

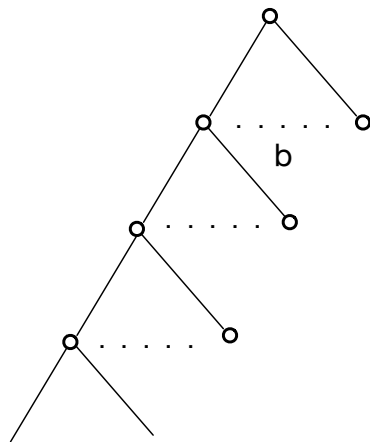
Level 0

Level 1

Level 2

⋮

Level d



No. Nodes

1

b

b^2

b^d

b: branching factor

d: depth

$$\text{Total} = 1 + b^1 + b^2 + \dots + b^d$$

$$= \frac{b^{d+1} - 1}{b - 1}$$

$$= O(b^d)$$

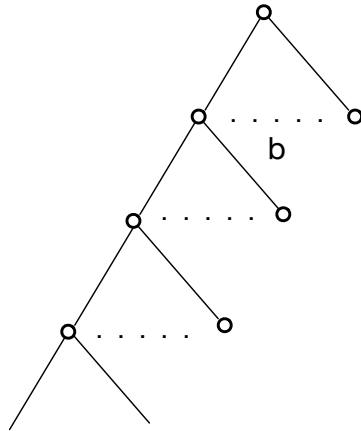
Level 0

Level 1

Level 2

⋮

Level d



No. Nodes

1

b

b^2

b^d

Iterative
Depending

d+1

visit root with depth
0, 1, ..., d.

d

visit level 1 ... d

d-1

1

b: branching factor

d: depth

$$\text{Total} = 1 + b^1 + b^2 + \dots + b^d$$

$$= \frac{b^{d+1} - 1}{b - 1}$$

$$= O(b^d)$$