

PS - ASSIGNMENT 02

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Gruppe

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Exercise 2

Part a).

Problem A:

The world will be divided into several (equal sized) pieces of the matrix. In the easiest case this will be a 3x3 matrix (one for the cell to be calculated and its neighbours). A node will calculate the life status of those cells and send this back to the manager.

Everytime the manager node receives the result of such a calculation he of course saves this. In this process he actually might be ready for the next generation for a part of the matrix. So what he can do is to check whether he is able to send a part of its matrix to a node again. This means that in this one matrix several different generations are saved in one moment. This theoretical approach has the disadvantage of the following assumption:

Every node will calculate its cells successfully and send it back to the manager without problems in a finite and reasonable time.

An approach to get around this problem is to hold more than one state of the current matrix in the manager node. This will be acceptable in the moment when the computation of a generation step takes much more time than saving and holding of a completely new matrix.

However this might not be the case in this simple game.

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