Artificial Intelligence 2019
Problem Sheet 8

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Notes

The homework serves as preparation for the exams. It is strongly recommended that you solve them before the given deadline - but you do not need to hand them in. Feel free to work on the problems as a group - this is even recommended.

1 Problem

Given the blocks world operators **stack**, **unstack**, **pickup**, and **putdown** from the lecture plus three blocks a, b, c and a table where arbitrarily many (i.e., at least three) blocks can be put on.

Use STRIPS style planning with a goal stack GS and a state list SL to find a plan to get from the initial state $\{\mathbf{ontable(b)}, \mathbf{ontable(c)}, \mathbf{on(a,c)}, \mathbf{clear(a)}, \mathbf{clear(b)}, \mathbf{handempty}\}$ to a state where the three blocks form a tower with a on top, b in the middle, and c at the bottom.

In addition to the operators, please also write down the goal stack GS and the state list SL for each step.