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$$T(n) = \underbrace{T(n/4) + T(n/2)}_{T(n/4)+T(n/2)+n/2} + n = 4T(n/4) + 2.5n/4 + n$$

$$T(n) = \underbrace{\left(n + 2.5n/4 + 6.25n/4 + \cdots + \hat{n}n/n\right)}_{\log(n)} + \underbrace{T(1)}_{O(1)} \times n = n\log n + n$$

$$T(n) = O(\log(n) \times n) = O(\log(n) * n)$$

(حل طلاس) $T(0) = T(1) = 0$

$$\frac{T(n)}{n} = 1 + \frac{2T(n/4)}{n/2}$$

$$\frac{T(n/4)}{n/4} = 1 + \frac{T(n/16)}{n/16}$$

سوال ۲