**Arbore binar plin**

Calculare numar noduri:

Level 0 -> 1 nod (radacina)

Level 1 -> 2 noduri

Level 2 -> 4 noduri

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Level k -1 -> 2k -1­­­ noduri

Level k -> 2k ­­­ noduri

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nrNoduri = 20 + 21+ 22 +…+2k = 2k+1 – 1

Concluzie: numarul de noduri intr-un arbore binar plin cu k niveluri

* **n = 2k+1­­ – 1 vs CURS: n = 2k­­ – 1**

Daca arborele are k niveluri => inaltimea h a arborelui este h = k – 1

⬄ k = h +1;

* Numarul de noduri n = 2h+2-1
* 2h+2 = n + 1 | log­2
* **h = log2(n+1) – 1 vs CURS: h = log2(n-1) – 1**