

## Homework Assignment 2

As with HW 1, please turn this assignment in as a jupyter notebook. This homework will be due next Wednesday.

**Question 1:** Using `pandas` along with the up-to-date CDC data plot 1) the number of new positive cases reported each day for California versus New York and 2) the number of new positive cases reported each day for Oregon versus Washington.

**Question 2:** Tracking the progress of social distancing. In the week2 notebook we looked at how the the number of new positive cases seems to be flattening in California when comparing March 2020 to March 2021. I'm going to ask you to use similar code / thinking and do a couple comparisons.

- 1) On March 19th 2020 the Governor of California ordered a state-wide lockdown– did this have an effect on the rate of transmission? To examine this, compare the data from California in the period from 03/01/2020-03/19/2020 to 03/20/2020-04/30/2020 and ask if doubling times are different. Present this in two, clearly-labelled plots, each showing log transformed counts of positive cases over time.
- 2) Do the same thing for Washington state which had it's first lockdown imposed on 03/24/2020. For Washington compare 02/15/2020-03/24/2020 to 03/25/2020-04/30/2020. Did the lockdown change the rate of transmission?