Assignment 8: Agent-Based Models
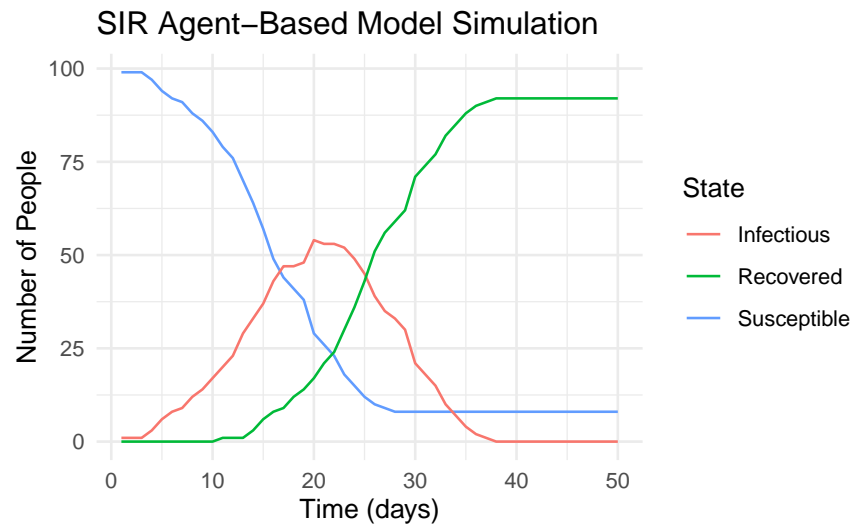
MinJae Jo

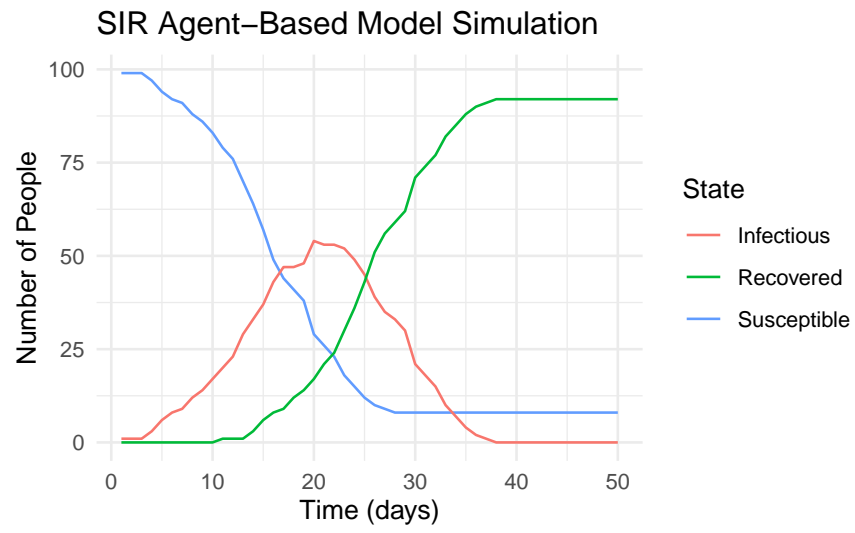### 2025-10-16

Exercise 1

   i. S, I, R

  ii. population_size = 100

 iii. time_steps = 50
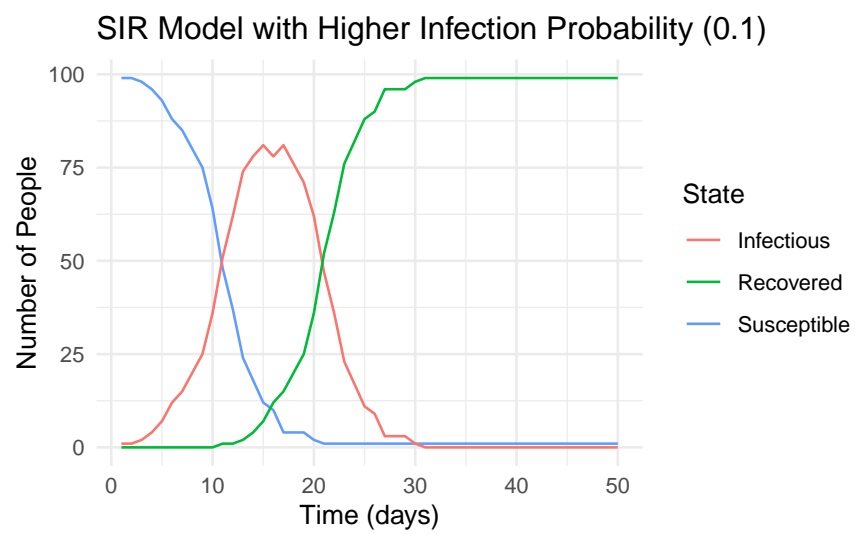
Exercise 2

SIR Agent–Based Model Simulation

Exercise 3

SIR Agent–Based Model Simulation

Number of People vs Time (days)

State:
- Infectious (red)
- Recovered (green)
- Susceptible (blue)

Exercise 4

SIR Model with Higher Infection Probability (0.1)

Number of People vs Time (days)

State:
- Infectious (red)
- Recovered (green)
- Susceptible (blue)

Exercise 5

Comparison of Infected Populations under Different Infec

Exercise 6

SIR Model with Minimum 5 Contacts per Agent
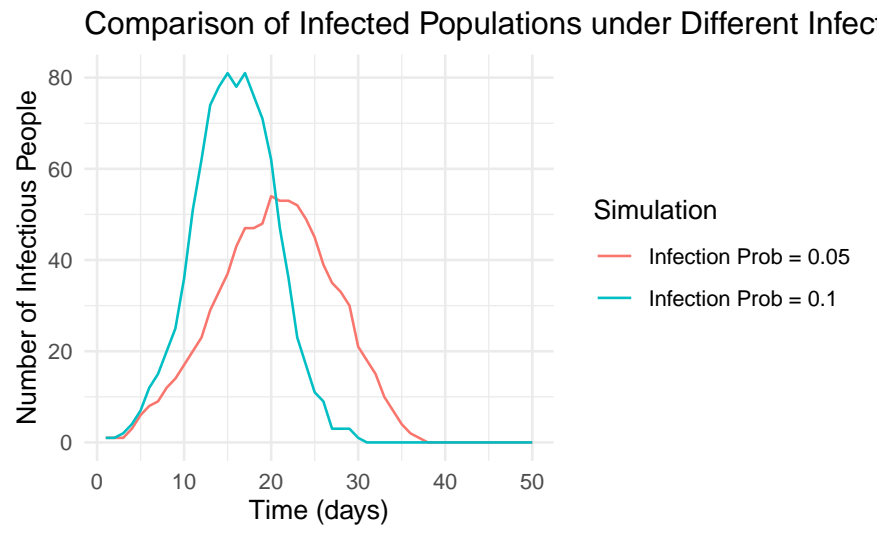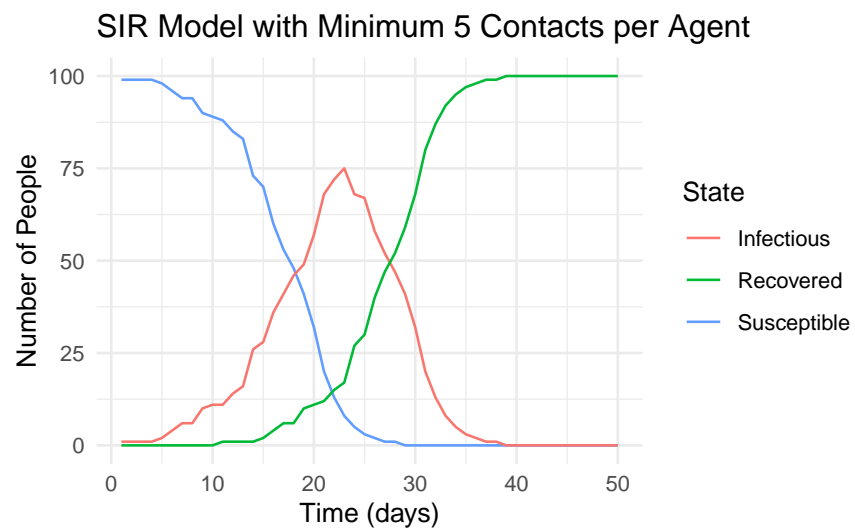
Exercise 7

Exercise 8

Exercise 9