



[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
0	80	17	35	15	10	20	30	12	2	1

leaf nodes = mid + 1 to n.

no. leaf nodes = 1 to mid.

$$\text{Leaf nodes} = (n/2) + 1 \text{ to } n$$

$(n \log n) \rightarrow \text{heapify}$

$(n \log n) \rightarrow \text{delete}$

heap sort = heapify + delete.

$(2 * n \log n)$

heap sort = $(n \log n) \rightarrow 2$ is constant