

# Heap by Hand (Done Using the Heapsort Heapify Method)

Array:

Index:

Steps:

1

1	2	3	4	5	6	7	8	9	10
22	38	5	40	20	38	25	47	5	19

2

22	38	5	40	20	38	25	47	5	19
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3

22	38	5	47	20	38	15	40	5	19
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4

22	38	38	47	20	5	25	40	5	19
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5

22	47	38	40	20	5	25	38	5	19
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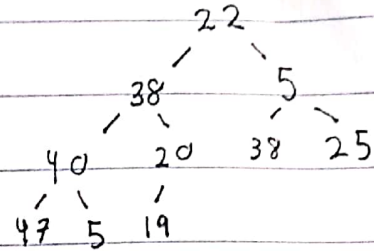
6

47	40	38	38	20	5	25	22	5	19
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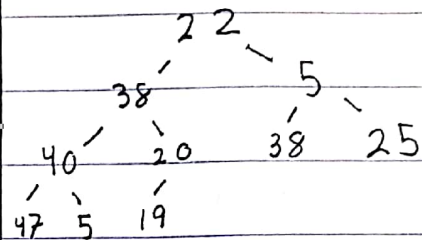
Heaps:

Steps:

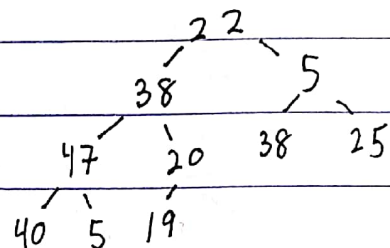
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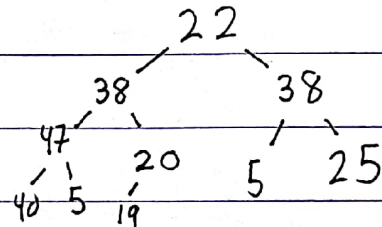
2



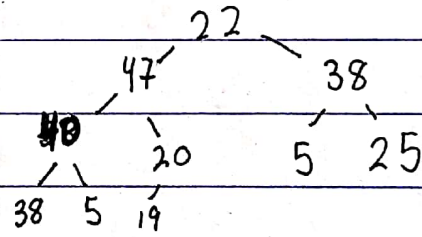
3



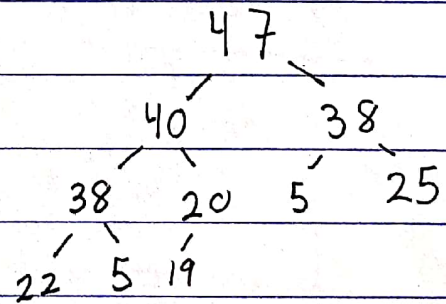
4



5



6



List of Inputs:

22, 38, 5, 40, 20, 38, 25, 47, 5, 19

38, 5, 40, 20, 38, 25, 47, 5, 19

5, 40, 20, 38, 25, 47, 5, 19

40, 20, 38, 25, 47, 5, 19

20, 38, 25, 47, 5, 19

38, 25, 47, 5, 19

25, 47, 5, 19

47, 5, 19

5, 19

19

Current Heap:

22

38  
22

38  
22 25

40  
38 5  
22

40  
38 5  
22 20

40  
38 38  
22 20 5

40  
38 38  
22 20 5 25

47  
40 38  
38 20 5 25  
22

47  
40 38  
38 20 5 25  
22 5



Keith  
DeSantis

HW2 Q3

