

Merging leftist [min]-heap trees:

Chop off all right branches

Pick any and another [smaller] root one and stick it on the right

If needed, swap the left and right subtrees of root to get a leftist tree

Skew tree merging just like leftist, but always swap

minmax Heap constructions:

Top-down: heapify as you go

Bottom-up: construct all, then run heapify down from the first non-leaf till root

Tree in array:

Root: 0

Parent of i : floor of $(i-1)/k$

j th child of i : $ki+j$

rank(k) - length of shortest path to leaf, 1-based

in leftist tree, rank of left child \geq rank of right child