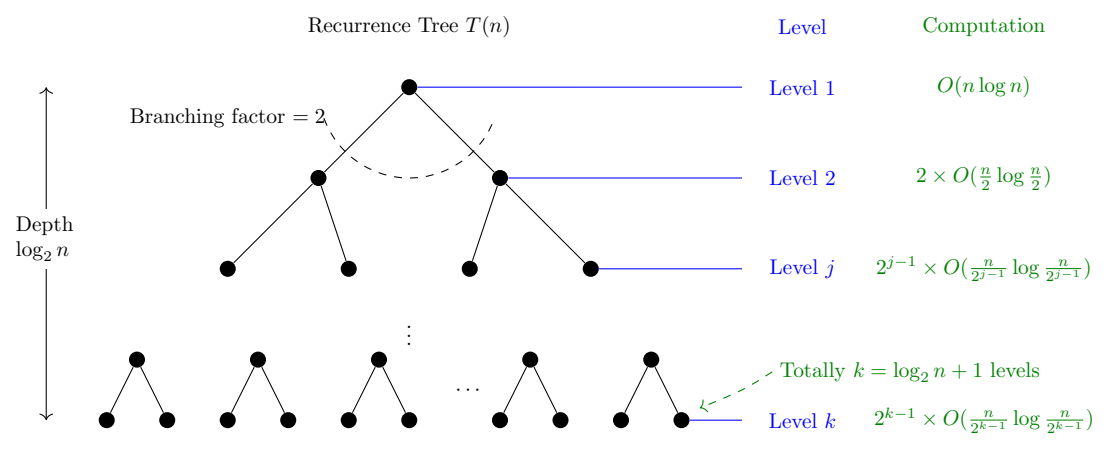
Recurrence Tree $T(n)$
Level
Computation
Branching factor = 2
Depth
$\log_2 n$
Level 1
$O(n \log n)$
Level 2
$2 \times O(\frac{n}{2} \log \frac{n}{2})$
Level j
$2^{j-1} \times O(\frac{n}{2^{j-1}} \log \frac{n}{2^{j-1}})$
Totally $k = \log_2 n + 1$ levels
Level k
$2^{k-1} \times O(\frac{n}{2^{k-1}} \log \frac{n}{2^{k-1}})$