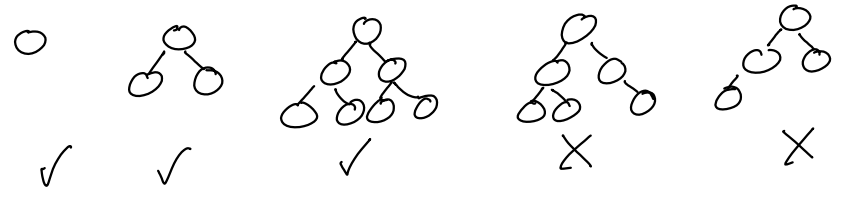


# Heaps

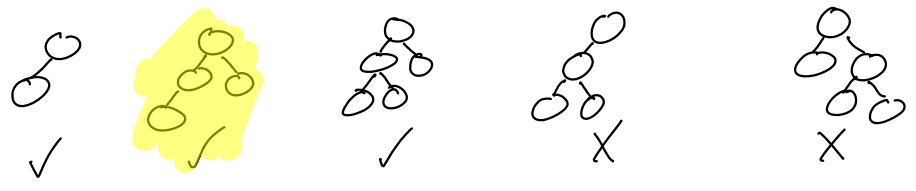
min-heap  
max-heap

a **max-heap** is a **complete** binary tree where every node has priority  $\geq$  its children

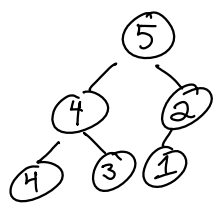
★ a **full** binary tree in which each level is "empty" (has 0 nodes) or "full" (has the maximum number of nodes)



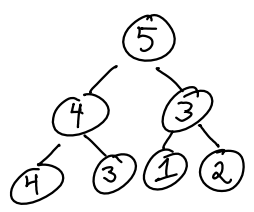
★ a **complete** binary tree is full on all levels except the last non-empty level; the last non-empty level is packed to the left



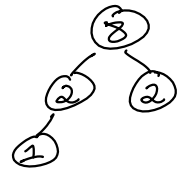
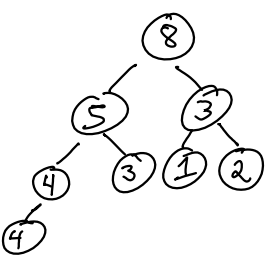
## Example Heap



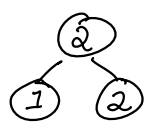
insert(3, ★)



insert(8, ★)



remove(L)



8