Assignment 1, step three out of three

This is the last step of assignment 1. You will work with the person whom you reviewed last time. Work together as you want, and ask the instructor/lab assistant/library tutor for question. Anyone else is a non-authorized collaboration, that is, an act of academic dishonesty. If you have any doubt or question about what qualifies as academic dishonesty, please contact the instructor.

Objective: When making a model, there can be an entire team of computer scientists. They will make different arguments for several modelling choices. The team then has to come to a consensus, and make a final choice based on all these arguments.

Due date: Tuesday October 10th, 9pm

How to submit: On the course website only (no emails or hardcopies accepted).
In each pair, only one person should submit.
The submission should indicate the last names (in any order) of both teammates:
"Lastname1_Lastname2_Assignment1.pdf"

I. Solutions... revisited

In part one of this assignment, you proposed a solution to five problems. In part two, you reviewed the solutions of another student. In this final part, you will work together to provide a final solution to all problems. Note that there are now 6 problems:
- the four given by the instructor
- two invented by the students. Include the description of these two problems in your solution.

For each of the six problems, write the solution as explained in assignment 1 part 1. That is:
• argue whether you would prefer to model it as CA or ABM (detail why you are making this choice)
• explain how your CA or ABM would work (needs to be sufficiently detailed so that, if anyone was to read your explanation and they know NetLogo very well, they could go ahead and write code)
• include a figure (with legend) showing the initial state of your model. If you use a CA, you don't need to show more than 5 by 5 cells. If you use an ABM, a handful of agents would suffice.

In addition, explain how the **details** of the final solution has been influenced by the reviews. We're not looking for a high-level generic overview along the lines of "We took all suggestions into account and we now made a better model". We're looking for specific changes, such as

> "One of our models had five states (healthy, with flu, with flu coughing, healthy in droplet, with flu in droplet) and the other model had three states (healthy, with flu, droplet). We borrowed states from both models to arrive at four (healthy, with flu, healthy in droplet, with flu in droplet) because ..."

II. Resolving differences

The members in your group may initially have favored different modelling methods (CA, ABM) for a same problem. We're interested in understanding how you resolved this, using which arguments.

Add a subsection "Resolving Differences" to each of the six problems. Then:
• If your initial submissions agree on using CA/ABM, just write "No differences to resolve".
• If you advocated for different methods, explain in details how as a pair you made a final choice. We don't want one-liners such as "We talked about it". We want to **precisely understand** why one of you changed his/her recommended solution.

This submission is your final product for assignment 1, shaped by the previous two steps. It is thus intended as your best, cumulative piece. To help you with this final step, each group will have a brief 20 minutes meeting with the instructor in his office, in:
Riley Hall, 2nd floor, computer science department, left side.