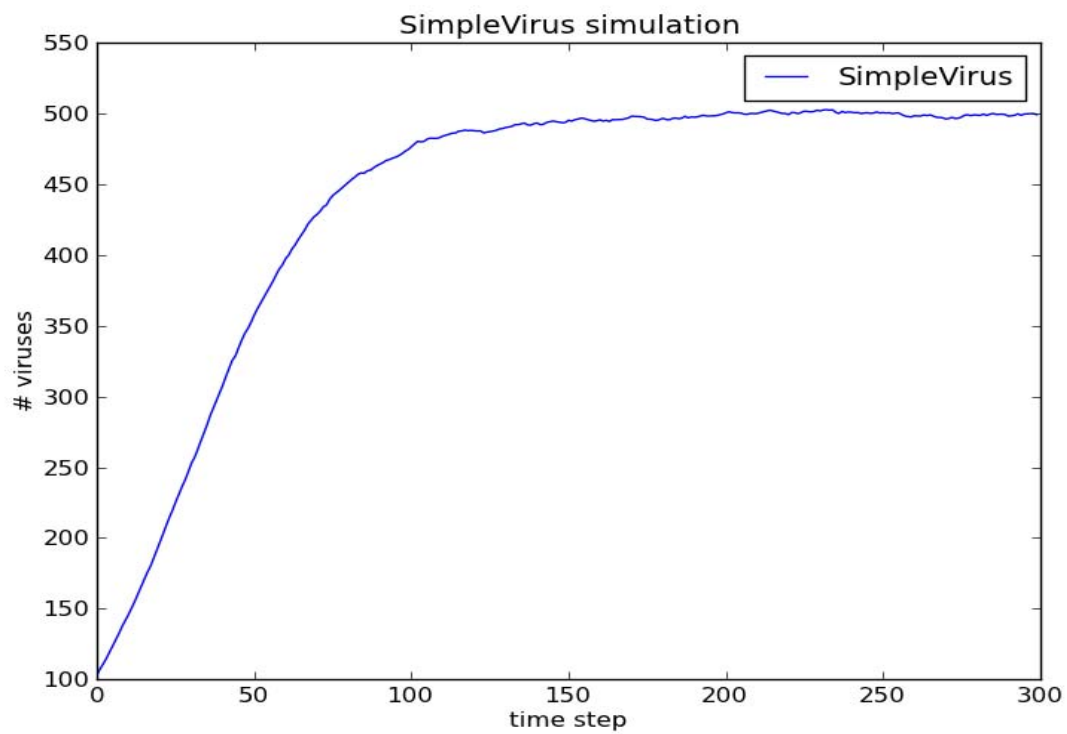


Problem 3: simulation without drug

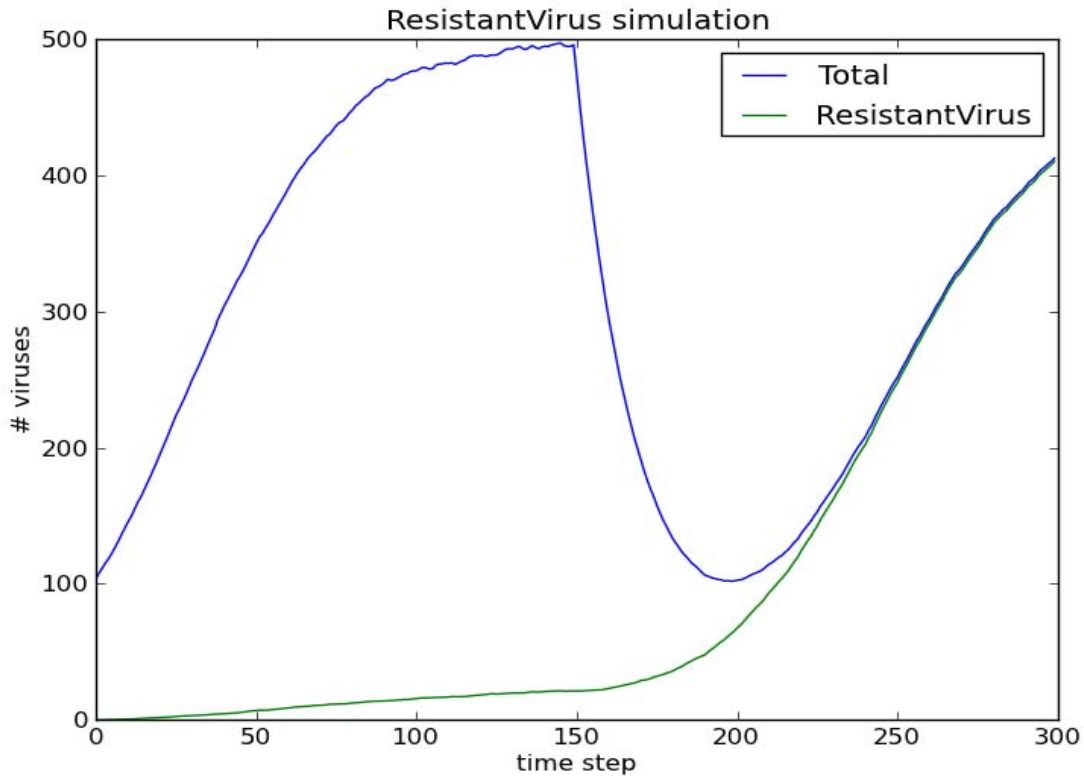
Here's the graph I got after running the simulation for 100 trials (avg # of viruses plotted):



- about how long does it take before the population stops growing?
Basically the virus count levels off after 150 time steps.

Problem 5: simulation with drug

This is the graph that I got after running the simulation for 100 trials.



- What trends do you observe? Are the trends consistent with your intuition?

The virus population size drops dramatically as the drug was applied. But then the number grows back again since not all viruses were killed off, and the ones remaining are those that are resistant to the drug.