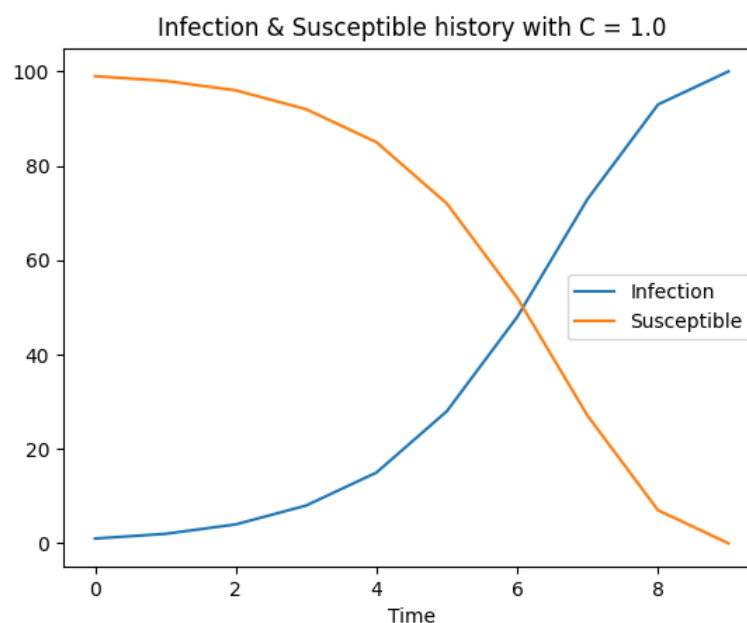
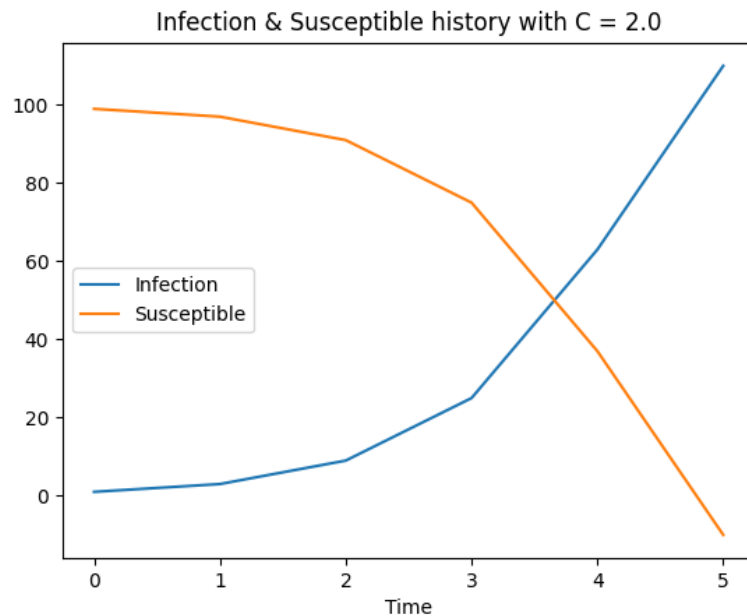


## **Report on SI Model**

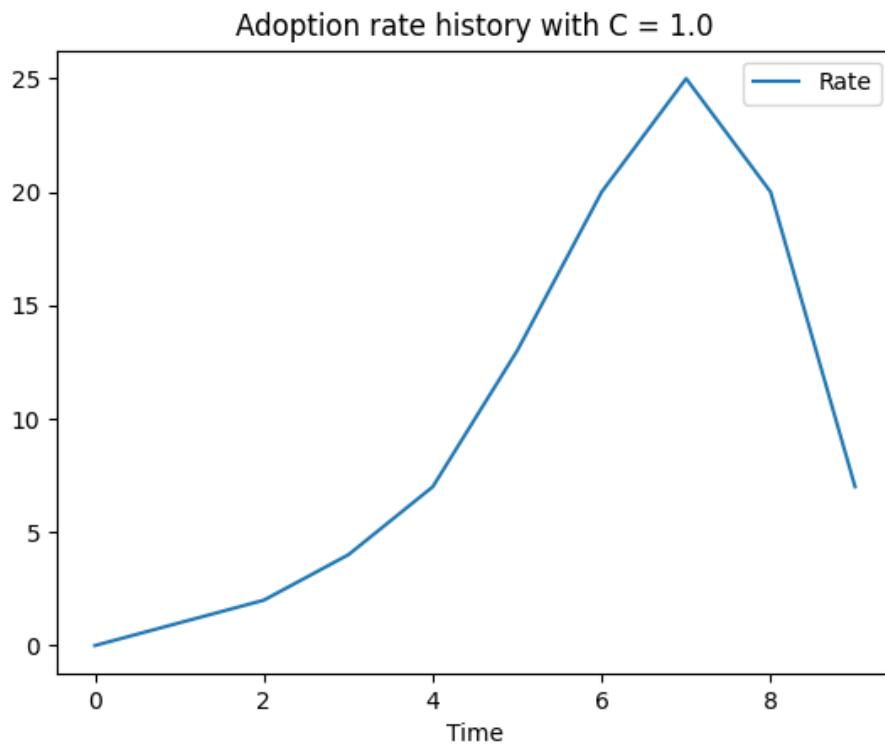
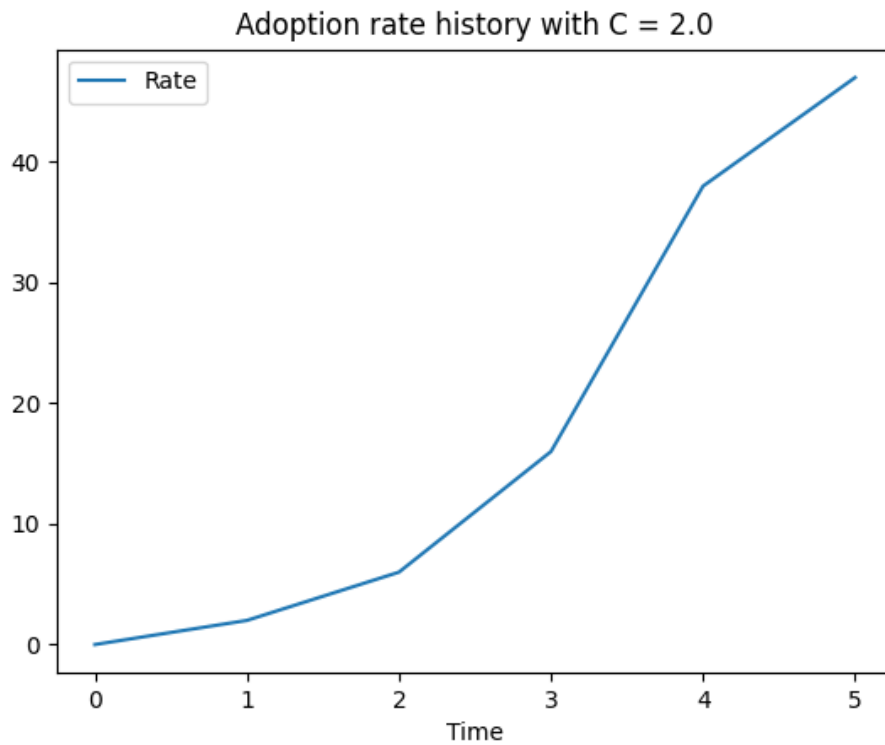
Change C and state differences. C models contact rate and infectivity (cf. lecture 09).

### Comparison of Number of infected and susceptible individuals over time



The smaller C needs fewer steps to infect all agents. Thus, the x-axis has fewer entries. Moreover, the curves are less step at the end section for the lower C. This could be due to the fact, that most agents are already infected and thus, the likelihood of the infection scenario (i.e. one infected and one susceptible agent meeting each other) is less likely, since most agents are already infected.

## Comparison of Number of adoption rate over time



This

trend can also be seen on the adoption rate plots.

Adoption rate is the number of new infected agents per time step. For a smaller  $C$ , the adoption rate decreases in the end section. For a bigger  $C$ , on the other hand, the adoption rate is strongly monoton increasing.