An exercise: blocks world planning
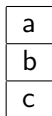
There are a collection of blocks: a block can be on the table, or on top of another block. There are three predicates:

- $clear(x)$: there is no block on top of block x;

- $on(x, y)$: block x is on top of block y; and

- $onTable(x)$: block x is on the table.

There are three actions:

- $move(x, y, z)$: move block x from block y onto block z, provided x is on y, both x and z are clear;

- $moveFromTable(x, y)$: move block x from the table onto block y, provided x is on the table, both x and y are clear; and

- $moveToTable(x, y)$: move block x from block y onto the table, provided x is on y, and x is clear.

The initial state is:
a
b
c

The goal state is:
| a | | c |
|---| |---|
| b |