# "Flattening the Curve"

Visualization of coronavirus "flattening of the curve" based on the SIR model of disease spread from epidemiology. Coded in python using pyplot and numpy. Graphs are .png files, program is .py file.

The Rnot value or reproduction value in the SIR model is a measure of the reproduction rate of the disease. The lower the Rnot value the less the disease is able to spread and infect people. We can think of preventative measures of disease spread like social distancing, wearing a mask, and staying at home as representing a low Rnot value. In this way we can see the effect of these preventative measures on the maximum number of people infected and the rate of infection and recovery over time.

A reproduction value of 1.7 could represent a situation where everyone always takes every preventative measure they can such as social distancing, wearing a mask, and staying at home, and washing hands.
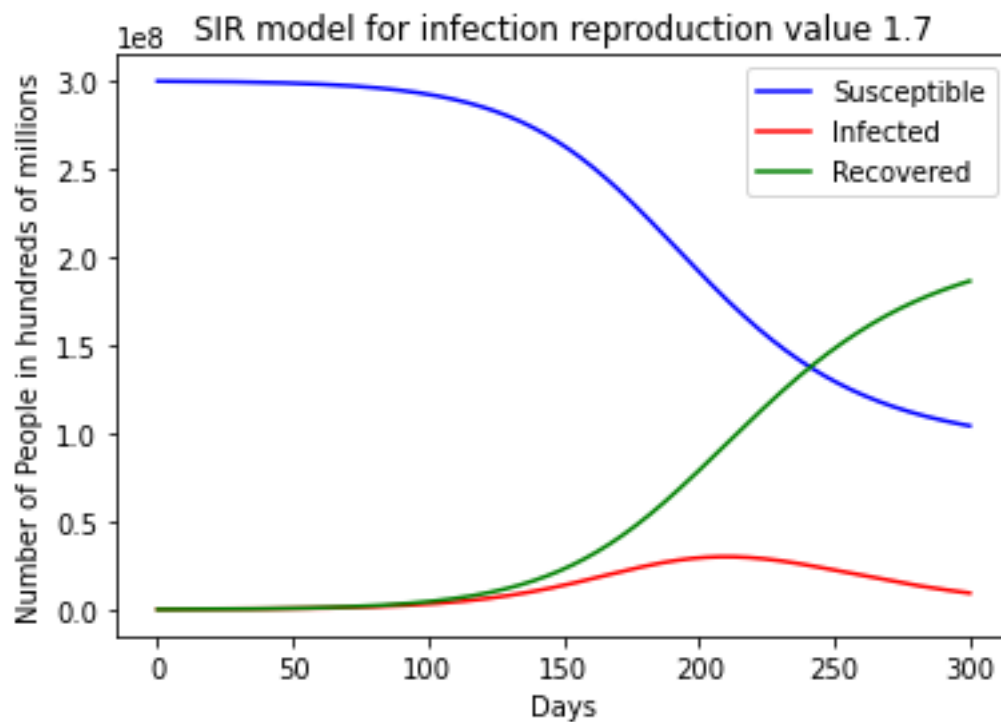
A reproduction value of 4 could represent people taking some preventative measures like wearing a mask and washing hands.
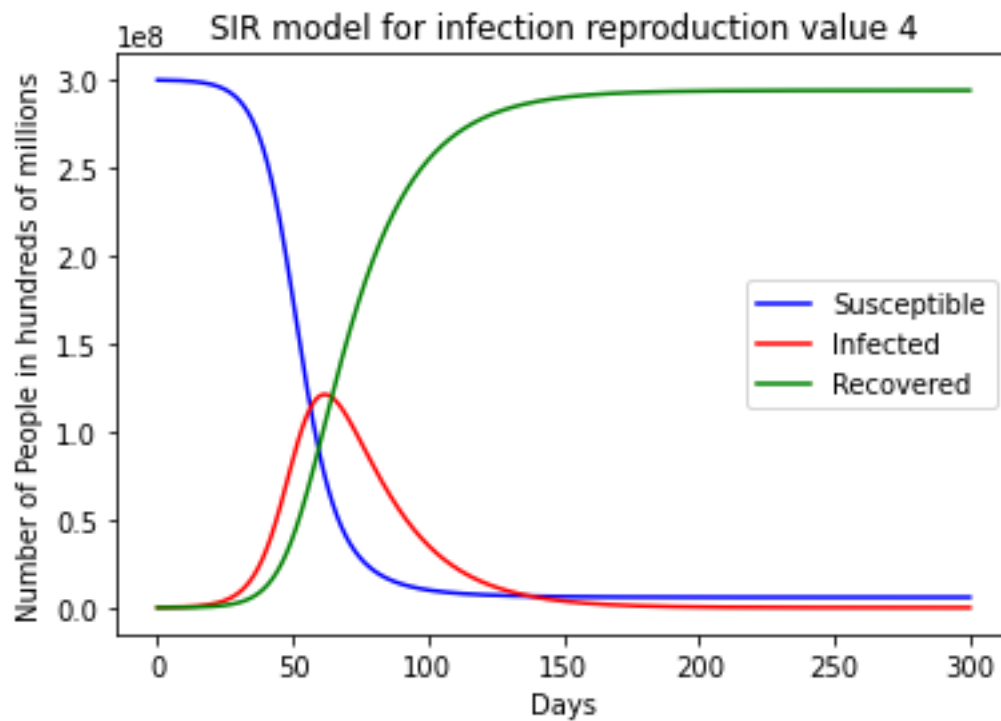


A reproduction value of 10 represents a society where few people take preventative measures.