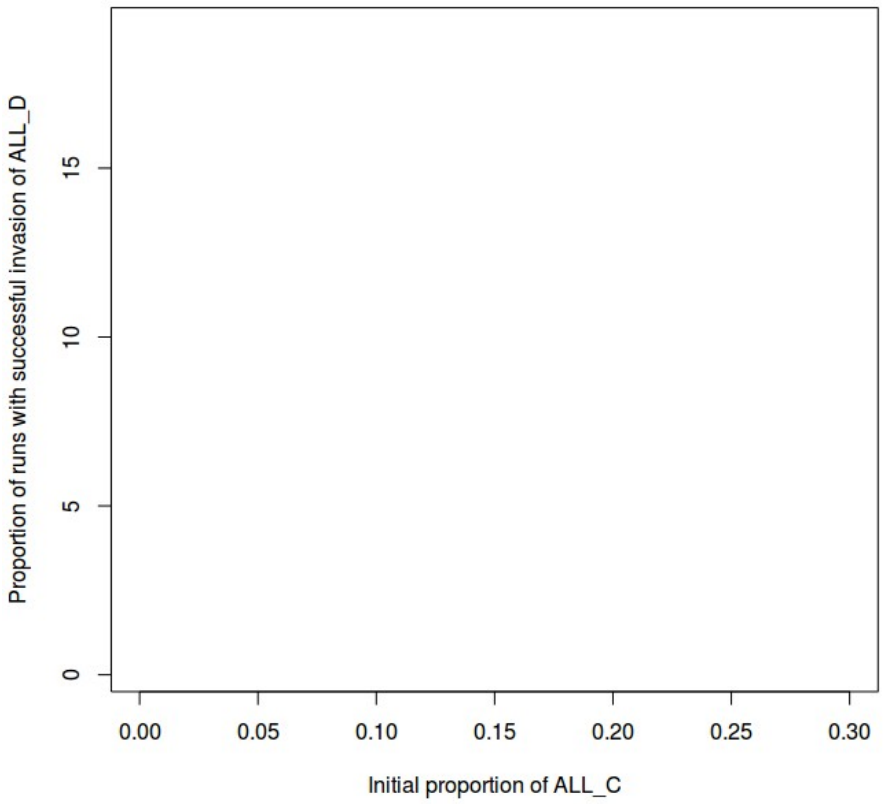
Homework Day 4

1. Play with the Netlogo model of the Iterated Prisoner's Dilemma. Specifically, change the probability of repeating the game (variable *prob_iteration*) and the initial proportions of the three strategies (ALL_C, ALL_D and TFT). Try to understand how these two factors change the dynamics of the system. If you have no clue, look at the slides of the lecture of day 2 again.
2. Using the BehaviorSpace in NetLogo, perform an experiment in which you vary the initial proportion of ALL_C in steps of 0.05 from 0 to 0.45. For all other variables, use the default values. Repeat the simulation at each level of initial ALL_C 20 times. Let the BehaviorSpace record the number of players with strategy ALL_D **only** in the last time step of each simulation run. Let simulations run for a maximum of 500 time steps. Using a plotting software of your choice (e.g. MS Excel, LibreOffice Calc, R) produce a plot of the proportion of simulation runs in which ALL_D successfully invaded (i.e., in which the count of ALL_D players at the end of simulation was larger than 0) against the initial proportion of ALL_C. The plot should look like this (of course, you'll have to add the data as points or a line):



Each group should upload an image of their plot to Ilias!