**Python assignment #7**

In class, we wrote the script ‘**SIR\_epidemic.py**’ to demonstrate a simple epidemic model in Python. This model has two parameters, beta and gamma, which are described in the script.

Run your model for varying values of beta and gamma (I suggest from 1/1 to 1/20, but only vary one at a time!) and observe what happens to:

1. The peak value for I
2. The ending values for S and R
3. The timing of the peak infection

NOTE: for some values, you may need to extend the time series out beyond 160 days.

Record R0 that is reported for each run and relate your observations to how the model works. What is the interpretation of ‘flattening the curve’?

You can analyze the results in Excel, but bonus if you add code to run your simulation for different values of beta and gamma, and then plot the results.