

Beliefs:

$$N = 2^n$$

$d=0$

node 0
16 beliefs

node at depth d : 2^{n-d} incoming beliefs

$d=1$

node 0
8 beliefs

node 1
8 beliefs

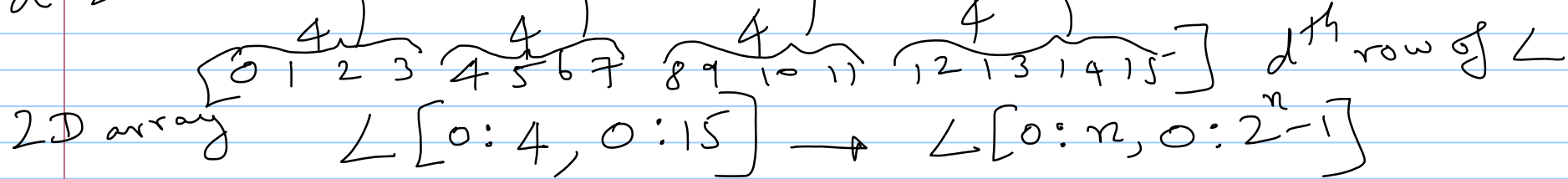
$d=2$

node 0

node 1

node 2

node 3



node i at depth d : incoming beliefs.

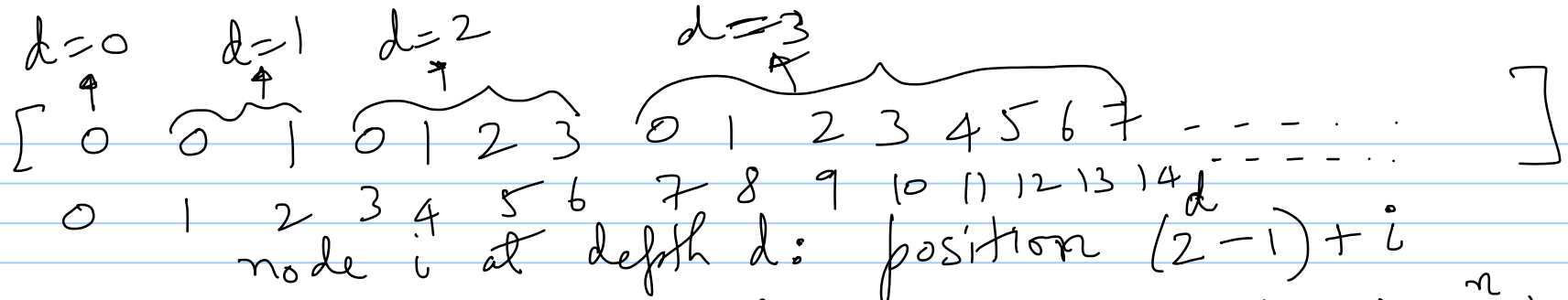
repeat for \hat{i}

$$\mathcal{L}[d, 2^{n-d} \cdot i : 2^{n-d} \cdot i + 2^{n-d} - 1]$$

States of nodes:

- 0: yet to be activated
- 1: finished \mathcal{L}
- 2: finished R
- 3: finished U

State
vector



0 to $2^{n+1} - 2$

length = $2^{n+1} - 1$

last node: $d = n$ and node $2^n - 1$

position: $2^n - 1 + 2^n - 1$

$$= 2 \cdot (2^n - 1)$$

$$= 2^{n+1} - 2$$