Homework 1.2 of the Towers of Hanoi

The problem is explained in Homework 1 exercises 5 and 6.

1) Try with 3 pegs and n discs.

2) Try to solve the problem with 4 pegs. Try to find a sequence of moves as short as possible. The minimum is 129 moves!

3) Write a function that, given a list of moves and an initial configuration, checks that the sequence is such that only allowed moves are executed (no move from empty peg) and allowed configurations are reached (on each peg discs are increasing from top to bottom) and finally checks that the last configuration is the one aimed at. You need to define a type for the configurations that can be easily tested for being an allowed configuration.