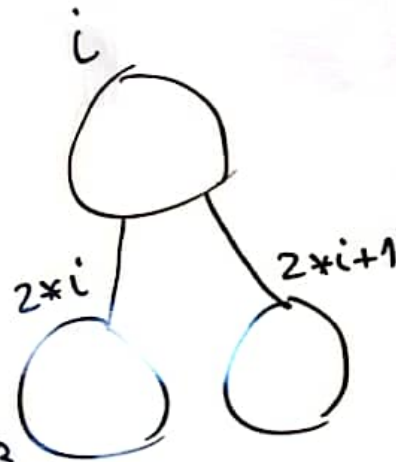
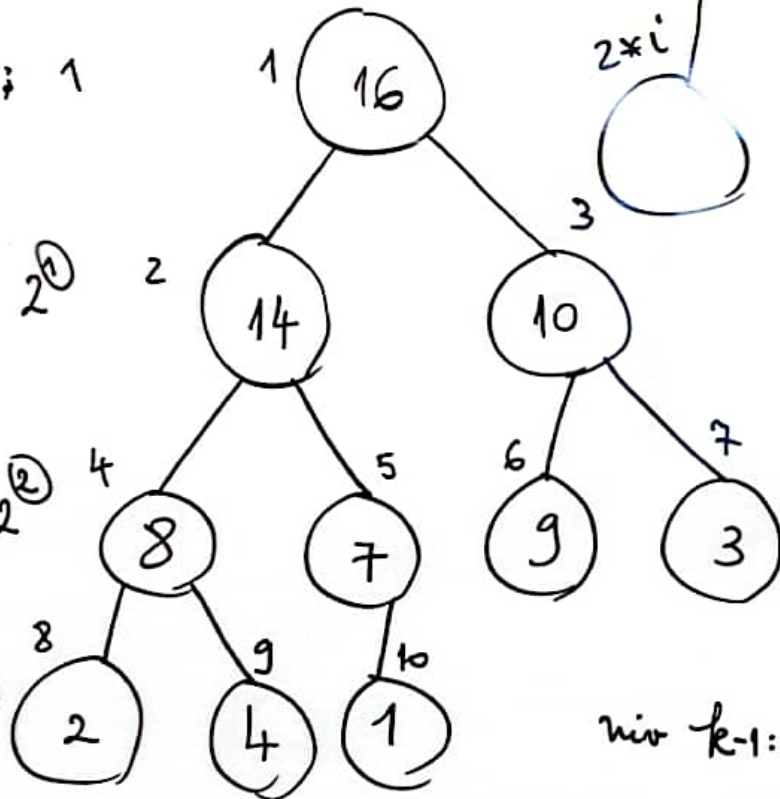


niv 0: 1

niv 1: 2⁽¹⁾

niv 2: 2⁽²⁾

niv 3: 2⁽³⁾



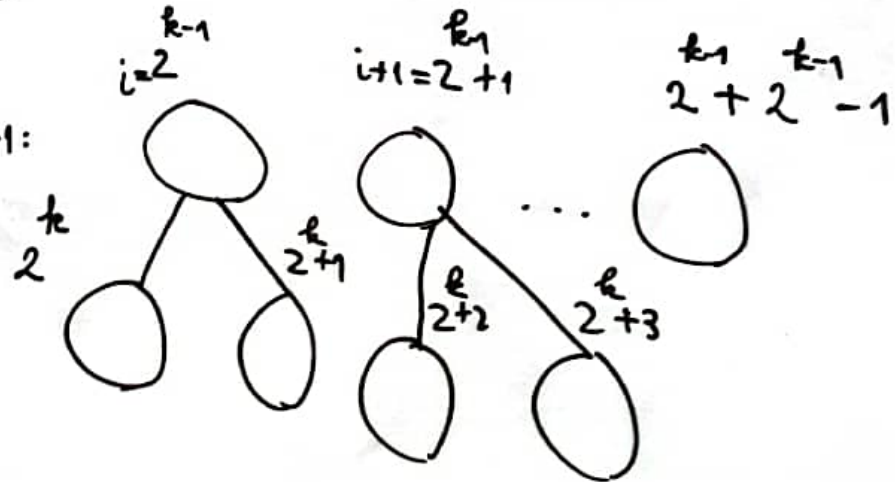
16	14	10	8	7	9	3	2	4	1
0	1	2	3	4	5	6	7	8	9

părinte fiu

Pas 2: Repet de n-1 ori: Pas 1

pe nivelul k avem 2^k noduri

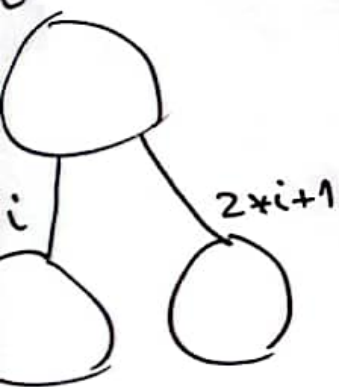
niv k-1:



$$1 + 2 + \dots + 2^{k-1} = 2^k - 1$$

$$1 + 2 + \dots + 2^{k-1} \leq n \leq 2^k - 1$$

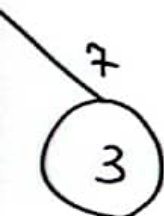
$$2^{k-1} \leq n \Rightarrow k \leq \log_2(n+1)$$



16	14	10	8	7	9	3	2	4	1
0	1	2	3	4	5	6	7	8	9

$\underbrace{\quad\quad\quad}_{\text{parinte}} \quad \underbrace{\quad\quad}_{\text{fii}}$

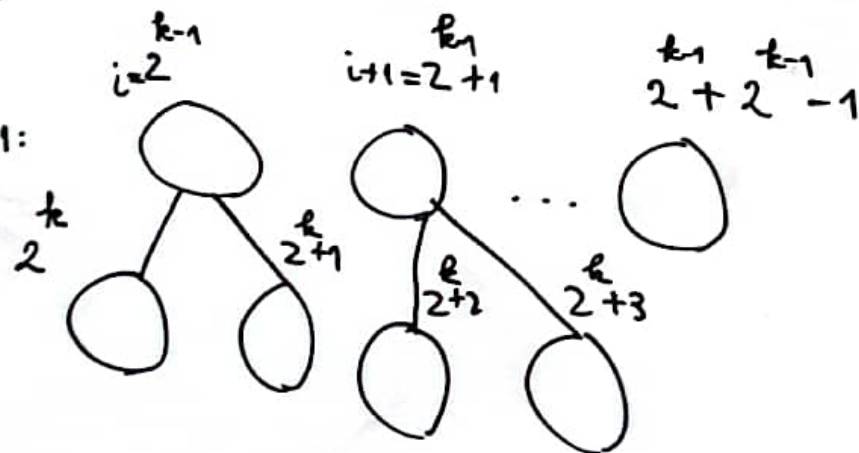
9	4	10	16	1	14	3	2	8	7
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Pas 2: Repet de $n-1$ ori:

pe nivelul k avem 2^k noduri

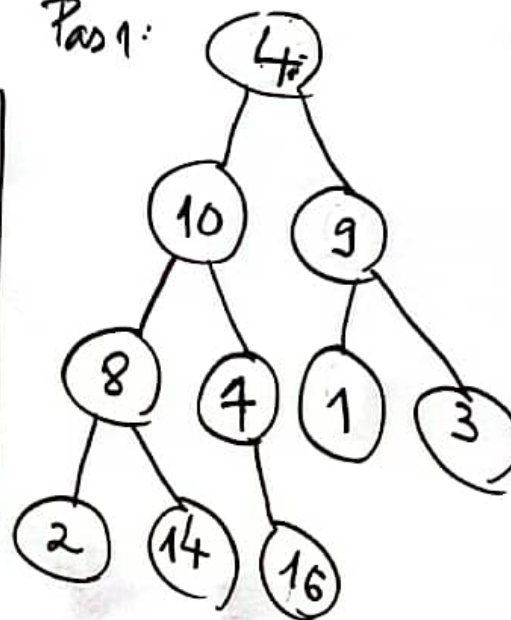
niv $k-1$:



Heap sort:

Pas 1:

$O(n \log_2 n)$



1
f(n+1)
f2