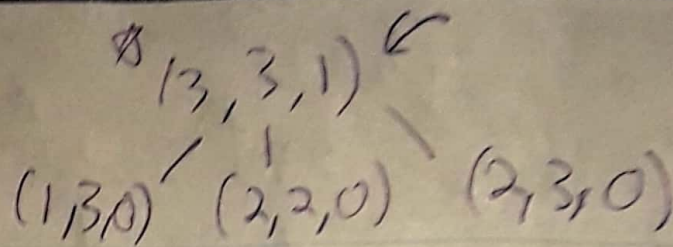
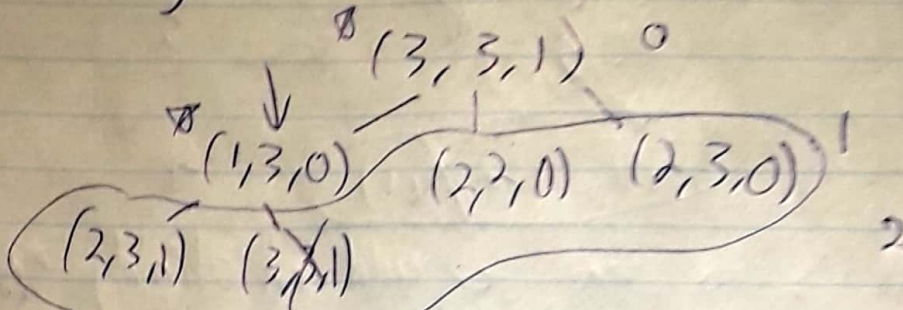


(1)



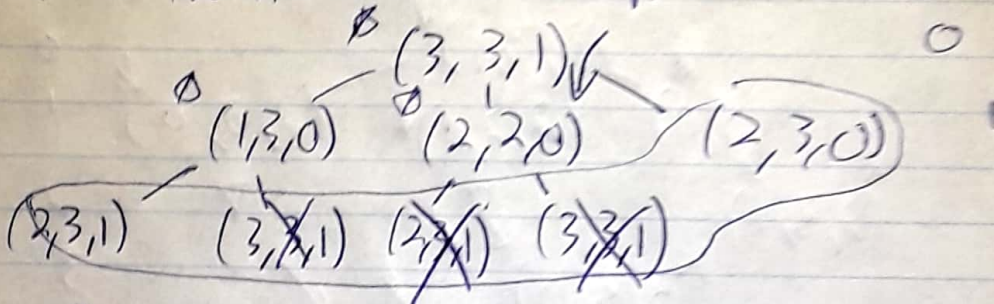
arbitrarily pick $(1, 3, 0)$ to expand.

(2)



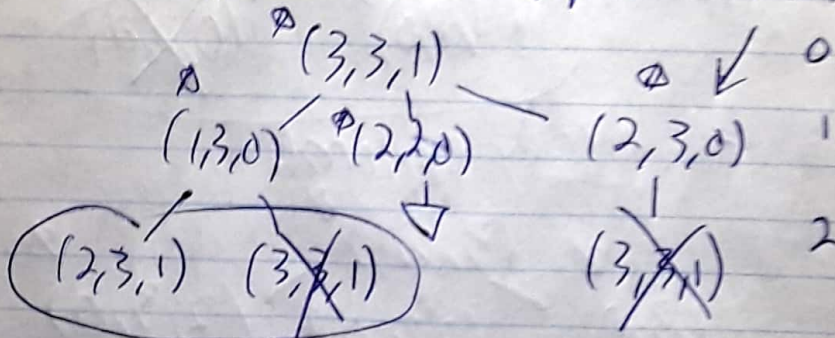
pick a frontier w/ lowest depth: $(2, 2, 0)$

(3)



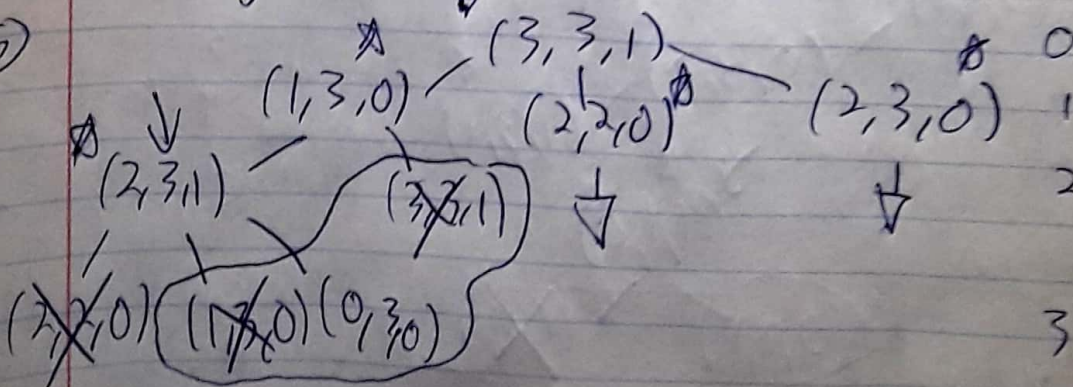
children were already in the frontier, they don't get added. explore last depth 1 frontier

(4)



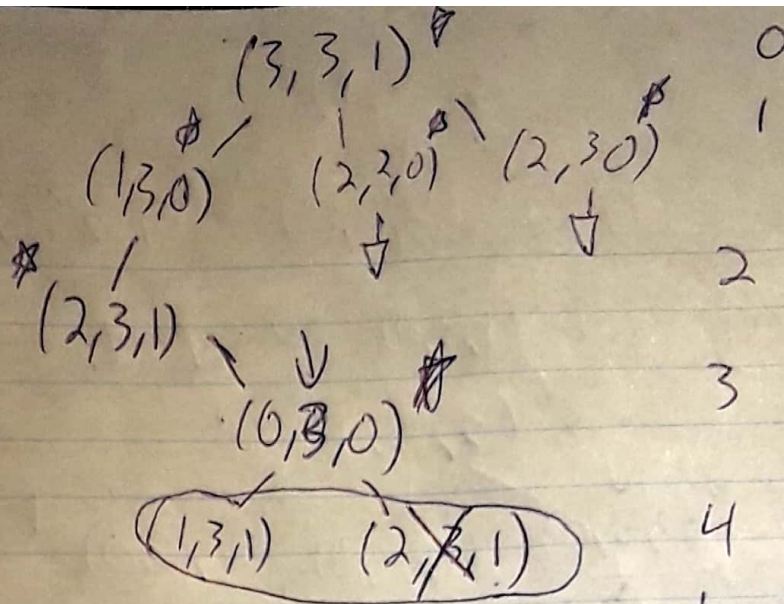
already in frontier, no need to include.

(5)



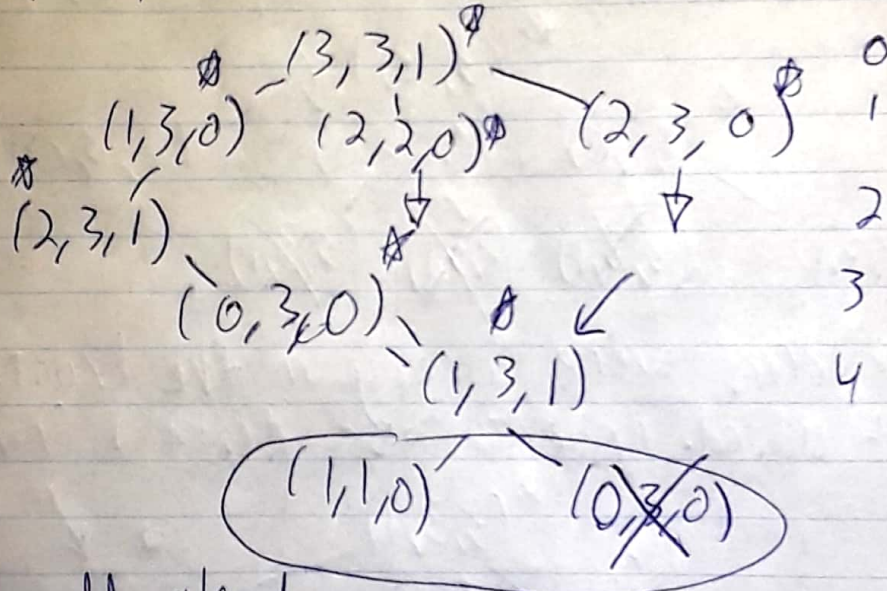
is leaf node
is explored
is frontier
is terminated

(6)



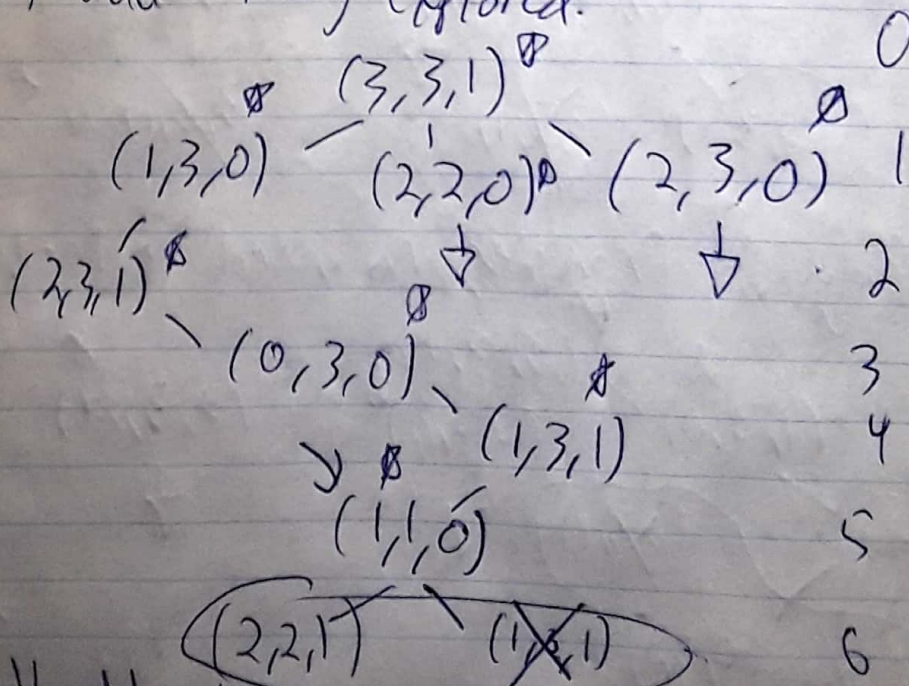
there is no need to add an already explored node to the frontier.

(7)



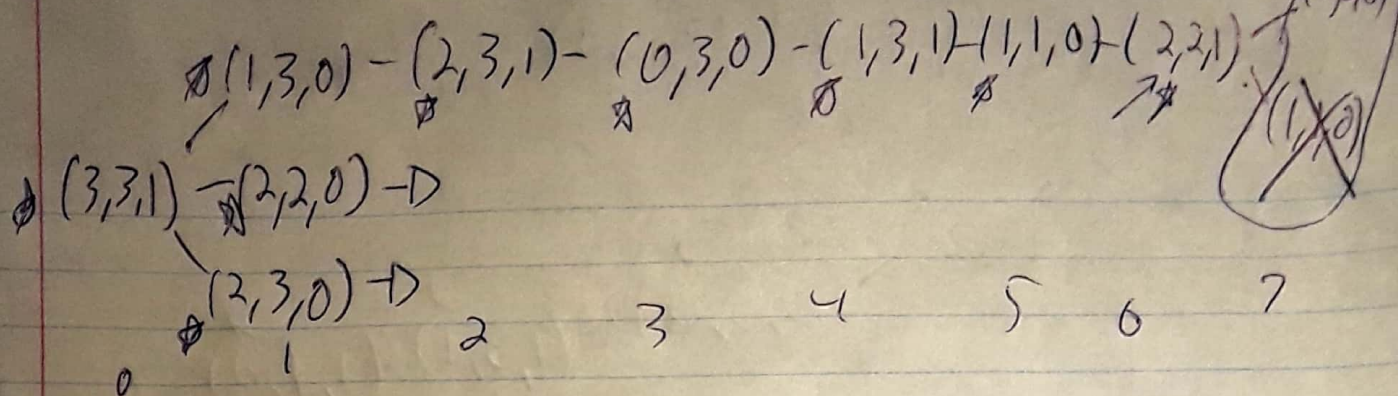
don't add already explored.

(8)

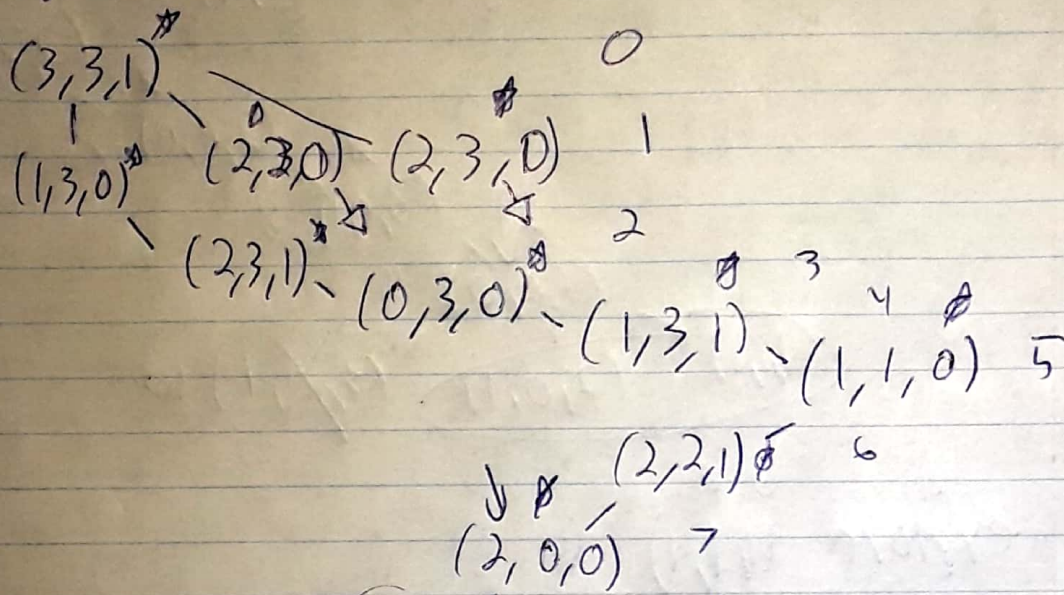


don't add already explored

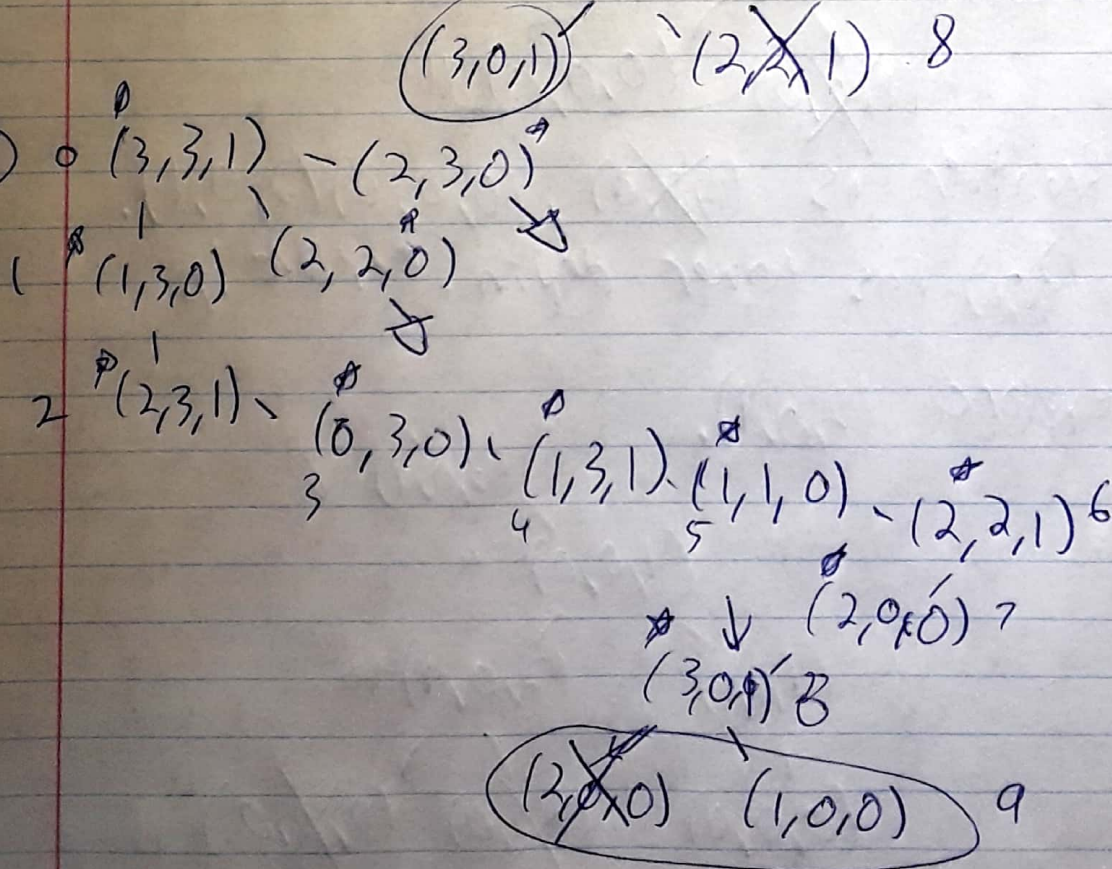
⑨



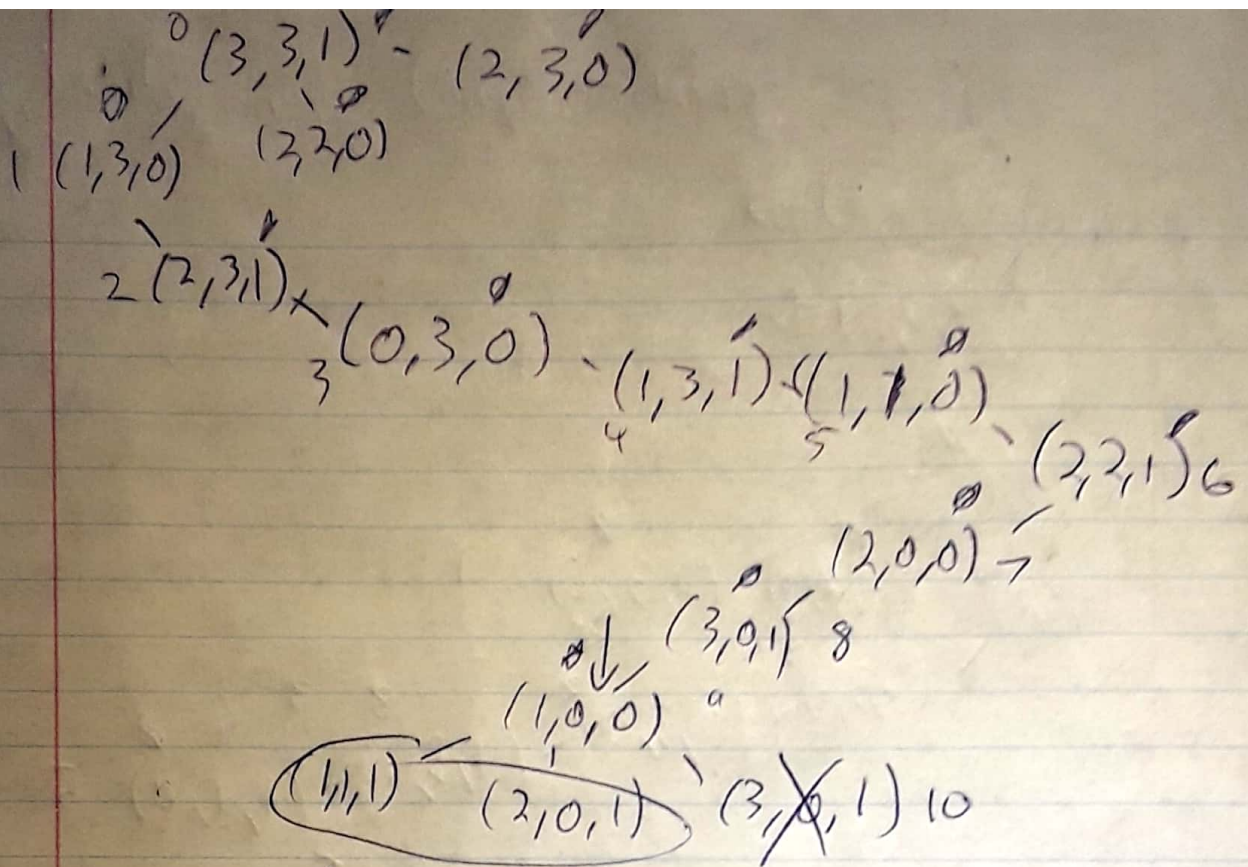
⑩



⑪

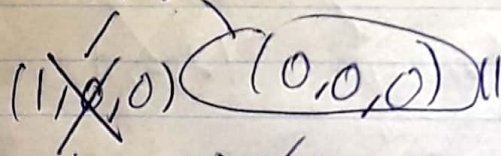


(12)



(13)

explore (1,1,1) 10

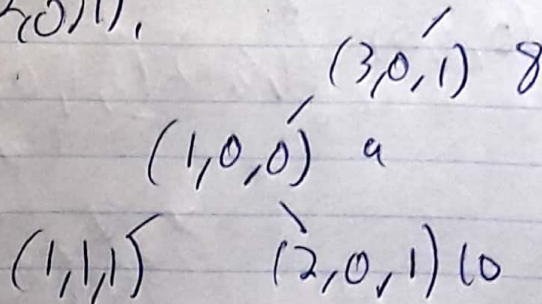


frontier is (1,1,1), (0,0,0), (2,0,1).

(2,0,1) has lower depth, explore it.

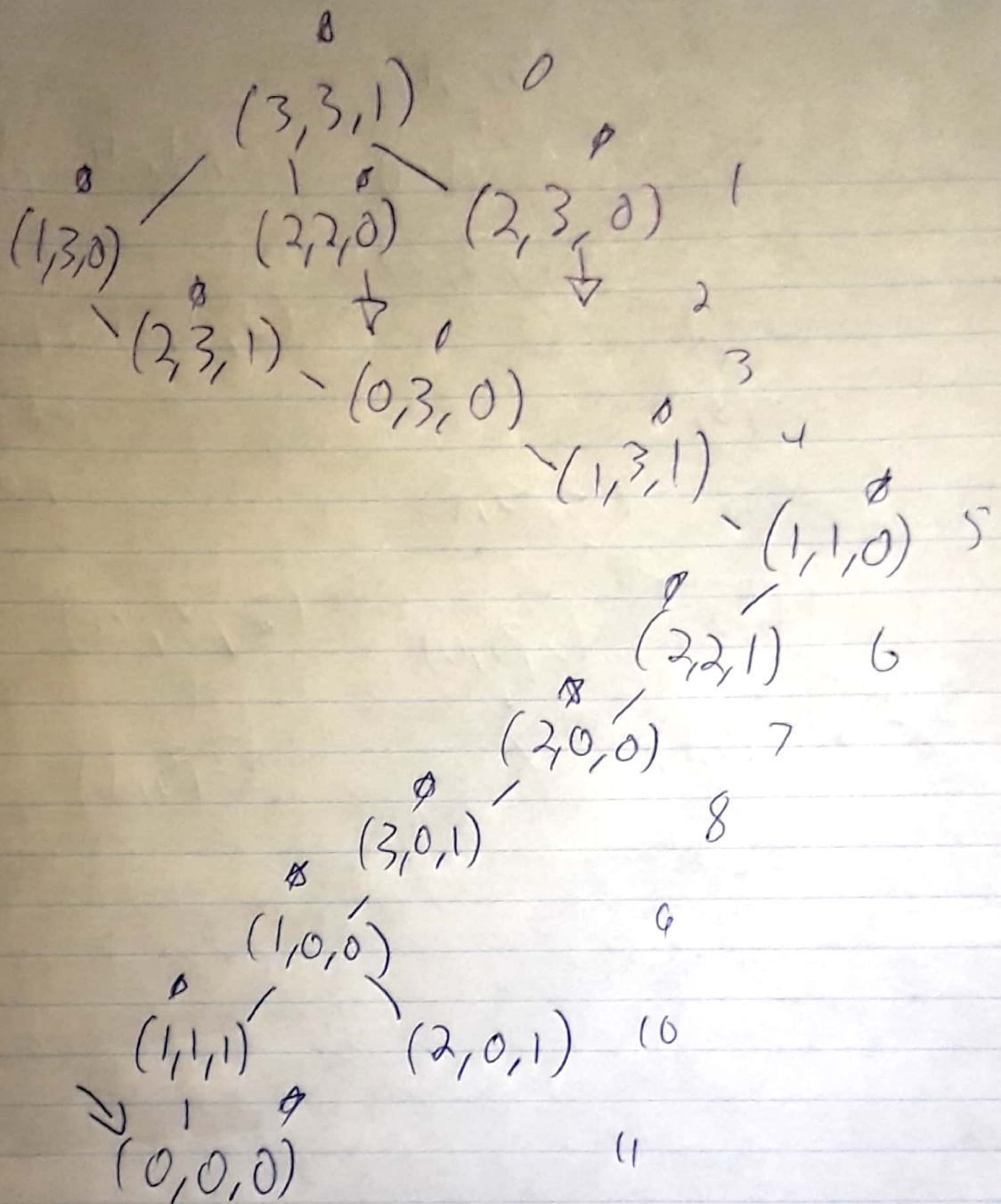
(14)

explore (2,0,1).



don't add unnecessary things already in explored or frontier.

(15)



Current node is the goal state! no children explored, terminate. Final path has cost 11 and is $(3, 3, 1) \rightarrow (1, 3, 0) \rightarrow (2, 2, 1) \rightarrow (0, 3, 0) \rightarrow (1, 3, 1) \rightarrow (1, 1, 0) \rightarrow (2, 2, 1) \rightarrow (2, 0, 0) \rightarrow (3, 0, 1) \rightarrow (1, 0, 0) \rightarrow (1, 1, 1) \rightarrow (0, 0, 0)$