**Instructions to run code:**

scrape\_country(website, filename, countries) receives 3 arguments:

first argument:

is an integer value of 1, 2 or 3 with each corresponding to a different website option. Selecting 1 will provide required information for each country in the list (see third argument instructions). Selecting 2 will provide all information of all countries reported by website [www.worldometers.info](http://www.worldometers.info). Selecting 3 will provide all information of all countries reported by website <https://covid19.who.int/table> . Currently, only 17 countries are available for website 3.

Second argument:

A string argument of the json filename you would want data sent to. Example: “test.json”

Third argument (required for only option 1):

A python list of countries interested in receiving data. Not used if website = 2 or 3.

**Short Report:**

Data was collected by using beautiful soup as a scraping tool. Worldometers provides a table with all desired data for necessary countries, the data can therefore either be scraped individually for selected countries (option 1) by going to country specific web pages or from the main table by selecting option 2 which will return data associated with all countries. Similarly, WHO (option 3) provides a table where all needed data is available and then sent to json file as a dictionary. Option 1 modifies the link based upon selected countries in order to scrape for desired information. Options 2 and 3 iterate through the provided website table in order to generate a dictionary based upon content provided. All data provided corresponds with time generated. Consecutive days will be obtained by running code on daily.

The JSON file consists of a combination of dictionaries (each country has its own dictionary). Each website option will provide a different dictionary based upon information available from site. Below is an example provided by setting website equal to 1:

{

                "Country Name": "us",

                "Cases": 100796300.0,

                "Cases-Normalized": 304518.1049018245,

                "Deaths": 1106640.0,

                "Deaths-Normalized": 3343.296486166209,

                "Recovered": 98257582.0,

                "Recovered-Normalized": 296848.32342928875,

                "Population": 331002651.0

        },

**Website =2:**

{

                "Country": "USA",

                "Total Cases": "100,796,300",

                "New Cases": "NA",

                "Total Deaths": "1,106,640                                ",

                "New Deaths": "NA",

                "Total Recovered": "98,257,582",

                "New Recovered": "NA",

                "Active Cases": "1,432,078",

                "Serious, Critical": "3,541",

                "Tot Cases/ 1M pop": "301,059",

                "Deaths/ 1M pop": "3,305",

                "Total Tests": "1,141,588,533",

                "Tests/ 1M pop": "3,409,709",

                "Population": "334,805,269",

                "Continent": "North America",

                "1 Case every X ppl": "3",

                "1 Death every X ppl": "303",

                "1 Test every X ppl": "0",

                "New Cases/ 1M pop": "NA",

                "New Deaths/ 1M pop": "NA",

                "Active Cases/ 1M pop": "4,277"

        },

**Website = 3:**

  {

                "Country": "United States of America",

                "Cases - Newly reported in the last 7 days": "288,901",

                "Deaths - Cumulative Total": "1,071,245",

                "Deaths - Newly reported in the last 7 days": "1,488",

                "Total vaccine doses administered per 100 population": "195.04",

                "Persons fully vaccinated with last dose of primary series per 100 population": "68.16",

                "Persons Boosted per 100 population": "33.98"

        }