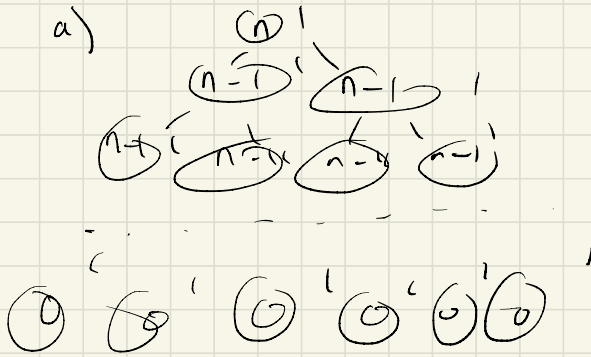


②

a)



$$1 + 2 + 4 + 6 + 8 + \dots + 2^n = \Theta(2^n)$$

b)



$$1 + 1 + 1 + \dots + 1 = 1 \cdot \log n$$

$$= \Theta(\log n)$$

c)

$$\left(\frac{n}{2}\right)^n$$

$$\left(\frac{n}{2}\right)^{\frac{n}{2}}$$

$$\left(\frac{n}{4}\right)^{\frac{n}{4}}$$

...

$$(1)^1$$

$$1 + 1 + 2 + 4 + \dots + n + \log n = \Theta(n)$$