m = 3

a = total last month

n = 3 [0, 1, 1]

n = 4 [1, 1, 2]

b = # died

n = 3 [0, 0, 0]

n = 4 [0, 0, 0]

progeny

n = 3 [0, 0, 1]

n = 4 [0, 1, 1]

last month

m months ago

mortality = 3 months

a-b+c = total

① 0-0+1 = 1

② 1-0+0 = 1

*m ③ 1-0+1 = 2

④ 2-1+1 = 2

⑤ 2-0+1 = 3

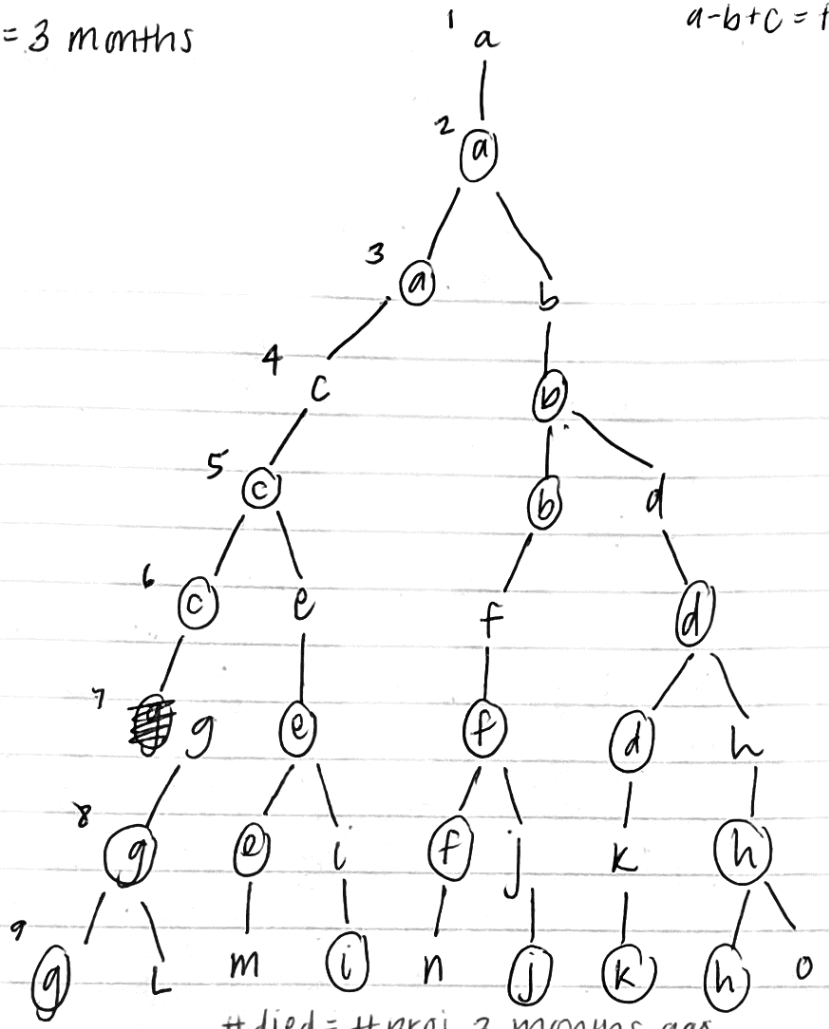
⑥ 3-1+2 = 4

⑦ 4-1+2 = 5

⑧ 5-1+3 = 7

⑨ 7-2+4 = 9

↓ #alive last month ↓ #died ↓ # new offspring ↓ total alive



#died = #proj 3 months ago

#proj = ~~total 3 months ago~~ a-b last month

mortality = 4 months

need to keep track of:
- total # alive
- # died
- # offspring

where a-b =
a: #alive last month (total)
b: #died last month

① 0-0+1 = 1

② 1-0+0 = 1

③ 1-0+1 = 2

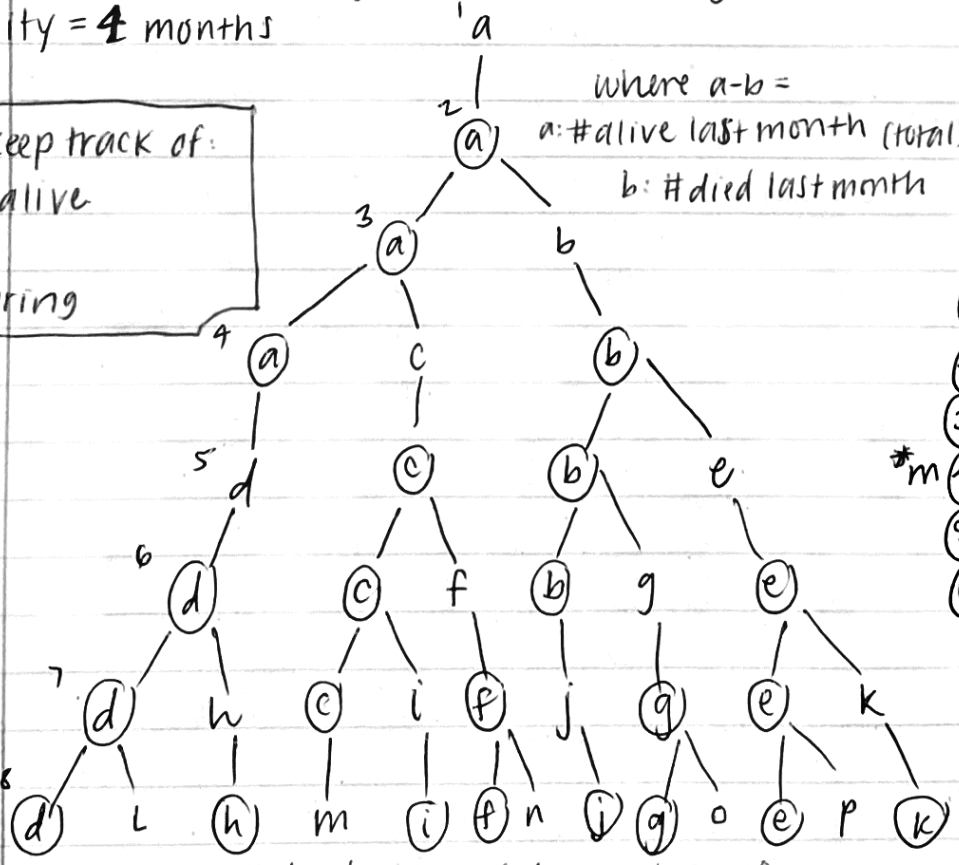
*m ④ 2-0+1 = 3

⑤ 3-1+2 = 4

⑥ 4-0+2 = 6

⑦ 6-1+4 = 9

⑧ 9-1+5 = 13



#died = #proj 4 months ago

#proj = a-b last month