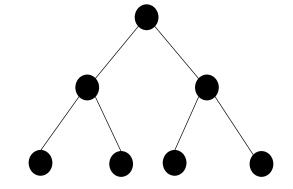
Recurrence Tree T(n)



Level

Computation

Level 1

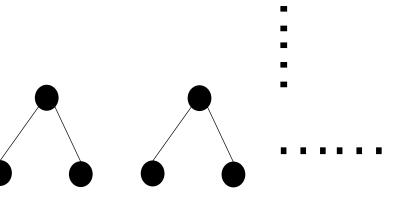
 $O(n\log n)$

Level 2

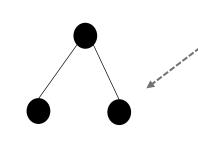
 $2 \times O\left(\frac{n}{2}\log\frac{n}{2}\right)$

Level j

 $2^{j-1} imes Oigg(rac{n}{2^{j-1}} log rac{n}{2^{j-1}}igg)$



Depth $\log_2 n$



Totally $k = \log_2 n + 1$ levels

Level k $2^{k-1} \times O\left(\frac{n}{2^{k-1}} \log \frac{n}{2^{k-1}}\right)$