    NaN
                                 NaN
                                          Afghanistan
                                                      27657145 0.583587 2020-01-25
                                                                                                         0
                    NaN
                                                     27657145  0.058359  2020-01-26  ConfirmedCases
                                                                                                         0
           6 7
                                 NaN
                                           Afghanistan
                                 NaN
                                           Afghanistan 27657145 0.583587 2020-01-26
                                                                                        Fatalities
                                                                                                         0
           7 8
                                                     27657145  0.058359  2020-01-27  ConfirmedCases
                                                                                                         0
           8 9
                    NaN
                                 NaN
                                           Afghanistan
                                                      27657145 0.583587 2020-01-27
           9 10
                    NaN
                                 NaN
                                           Afghanistan
                                                                                        Fatalities
                                                                                                         0
                                           Afghanistan
                                                      27657145 0.058359 2020-01-28 ConfirmedCases
          10 11
                    NaN
                                 NaN
                                                                                                         0
          11 12
                    NaN
                                 NaN
                                           Afghanistan 27657145 0.583587 2020-01-28
                                           Afghanistan
                    NaN
                                                      27657145  0.058359  2020-01-29  ConfirmedCases
                                                                                                         0
          12 13
                                 NaN
          13 14
                    NaN
                                 NaN
                                           Afghanistan
                                                      27657145 0.583587 2020-01-29
                                                                                        Fatalities
                                                                                                         0
          14 15
                    NaN
                                           Afghanistan 27657145 0.058359 2020-01-30 ConfirmedCases
                                                                                                         0
                                 NaN
          15 16
                    NaN
                                 NaN
                                           Afghanistan 27657145 0.583587 2020-01-30
                                                                                        Fatalities
                                                                                                         0
                                                     27657145 0.058359 2020-01-31 ConfirmedCases
                                                                                                         0
          16 17
                    NaN
                                 NaN
                                           Afghanistan
          17 18
                    NaN
                                 NaN
                                                      27657145 0.583587 2020-01-31
                                                                                                         0
                                           Afghanistan
                                                      27657145  0.058359  2020-02-01  ConfirmedCases
          18 19
                    NaN
                                                                                                         0
                                 NaN
                                           Afghanistan
          19 20
                    NaN
                                 NaN
                                          Afghanistan 27657145 0.583587 2020-02-01
                                                                                        Fatalities
In [14]: test_df.head(20)
Out[14]:
              Forecastld County Province_State Country_Region Population Weight
                                                                                   Date
                                                                                                Target
           0
                          NaN
                                                 Afghanistan 27657145 0.058359 2020-04-27 ConfirmedCases
                     1
                                        NaN
                                                 Afghanistan 27657145 0.583587 2020-04-27
                          NaN
           1
                     2
                                        NaN
                                                                                               Fatalities
           2
                     3
                          NaN
                                        NaN
                                                 Afghanistan
                                                            27657145  0.058359  2020-04-28  ConfirmedCases
           3
                          NaN
                                        NaN
                                                 Afghanistan 27657145 0.583587 2020-04-28
                                                                                               Fatalities
           4
                          NaN
                                                 Afghanistan 27657145 0.058359 2020-04-29 ConfirmedCases
                     5
                                        NaN
                          NaN
                                        NaN
                                                 Afghanistan 27657145 0.583587 2020-04-29
           6
                                                            27657145 0.058359 2020-04-30 ConfirmedCases
                          NaN
                                        NaN
                                                 Afghanistan
                          NaN
                                        NaN
                                                 Afghanistan 27657145 0.583587 2020-04-30
           8
                     9
                          NaN
                                        NaN
                                                 Afghanistan
                                                            27657145  0.058359  2020-05-01  ConfirmedCases
                          NaN
                                                 Afghanistan 27657145 0.583587 2020-05-01
                                                                                               Fatalities
          10
                    11
                                                            27657145  0.058359  2020-05-02  ConfirmedCases
                          NaN
                                                 Afghanistan
                                        NaN
          11
                    12
                          NaN
                                        NaN
                                                 Afghanistan 27657145 0.583587 2020-05-02
                                                                                               Fatalities
          12
                                                 Afghanistan 27657145 0.058359 2020-05-03 ConfirmedCases
                    13
                          NaN
                                        NaN
          13
                    14
                          NaN
                                        NaN
                                                 Afghanistan 27657145 0.583587 2020-05-03
                                                                                               Fatalities
          14
                    15
                          NaN
                                        NaN
                                                            27657145  0.058359  2020-05-04  ConfirmedCases
                                                 Afghanistan
          15
                    16
                          NaN
                                        NaN
                                                 Afghanistan 27657145 0.583587 2020-05-04
                                                                                               Fatalities
                                                 Afghanistan 27657145 0.058359 2020-05-05 ConfirmedCases
          16
                    17
                          NaN
                                        NaN
          17
                    18
                          NaN
                                        NaN
                                                 Afghanistan
                                                           27657145 0.583587 2020-05-05
                                                                                               Fatalities
          18
                                                            27657145  0.058359  2020-05-06  ConfirmedCases
                    19
                          NaN
                                                 Afghanistan
                                        NaN
          19
                    20
                          NaN
                                        NaN
                                                 Afghanistan 27657145 0.583587 2020-05-06
                                                                                               Fatalities
 In [9]: train_df.info()
          <class 'pandas.core.frame.DataFrame'>
          RangeIndex: 969640 entries, 0 to 969639
          Data columns (total 9 columns):
           # Column
                                Non-Null Count Dtype
                                 -----
           0 Id
                                 969640 non-null int64
                                880040 non-null object
           1 County
           2 Province_State 917280 non-null object
           3 Country_Region 969640 non-null object
               Population
                                969640 non-null int64
           5
               Weight
                                 969640 non-null float64
           6
               Date
                                 969640 non-null object
                                969640 non-null object
           7 Target
           8 TargetValue 969640 non-null int64
          dtypes: float64(1), int64(3), object(5)
          memory usage: 66.6+ MB
In [10]: train_df.describe()
Out[10]:
                          ld Population
                                                Weight
                                                         TargetValue
          count 969640.000000 9.696400e+05 969640.000000 969640.000000
          mean 484820.500000 2.720127e+06
                                               0.530870
                                                           12.563518
            std 279911.101846 3.477771e+07
                                               0.451909
                                                          302.524795
                     1.000000 8.600000e+01
                                               0.047491 -10034.000000
           25% 242410.750000 1.213300e+04
                                               0.096838
                                                            0.000000
            50% 484820.500000 3.053100e+04
                                               0.349413
                                                            0.000000
            75% 727230.250000 1.056120e+05
                                               0.968379
                                                            0.000000
            max 969640.000000 1.395773e+09
                                               2.239186
                                                        36163.000000
In [15]: test_df.isnull().sum()
Out[15]: ForecastId
                                  0
                             28800
          County
          Province_State
                             16830
          Country_Region
          Population
          Weight
                                  0
          Date
          Target
          dtype: int64
In [16]: train_df.isnull().sum()
Out[16]: Id
                             89600
          County
          Province_State
                             52360
          Country_Region
          Population
          Weight
          Date
          Target
          TargetValue
          dtype: int64
In [18]: train_df.shape
Out[18]: (969640, 9)
In [19]: train_df[train_df['Country_Region']=='China']
                                                                                               Target TargetValue
                    Id County Province_State Country_Region Population Weight
                                                                                   Date
Out[19]:
          15680 15681
                                      Anhui
                                                            62550000 0.055706 2020-01-23 ConfirmedCases
                                                                                                               8
          15681 15682
                         NaN
                                      Anhui
                                                    China
                                                            62550000 0.557057 2020-01-23
                                                                                                              0
                                                                                              Fatalities
          15682 15683
                         NaN
                                      Anhui
                                                    China
                                                            62550000 0.055706 2020-01-24 ConfirmedCases
                                                                                                               6
                                                            62550000 0.557057 2020-01-24
                                                                                                              0
          15683 15684
                         NaN
                                      Anhui
                                                    China
                                                                                              Fatalities
          15684 15685
                         NaN
                                      Anhui
                                                            62550000 0.055706 2020-01-25 ConfirmedCases
                                                                                                              24
          25195 25196
                         NaN
                                       NaN
                                                    China 1395773400 0.474908 2020-06-08
                                                                                              Fatalities
                                                                                                              0
                                                                                                              3
          25196 25197
                         NaN
                                       NaN
                                                    China 1395773400 0.047491 2020-06-09 ConfirmedCases
                                                    China 1395773400 0.474908 2020-06-09
          25197 25198
                         NaN
                                       NaN
                                                                                              Fatalities
                                                                                                              0
          25198 25199
                                                    China 1395773400 0.047491 2020-06-10 ConfirmedCases
                                                                                                              11
                                       NaN
                         NaN
          25199 25200
                         NaN
                                       NaN
                                                    China 1395773400 0.474908 2020-06-10
                                                                                              Fatalities
                                                                                                              0
         9520 rows × 9 columns
In [21]: train_df[train_df['Country_Region']=='India']
                    Id County Province_State Country_Region Population Weight
                                                                                               Target TargetValue
Out[21]:
                                                                                  Date
          40320 40321
                         NaN
                                       NaN
                                                     India 1295210000 0.04766 2020-01-23 ConfirmedCases
          40321 40322
                         NaN
                                       NaN
                                                     India 1295210000 0.47660 2020-01-23
                                                                                             Fatalities
          40322 40323
                                       NaN
                                                     India 1295210000 0.04766 2020-01-24 ConfirmedCases
                         NaN
                                                                                                              0
                                                     India 1295210000 0.47660 2020-01-24
          40323 40324
                         NaN
                                       NaN
                                                                                             Fatalities
                                                     India 1295210000 0.04766 2020-01-25 ConfirmedCases
          40324 40325
                         NaN
                                       NaN
                                                                                                              0
          40595 40596
                         NaN
                                       NaN
                                                     India 1295210000 0.47660 2020-06-08
                                                                                             Fatalities
                                                                                                            266
                                                                                                          10218
          40596 40597
                         NaN
                                       NaN
                                                     India 1295210000 0.04766 2020-06-09 ConfirmedCases
                                                     India 1295210000 0.47660 2020-06-09
          40597 40598
                                       NaN
                                                                                             Fatalities
                                                                                                            277
                         NaN
          40598 40599
                         NaN
                                       NaN
                                                     India 1295210000 0.04766 2020-06-10 ConfirmedCases
                                                                                                            437
          40599 40600
                         NaN
                                       NaN
                                                     India 1295210000 0.47660 2020-06-10
                                                                                             Fatalities
                                                                                                             -5
         280 rows × 9 columns
In [25]: group_data=train_df.groupby('Country_Region').sum()
          countries= group_data.nlargest(10, 'Population')['TargetValue']
          countries
          C:\Users\cool_adarsh\AppData\Local\Temp\ipykernel_2880\3685022227.py:1: FutureWarning: The default value of numeric_only in DataFrameGroupBy.sum is deprecated. In a future version, numeric_only will defau
          It to False. Either specify numeric_only or select only columns which should be valid for the function.
          group_data=train_df.groupby('Country_Region').sum()
Out[25]: Country_Region
          China
                          176564
          India
                          284328
          US
                         6317214
                           36275
          Indonesia
          Brazil
                          812096
          Pakistan
                          115957
          Nigeria
                           14255
          Bangladesh
                           75877
```

Russia

499373

Japan 18066 Name: TargetValue, dtype: int64

In []: