**Choropleth Chart Code**

# This code and related article was published here:-

# https://opensource.com/article/20/4/python-map-covid-19

import pycountry

import plotly.express as px

import pandas as pd

# ----------- Step 1 ------------

URL\_DATASET = r'https://raw.githubusercontent.com/datasets/covid-19/master/data/countries-aggregated.csv'

df1 = pd.read\_csv(URL\_DATASET)

# print(df1.head) # Uncomment to see what the dataframe is like

# ----------- Step 2 ------------

list\_countries = df1['Country'].unique().tolist()

# print(list\_countries) # Uncomment to see list of countries

d\_country\_code = {} # To hold the country names and their ISO

for country in list\_countries:

try:

country\_data = pycountry.countries.search\_fuzzy(country)

# country\_data is a list of objects of class pycountry.db.Country

# The first item ie at index 0 of list is best fit

# object of class Country have an alpha\_3 attribute

country\_code = country\_data[0].alpha\_3

d\_country\_code.update({country: country\_code})

except:

print('could not add ISO 3 code for ->', country)

# If could not find country, make ISO code ' '

d\_country\_code.update({country: ' '})

# print(d\_country\_code) # Uncomment to check dictionary

# create a new column iso\_alpha in the df

# and fill it with appropriate iso 3 code

for k, v in d\_country\_code.items():

df1.loc[(df1.Country == k), 'iso\_alpha'] = v

# print(df1.head) # Uncomment to confirm that ISO codes added

# ----------- Step 3 ------------

fig = px.choropleth(data\_frame = df1,

locations= "iso\_alpha",

color= "Confirmed", # value in column 'Confirmed' determines color

hover\_name= "Country",

color\_continuous\_scale= 'RdYlGn', # color scale red, yellow green

animation\_frame= "Date")

fig.show()