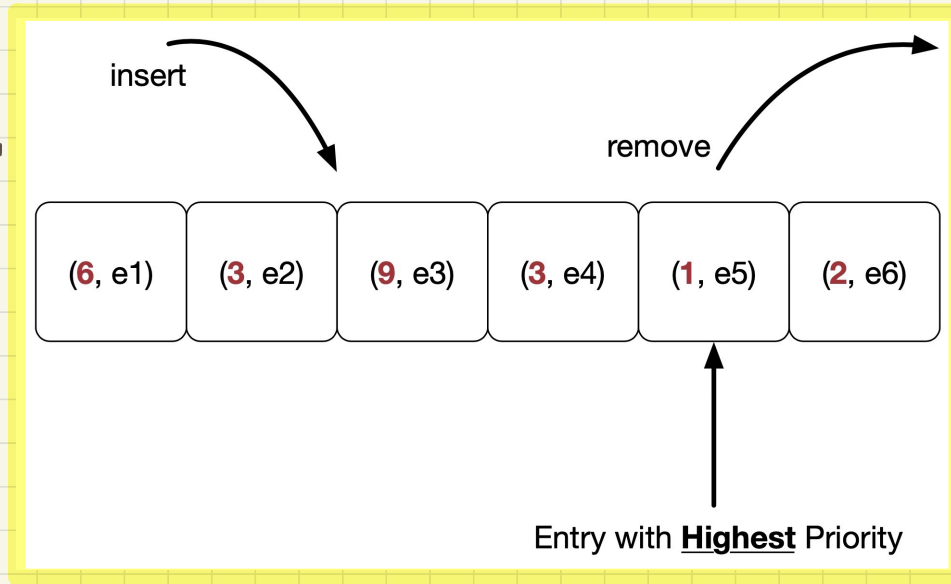
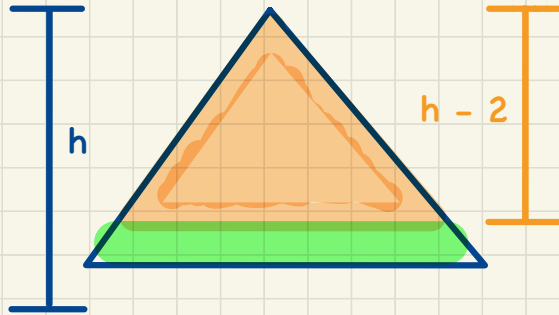
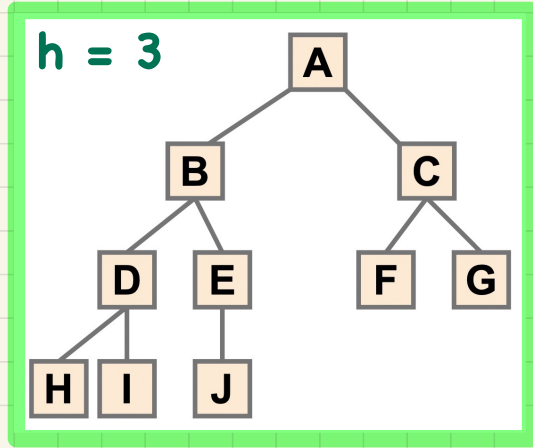


What is a Priority Queue (PQ)

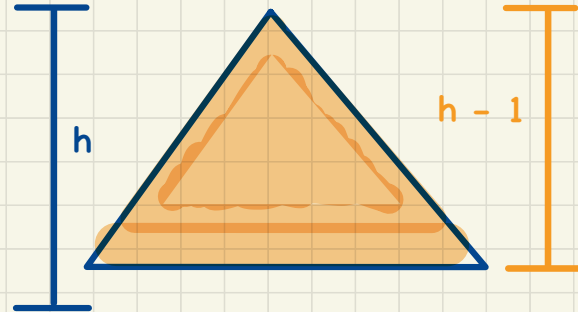
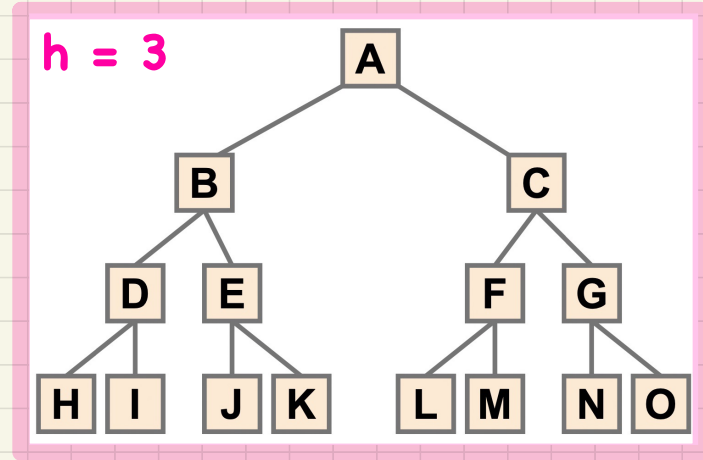


BT Terminology: Complete vs. Full BTs



Min # nodes?

Max # nodes?

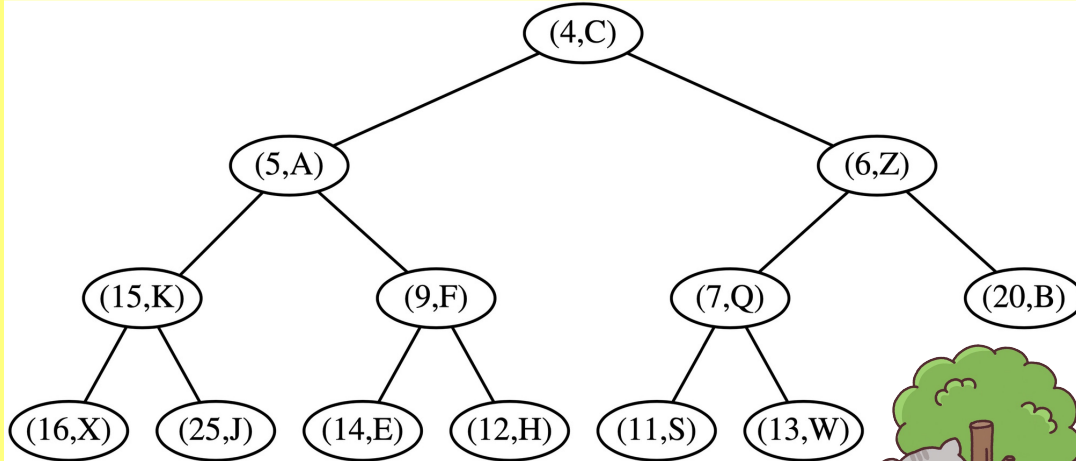


Min # nodes?

Max # nodes?

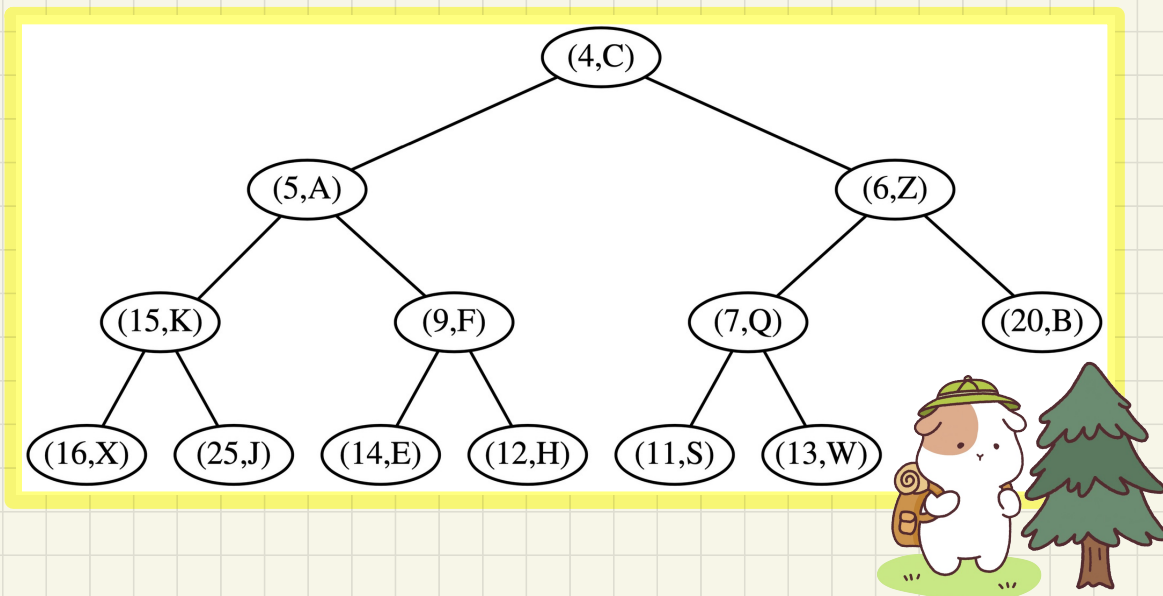
Heaps: Structural Properties of Nodes

Property: The tree is a complete Binary Tree



Heaps: Relational Properties of Keys

Property: Each non-root node n is s.t. $\text{key}(n) \geq \text{key}(\text{parent}(n))$

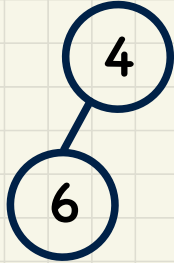


Example **Heaps**

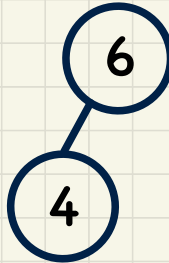
Example 1



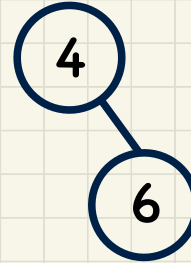
Example 2



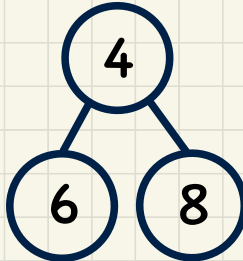
Example 3



Example 4



Example 5



Example 6

