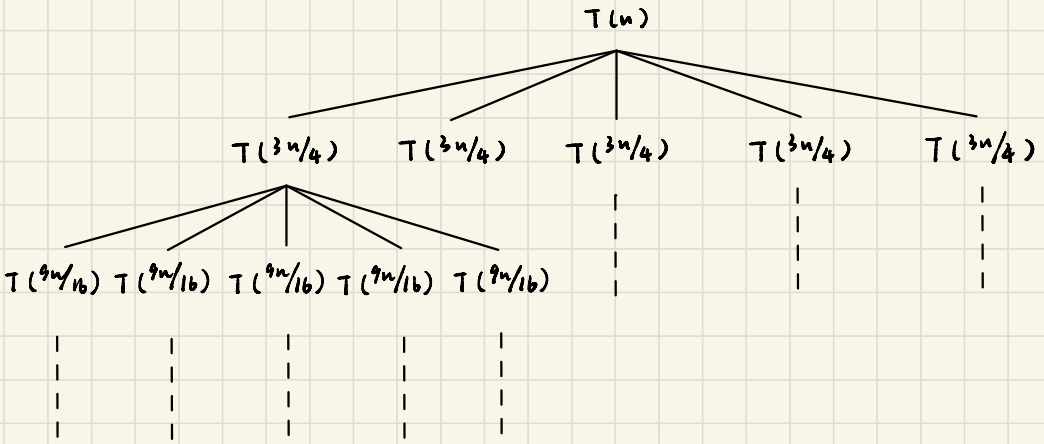
$T(n) \leq 5\,T(3n/4) + O(1)$



level 1 : $c \cdot n$

level 2 : $5 \cdot 3n/4 = 15/4\, c \cdot n$

level 3 : $25 \cdot 9n/16 = 225/16\, c \cdot n$

depth of tree : $\log_{3/2} 3$

$$T(n) = (n + 15/4 \cdot n + (15/4)^2 \cdot n + \cdots + (15/4)^{k-1} \cdot n) \cdot \log_{3/2} 3$$

$$= c \cdot n \cdot \log_{3/2} 3$$

$$= O(n^{\log_{3/2} 3})$$

$$= O(n^{2.7})$$