Prerequisite Libraries:

- matplotlib
- pandas
- pmdarima
- Scikit-learn (sklearn)
- statsmodels
- warnings

How to Run:

- Download zip folder and unzip it into local computer
- Open main.py in an IDE of your choosing
- If IDE has a graphical interface (Pycharm, Vscode, etc.)
    - Navigate to project directory after opening file
    - Click on ‘run’ button (should look something like this ▸)
- If IDE has no graphical interface (Terminal, Gitbash, etc.)
    - Navigate to project directory on local
    - Run the following command to run the program
        - python main.py

Expected Output:

- There should be a total of 7 plots that will pop out in the following order when running the program, which will all be saved into the project directory
    - # of Covid Cases in California Over Time
    - 0-2 Orders of Differencing On Data
    - PACF Plot with 1-2 Order Differencing
    - ACF Plot with 1-2 Order Differencing
    - # of Covid Cases in California Over Time Train-Test Split
    - ARIMA(9, 1, 21) Predicted vs. Actual in California Over Time
    - ARIMA(9, 2, 13) Predicted vs. Actual in California Over Time
- Console output can be seen in the file ‘results.pdf’, alongside where the plots are being saved in the code