

# Homework 1

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**Exercise (a).** Explain why a "wave" arises that travels to the right.

*Sol<sup>n</sup> :*

A wave starts among the  $n = 40$  agents because of the "initialization" step.

Notice for  $n = 40$ ,

$$\frac{n}{3} \approx 13.33 \implies \text{round}(13.33) = 13.$$

Then we do a logical operator, and in this case...

$$n == \text{round}(1/3) \implies 40 = 13? \implies F \text{ or } 0.$$

and then a double

Then for  $j = 1 : 80$  steps (we add pause so we can press enter 80 times),