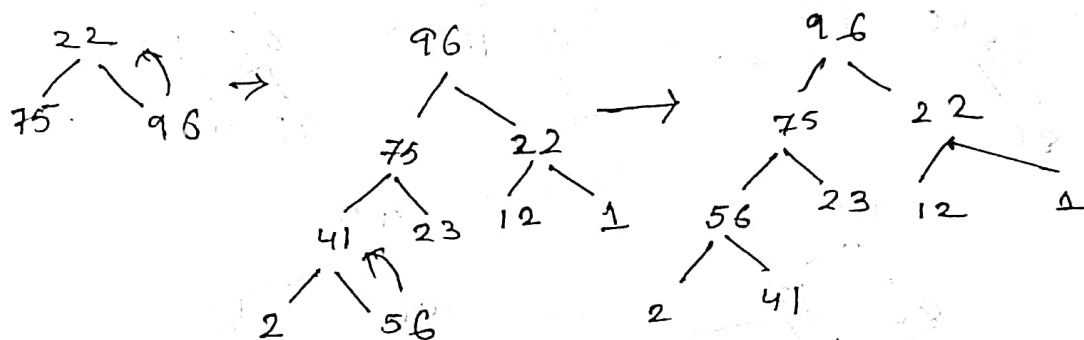
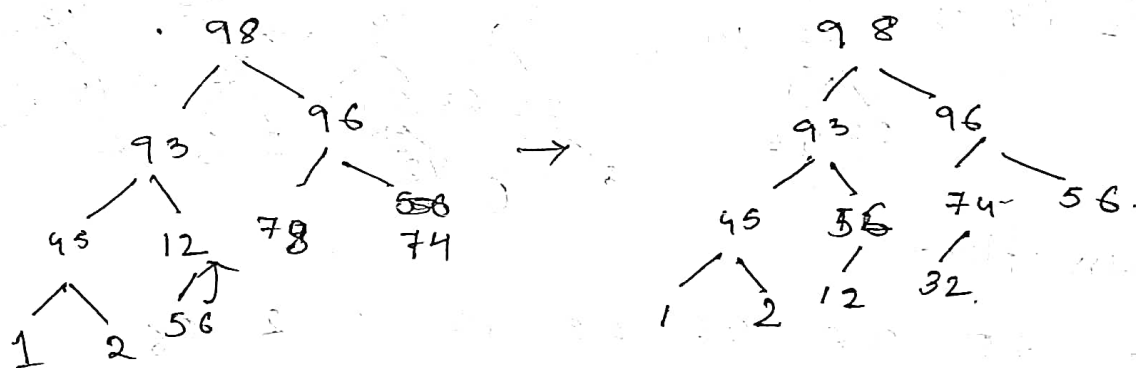
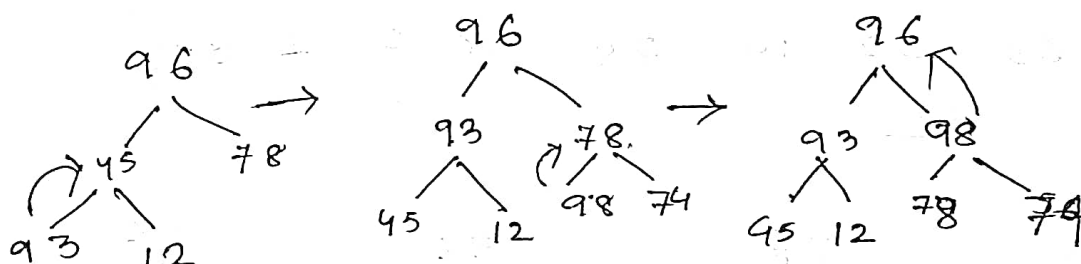


A) Create the ~~max~~ ^{Max} heap

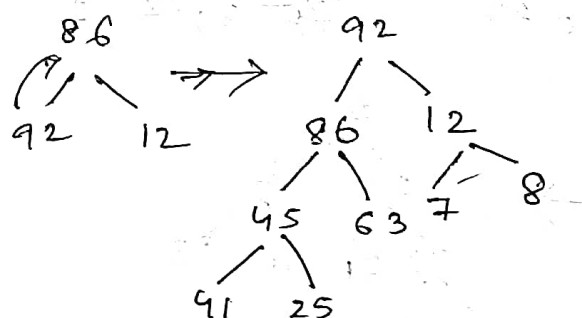
1. 22, 75, 96, 41, 23, 12, 1, 2, 56



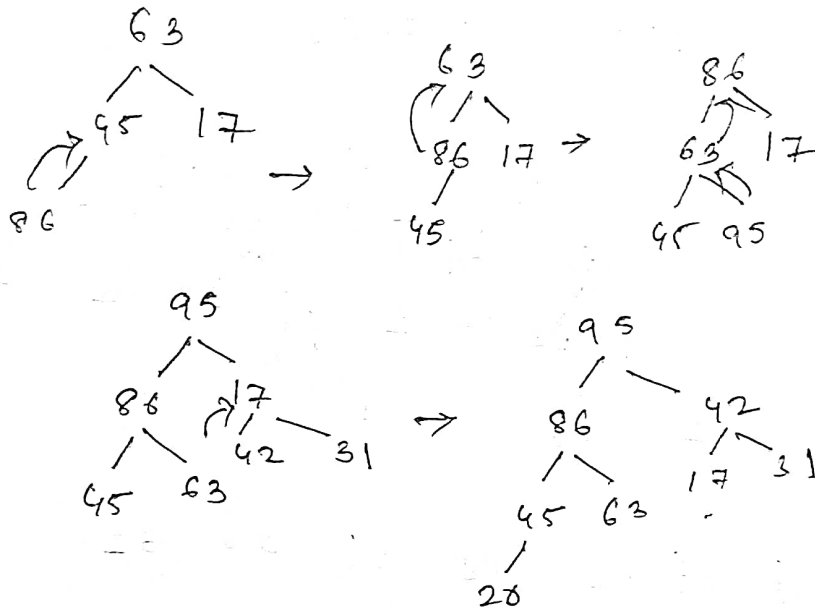
2. 96, 45, 78, 93, 12, 98, 74, 56, 32



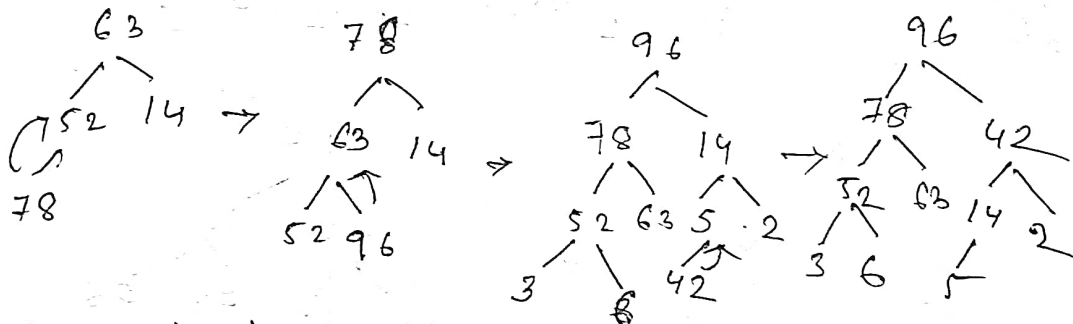
3. 86, 92, 12, 45, 63, 7, 8, 41, 25



4 63 45 17 86 95 42 31 20

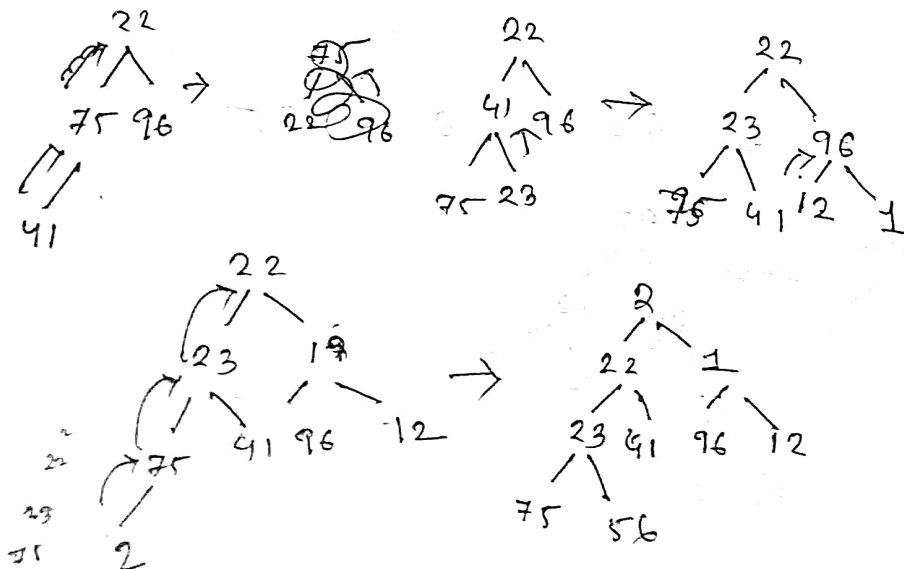


5 63 52 14 78 96 5 2 3 4
42



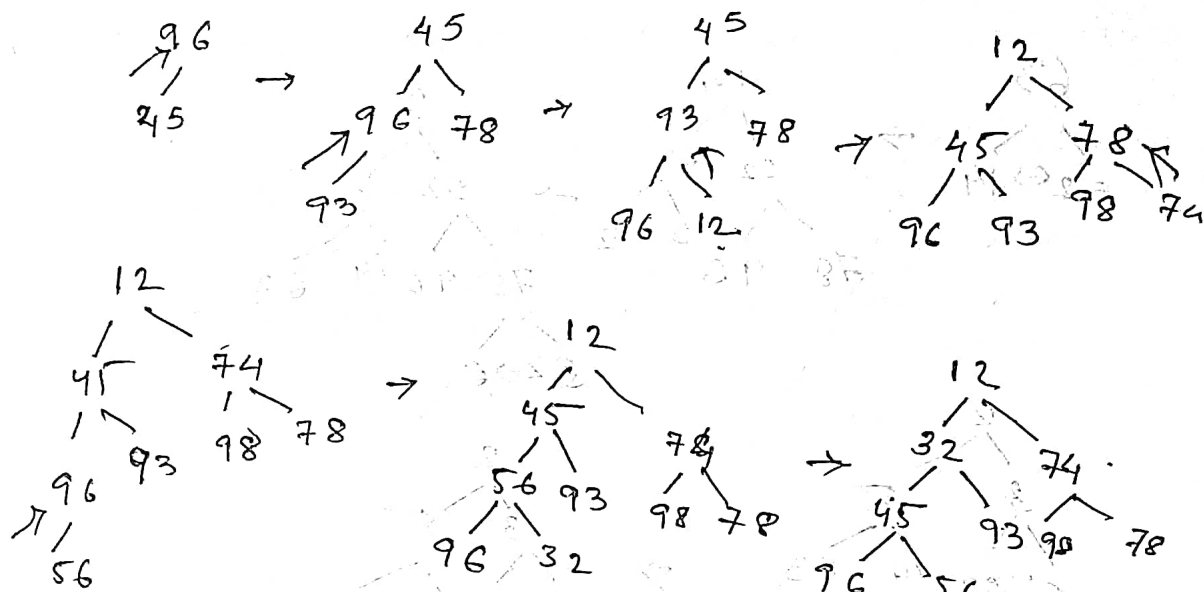
Min Heap

1) 22 75 96 41 23 12 1 2 56



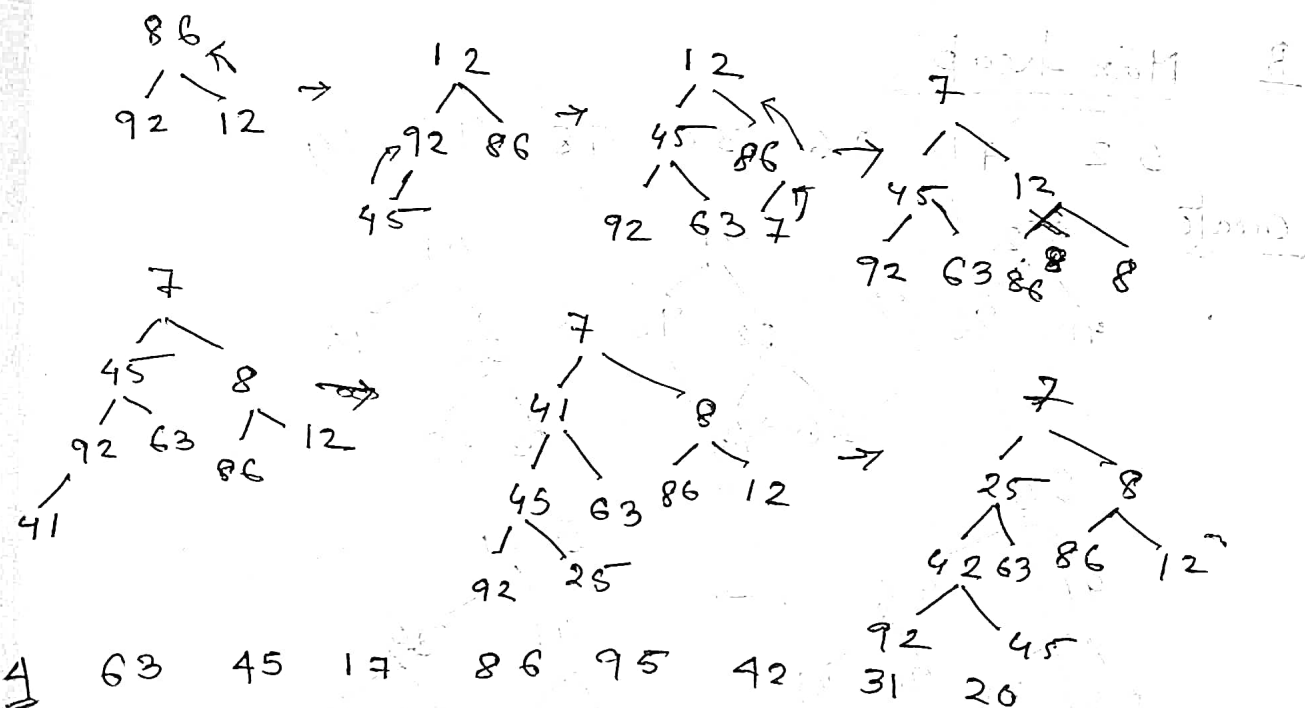
2

96 45 78 93 12 98 74 56 32



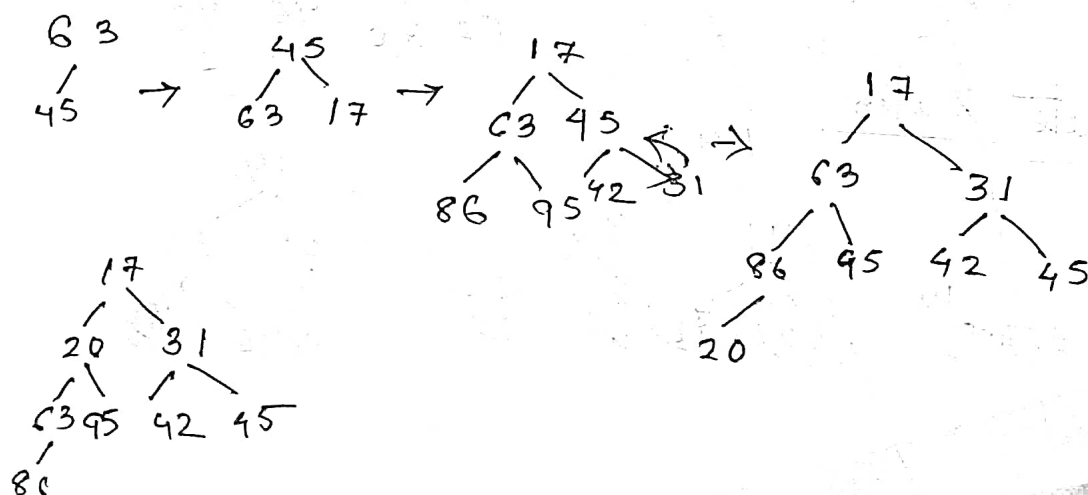
3

86 92 12 45 63 7 8 41 25

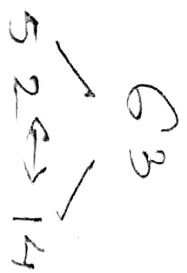


4

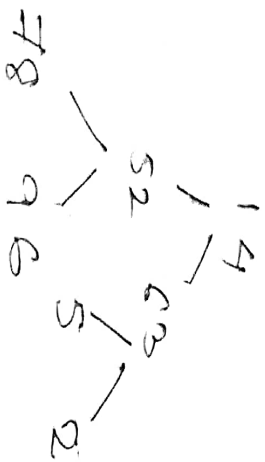
63 45 17 86 95 42



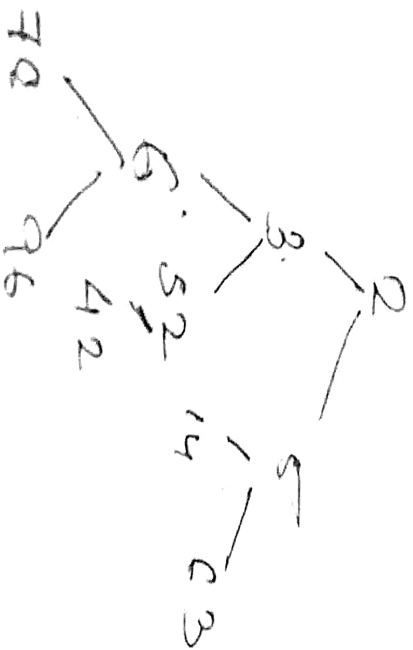
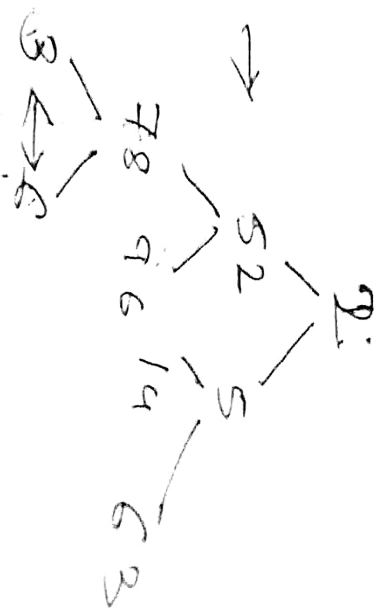
5) 6 3 5 2 1 4 7 8 9 6 5 2 3 6
 4 2



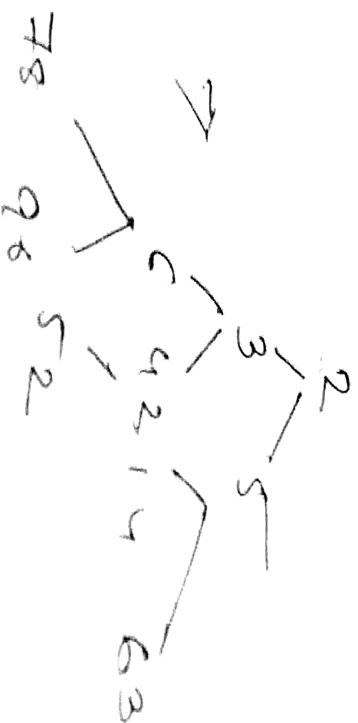
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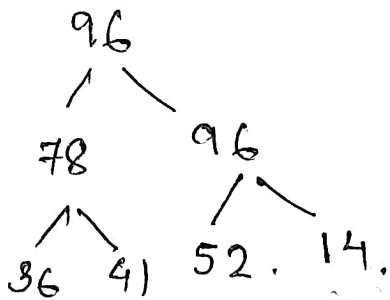
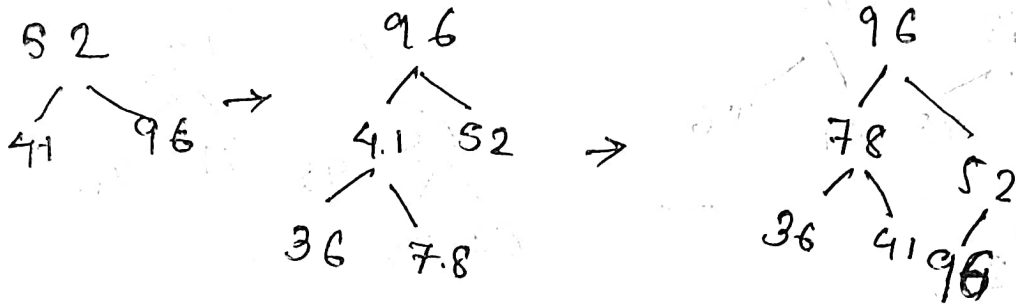
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→

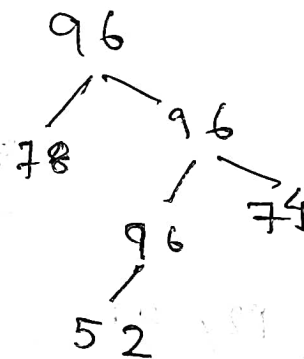
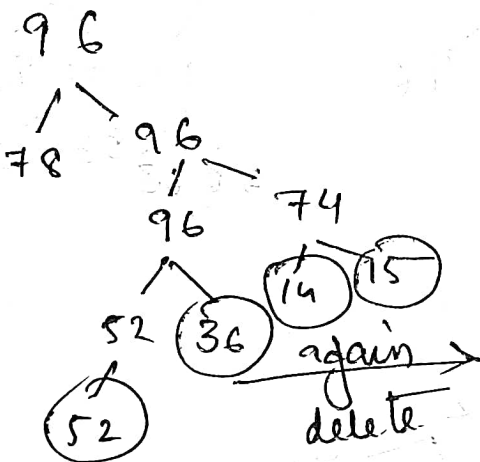
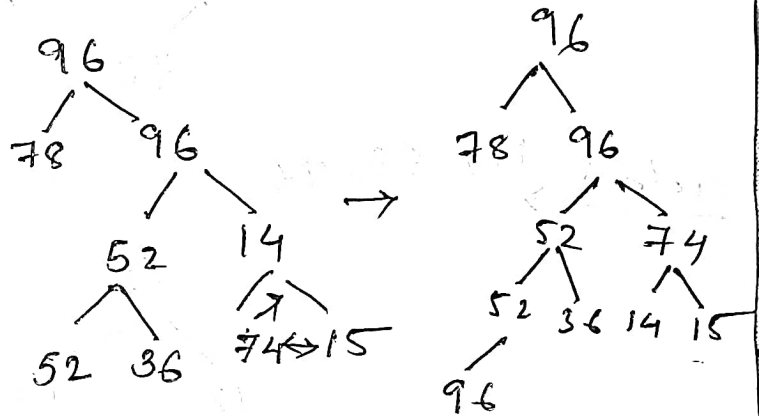


3. Max heap



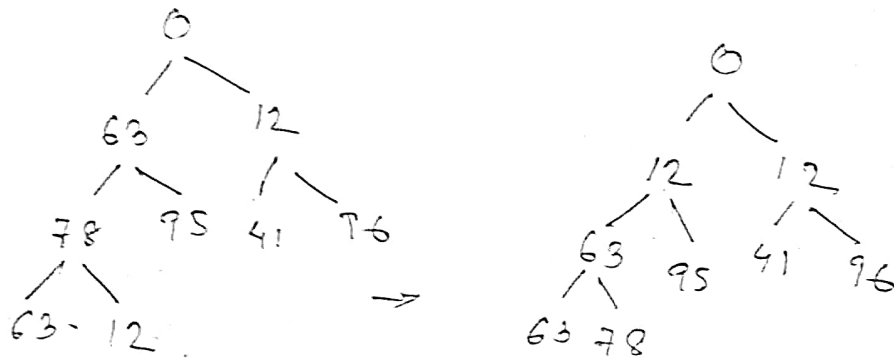
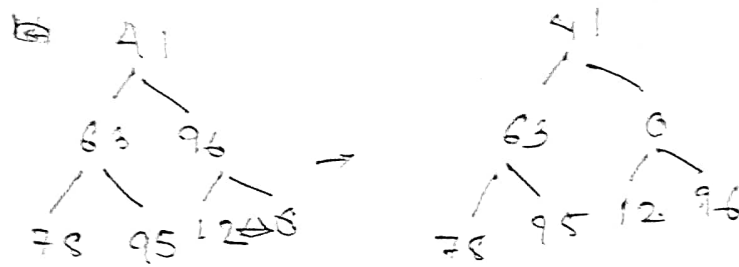
delete 36, 41

add \rightarrow 52, 36, 74, 15, 96

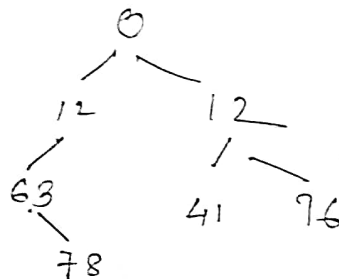


3) Min heap

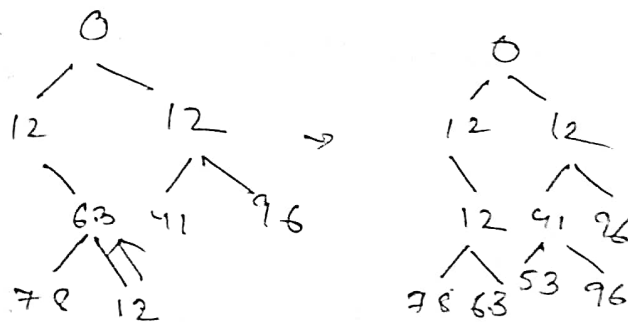
41, 63, 96, 78, 95, 12, 0, 63, 12



del 95, 63, 78



add: 12, 53, 96



del 12, 41

