Practice Lab Assignment 10

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Do these practice problems on paper, instead of coding

1. Consider the following tree. Check if it can be called a minheap Tree.

Ī	0	1	2	3	4	5	6	7	8	9	10	11	12	13
-		15	41	35	82	75	40	30	95	102	78	85		

2. Consider following minHeap tree. Insert 46 on this tree.

0	1	2	3	4	5	6	7	8	9	10	11	12	13
	15	41	35	82	75	40	62	95	102	78			

3. Consider following maxHeap tree. Insert 46 on this tree.

Ī	0	1	2	3	4	5	6	7	8	9	10	11	12	13
		105	62	96	26	50	42	85	13	20	35	48		

4. Consider following maxHeap tree. Carry out Delete operation on it.

0	1	2	3	4	5	6	7	8	9	10	11	12	13
	105	62	96	26	50	42	85	13	20	35	48		

5. Put these elements on an empty minheap tree in the order shown and then heapify the tree.

[45 23 93 65 12 80 77 55 42 32 15 60 8]

6. Sort the following array using Heapsort:

[66 23 34 12 89 107 32 82 77 4 55]