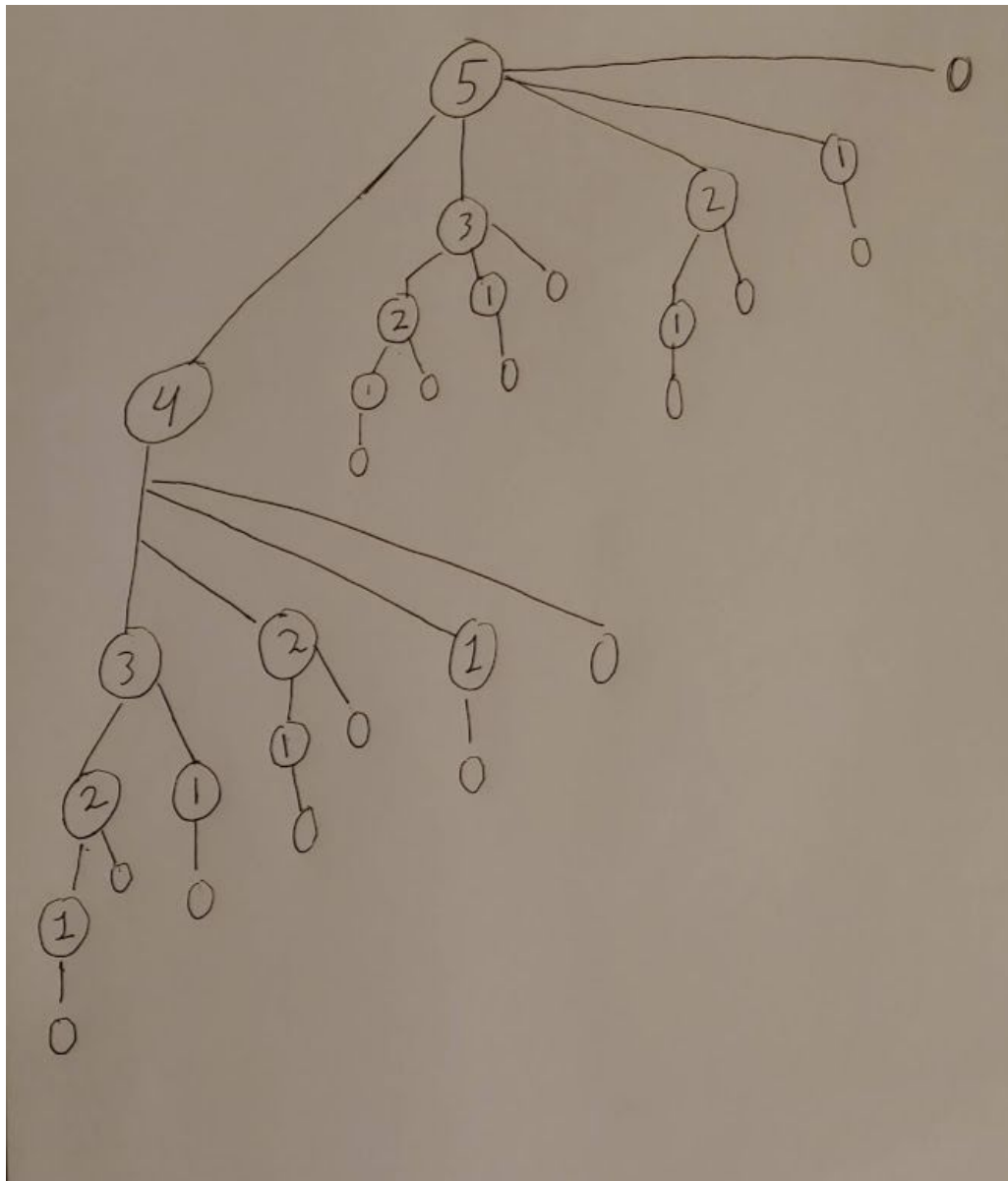


a) Recurrence on $n = 5$



b) 15-2

A greedy counterexample:

Suppose we had a rod of length 6
And $p_1 = 2$, $p_2 = 15$, $p_3 = 34$, $p_4 = 36$

A greedy solution would take rod p_3 as it is the most dense, and follow it with rod p_2 totaling to $36 + 15 = 51$, however ideally it would have chosen

P3 twice which is $36 * 2 = 72$, a solution which would only be arrived through a dynamic programming approach.