Data Structures

Sorting Technique – Heap Sort

Team Emertxe

Build Maxheap

Build Maxheap

- arr[SIZE]

SIZE = 10

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1	14	10	8	7	9	3	2	4	6

arr[0] arr[1] arr[2] arr[3] arr[4] arr[5] arr[6] arr[7] arr[8] arr[9]

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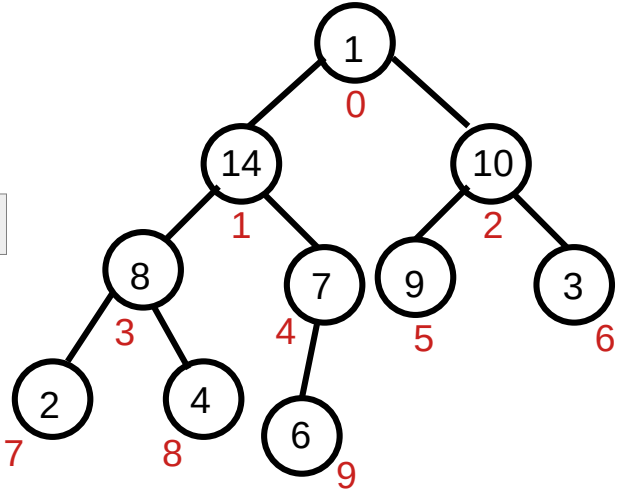

Algorithm

build_maxheap(arr,size):

Input Specification:

arr : Array to hold elements

size : Length of the array

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index = size/2 – 1
while(index >= 0 )
        maxheapify(arr,index,size)
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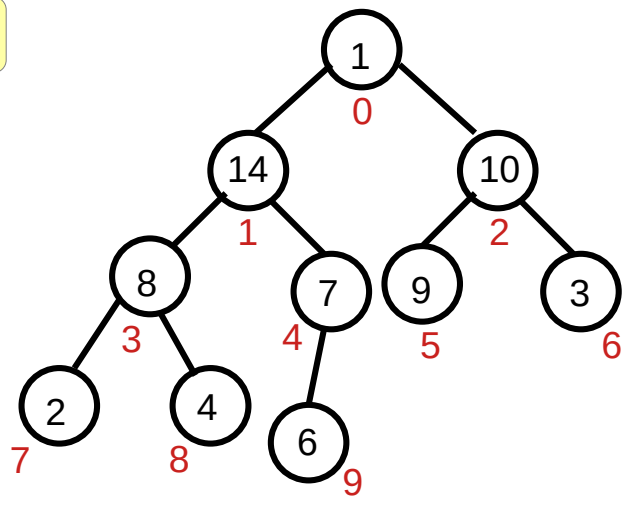

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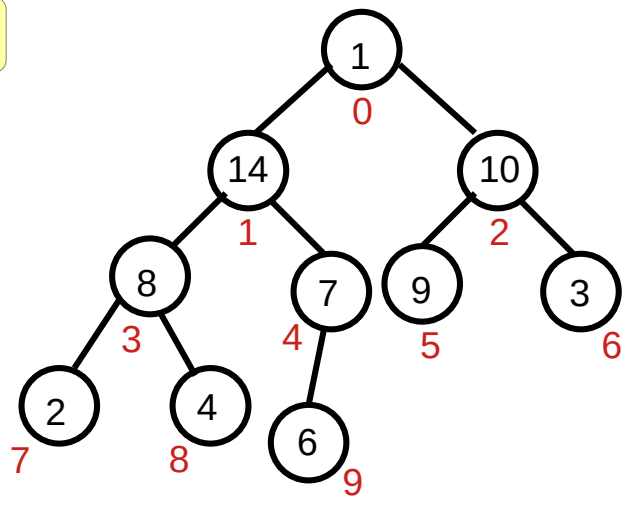

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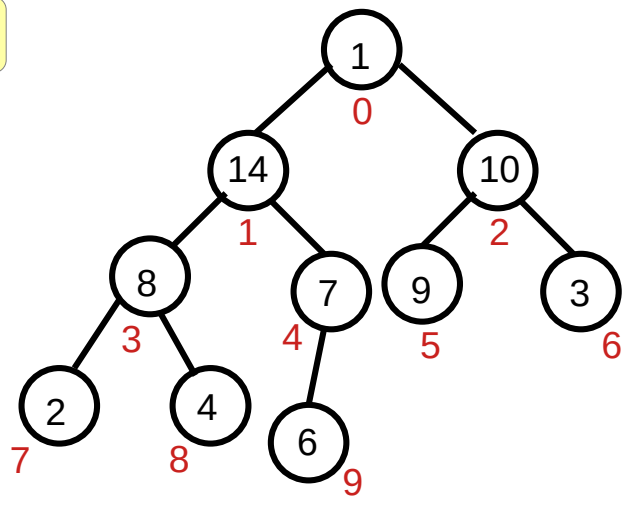

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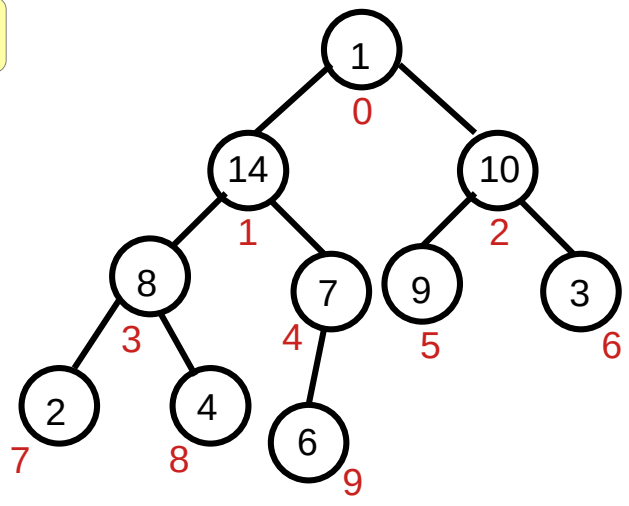

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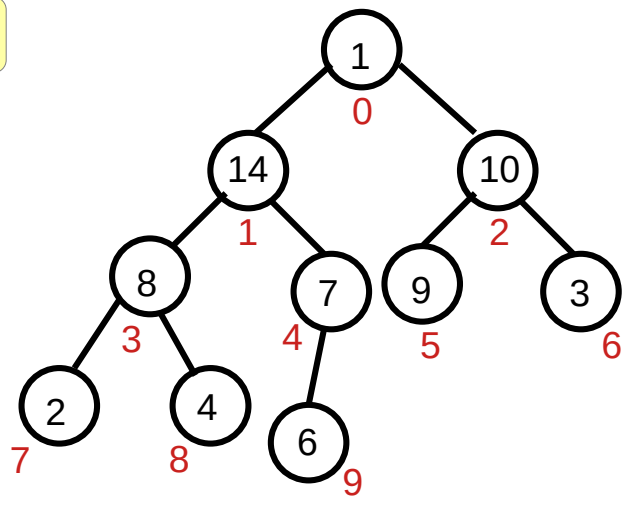

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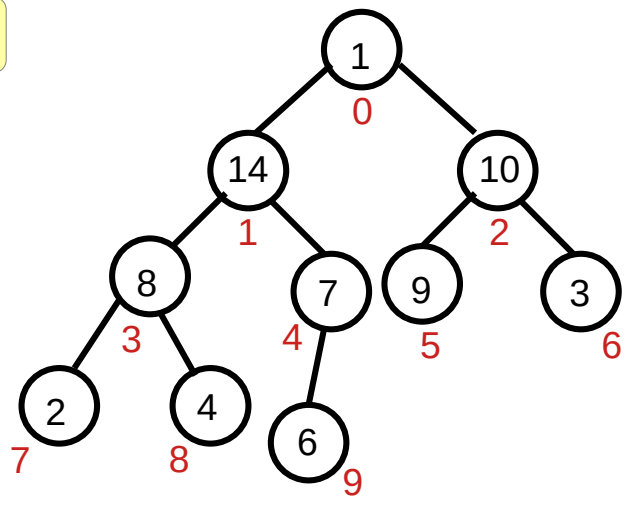

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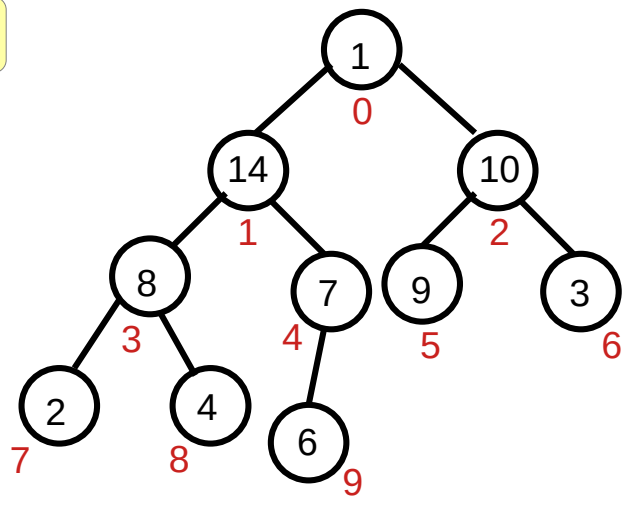

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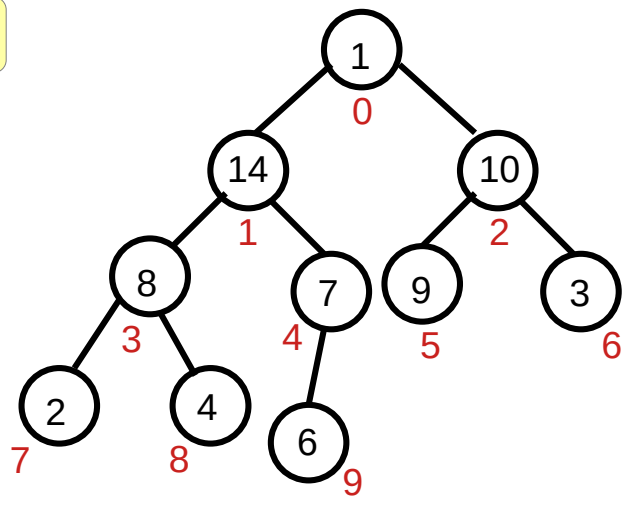

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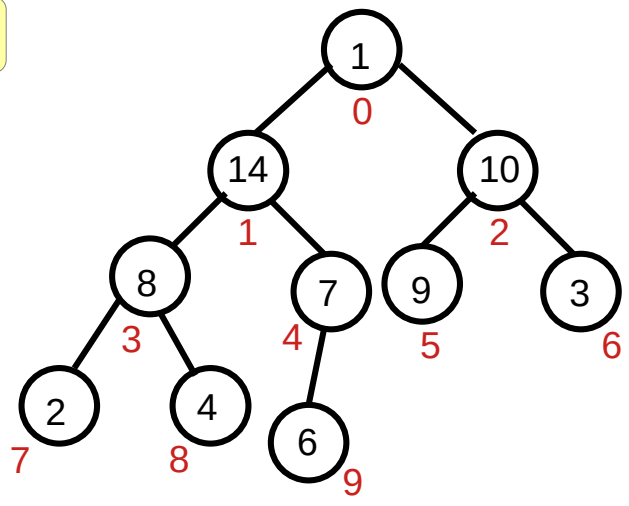

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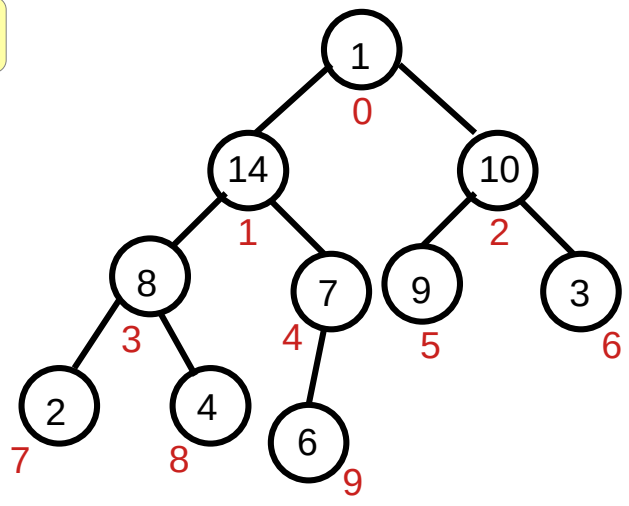

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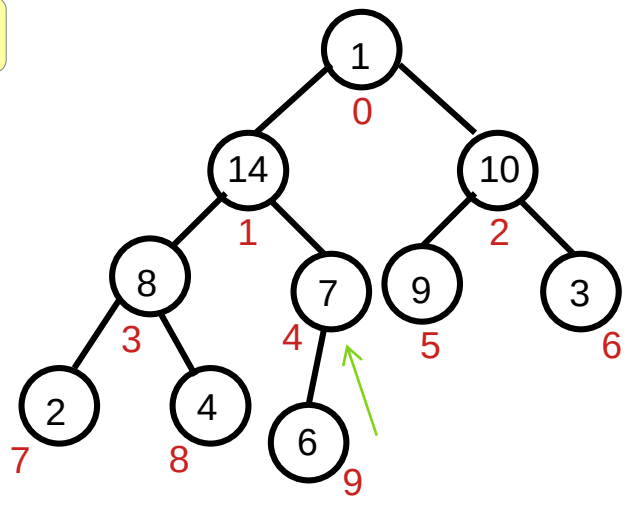

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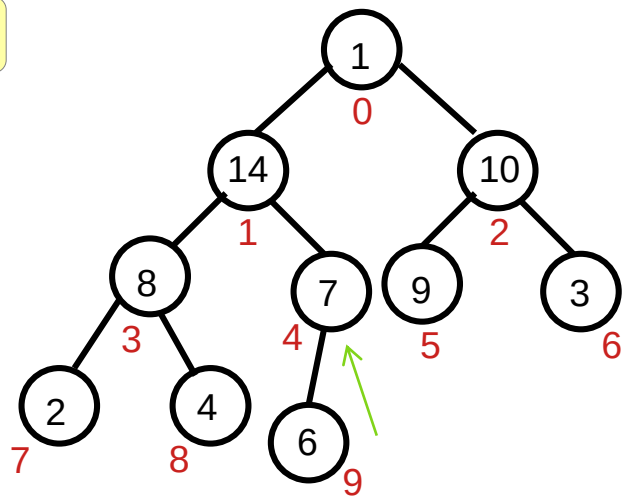

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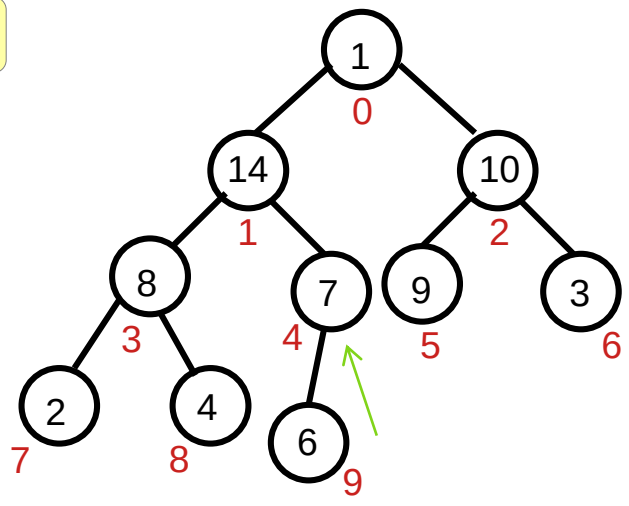

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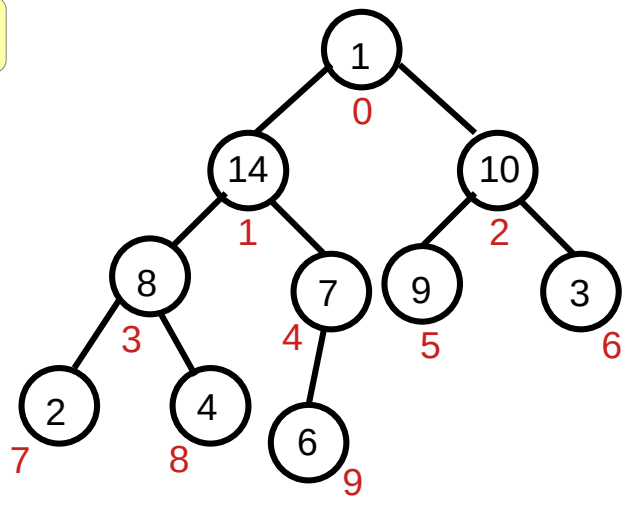

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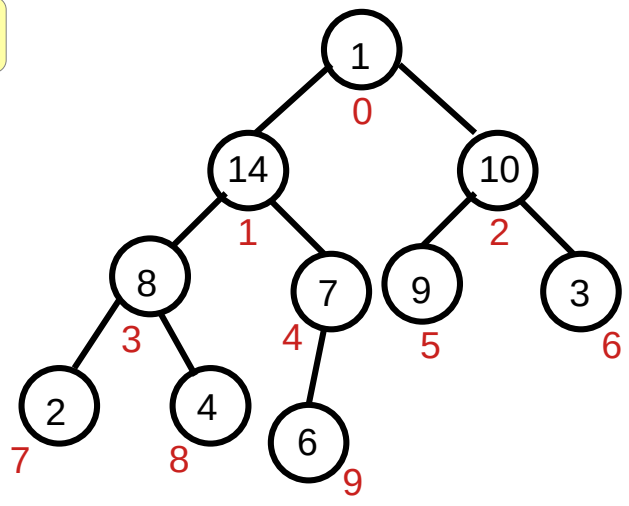

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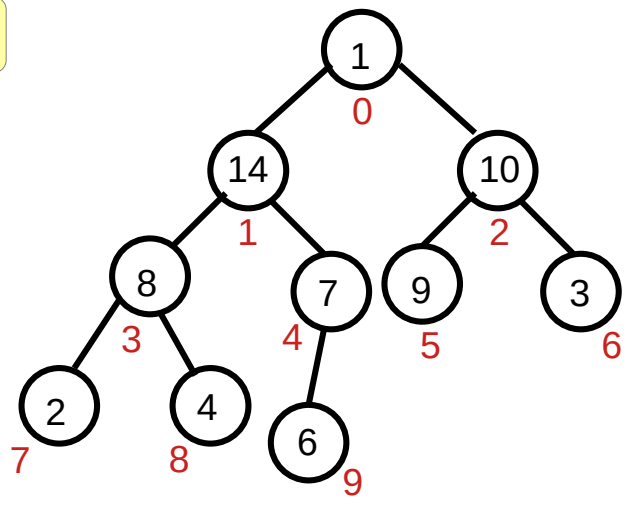

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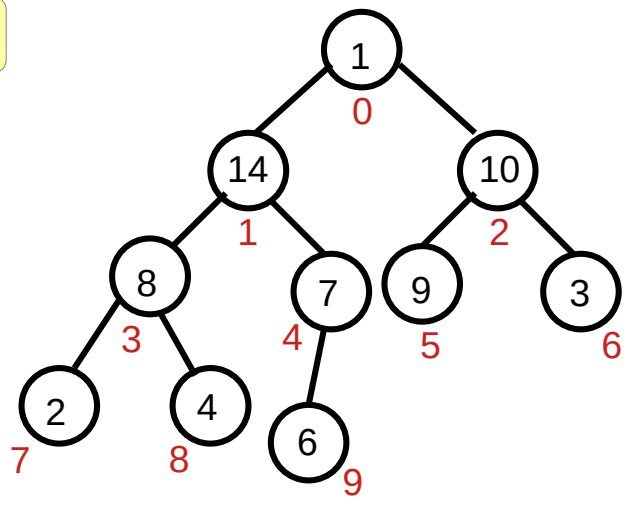

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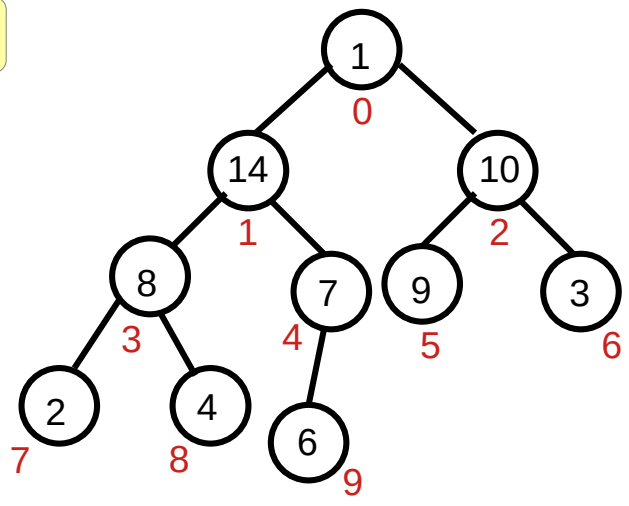

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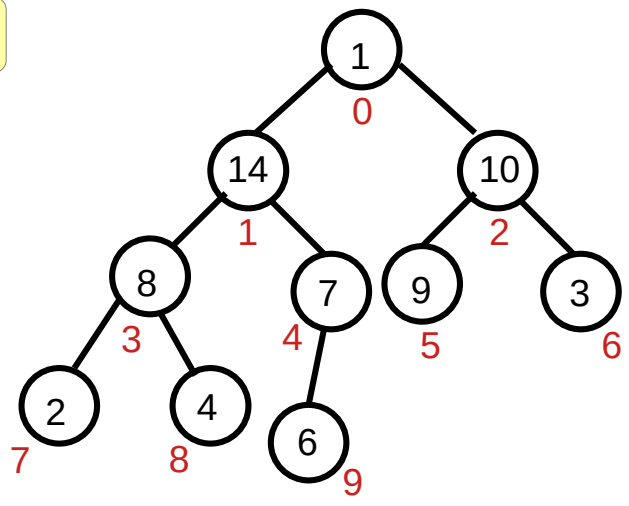

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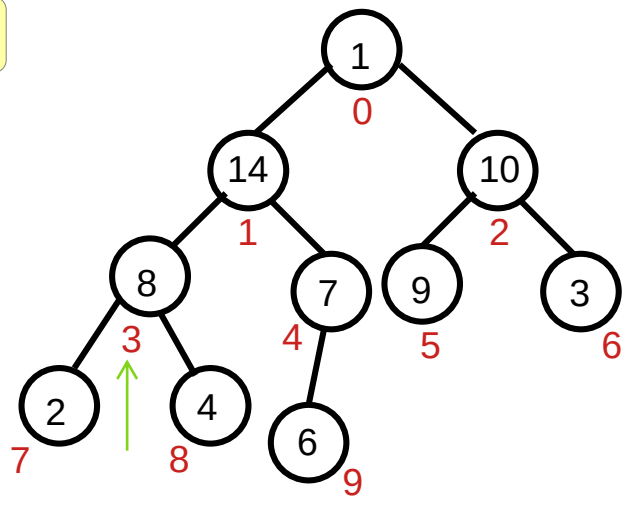

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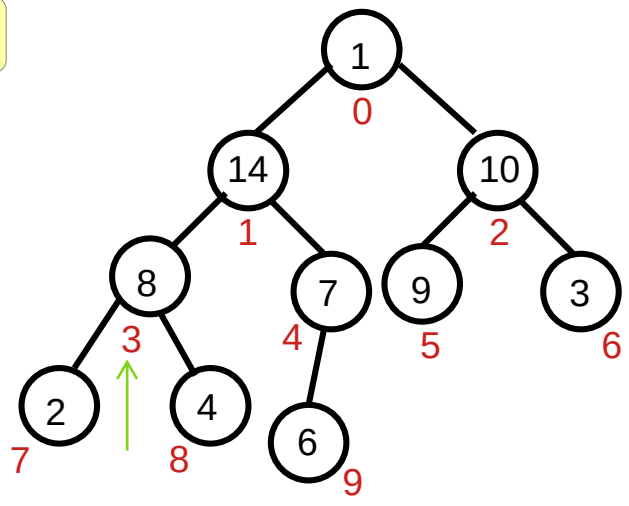

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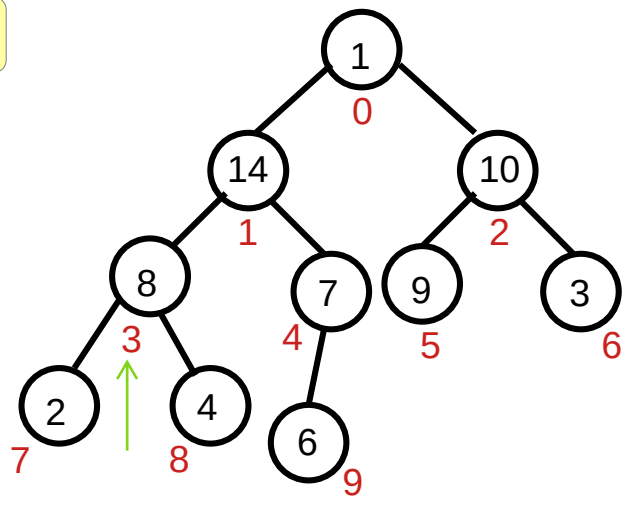

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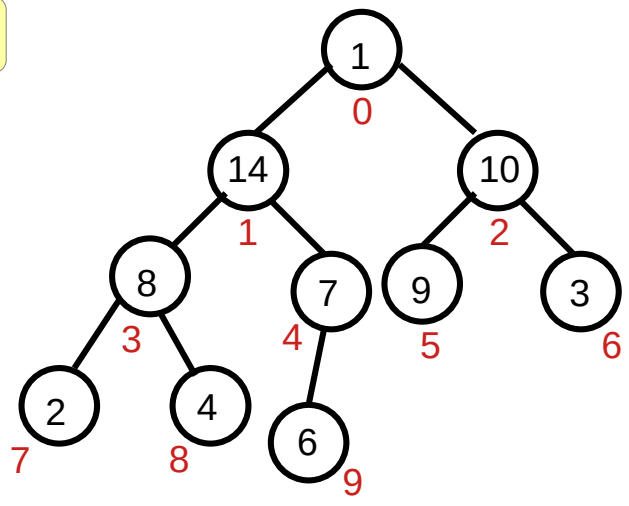

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index = size/2 – 1
while(index >= 0 )
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        Decrement index
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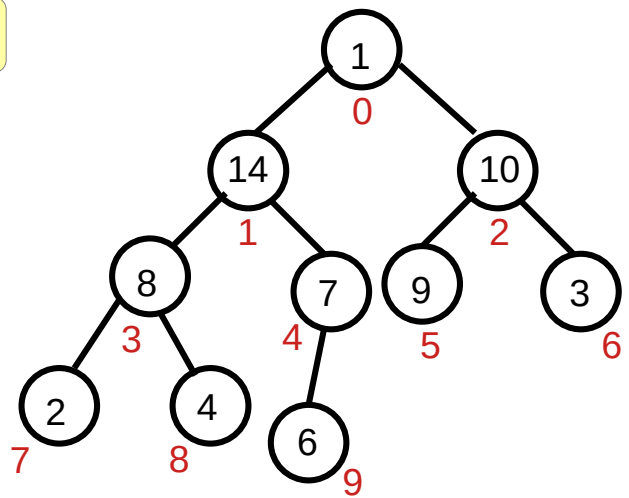
SIZE = 10

index = 2



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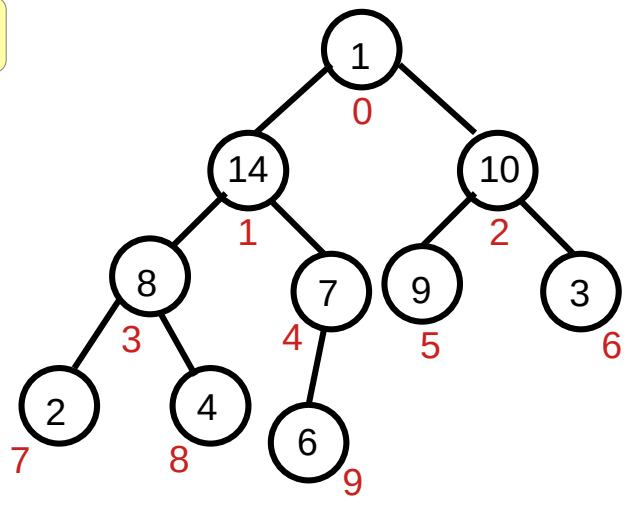

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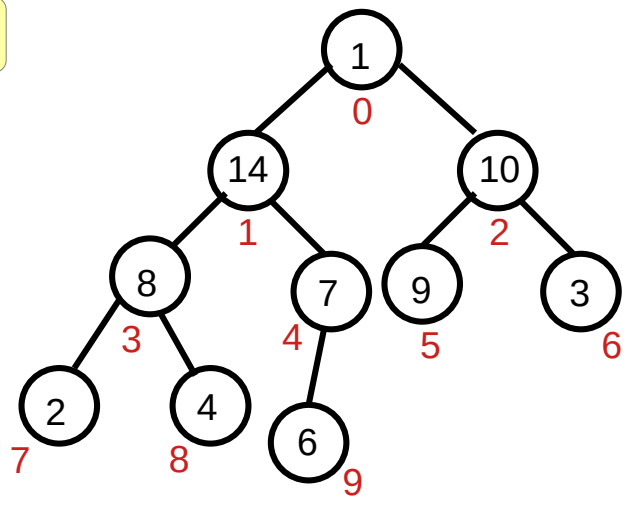

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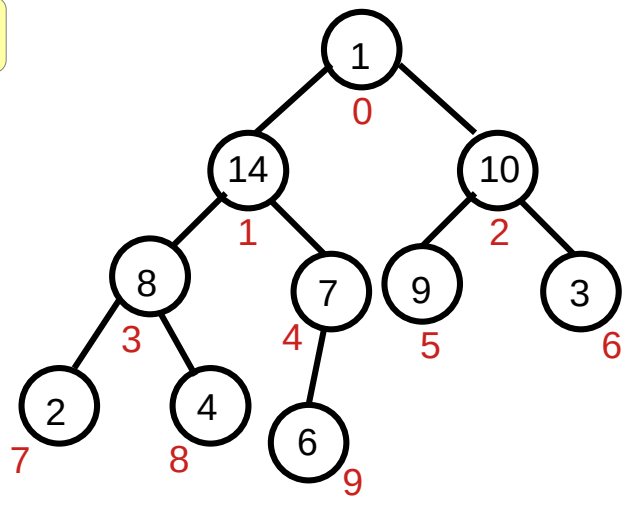

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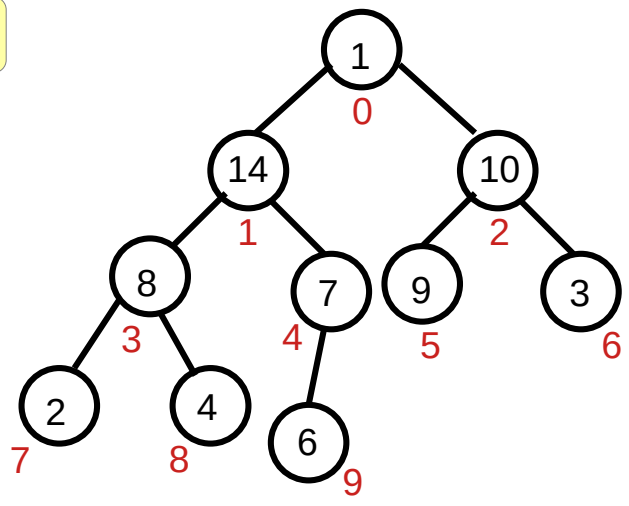

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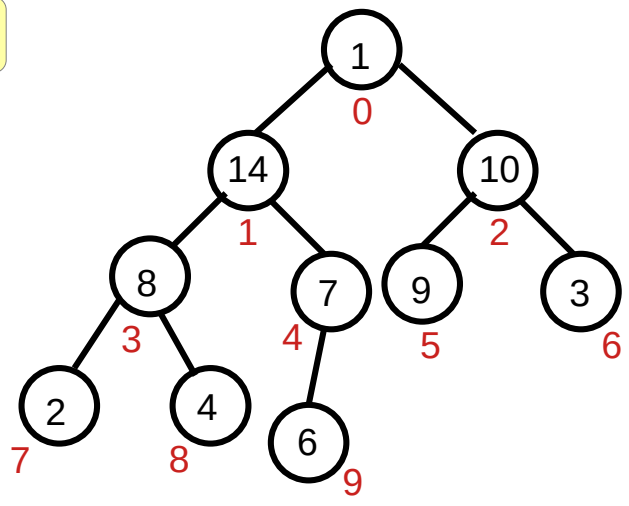

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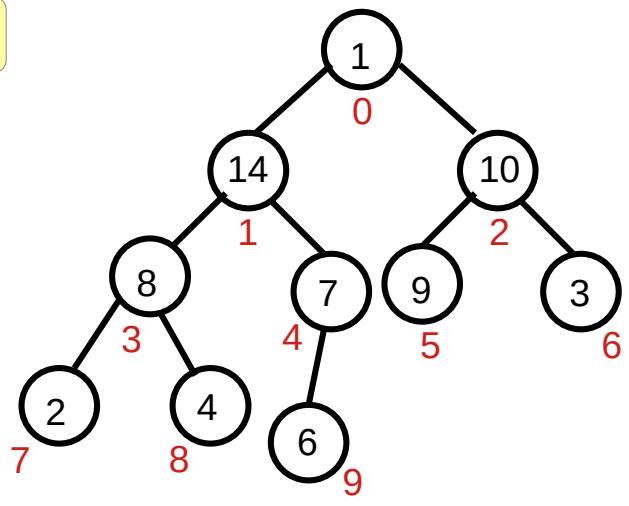

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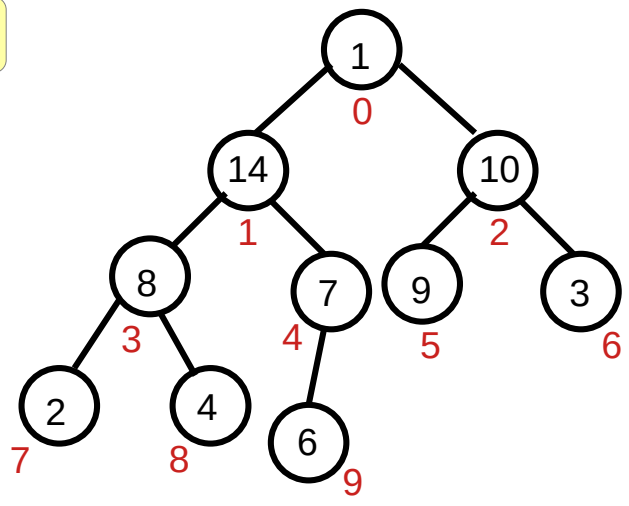

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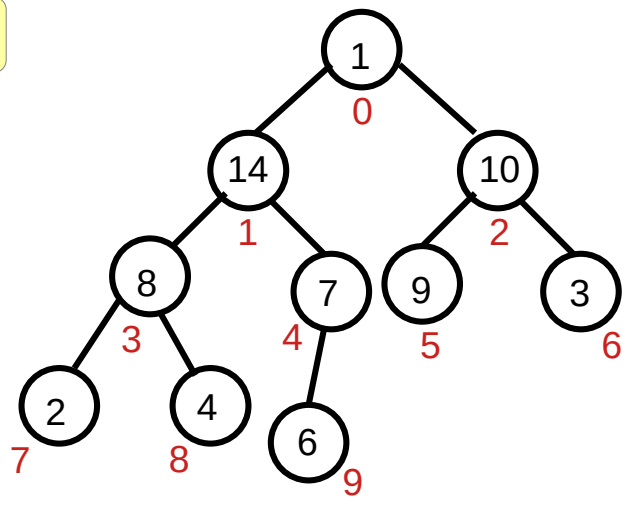

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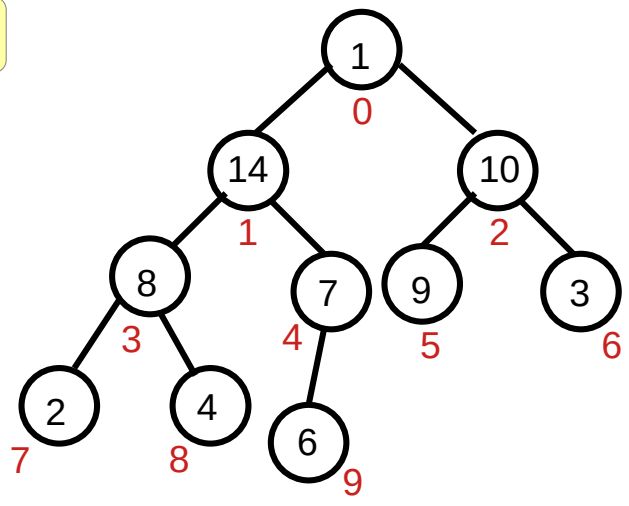

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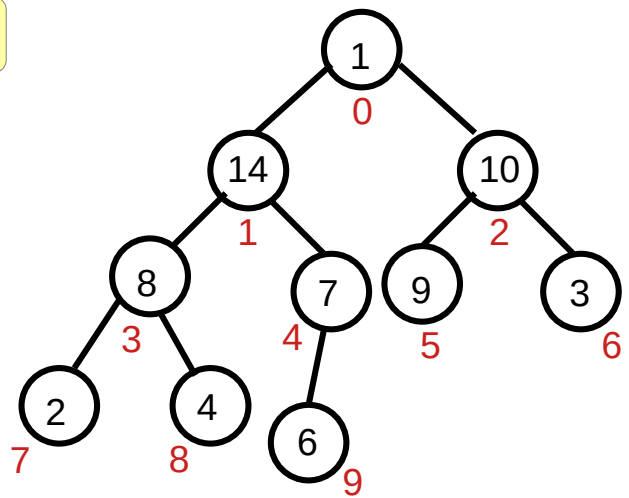

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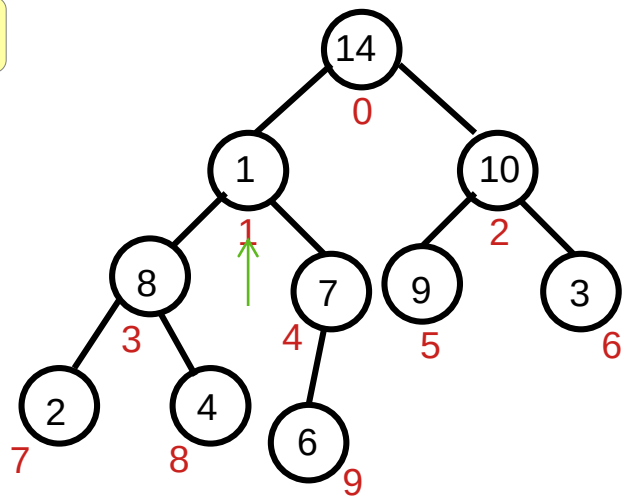

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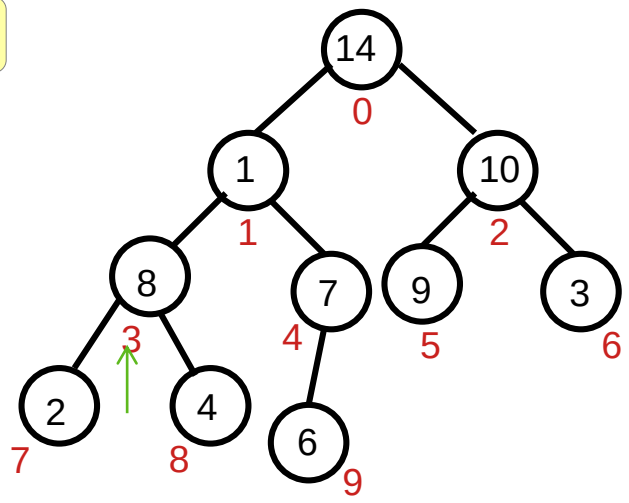

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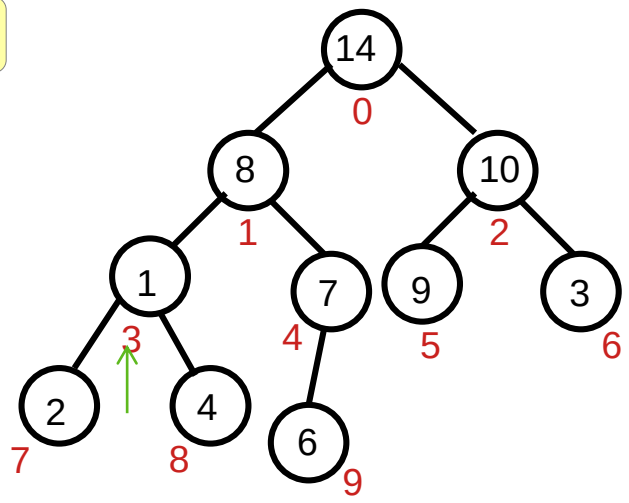

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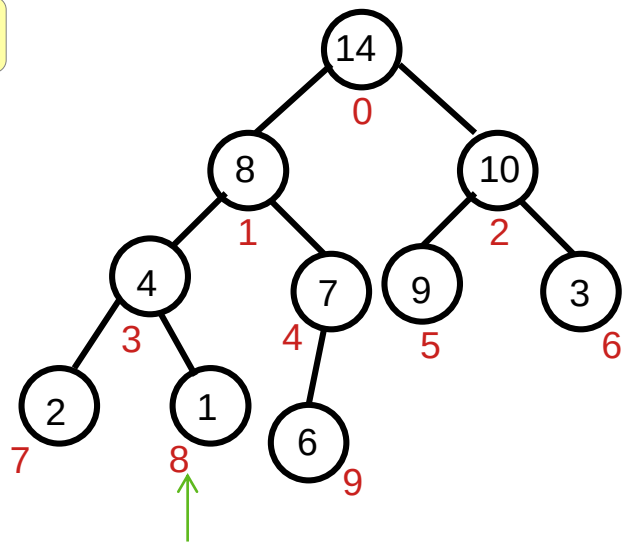

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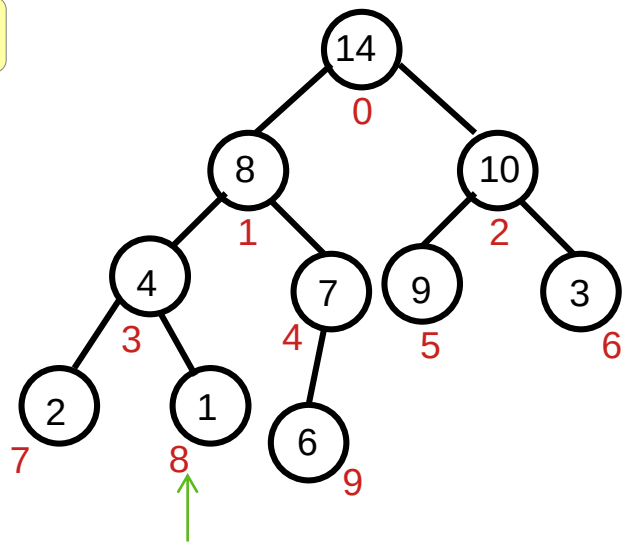

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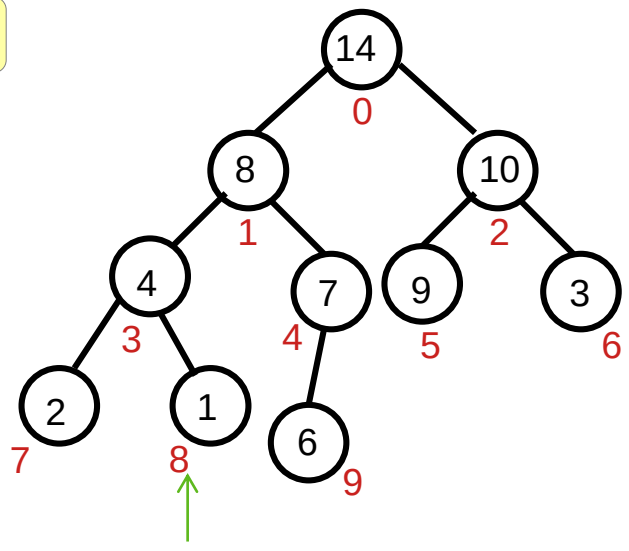

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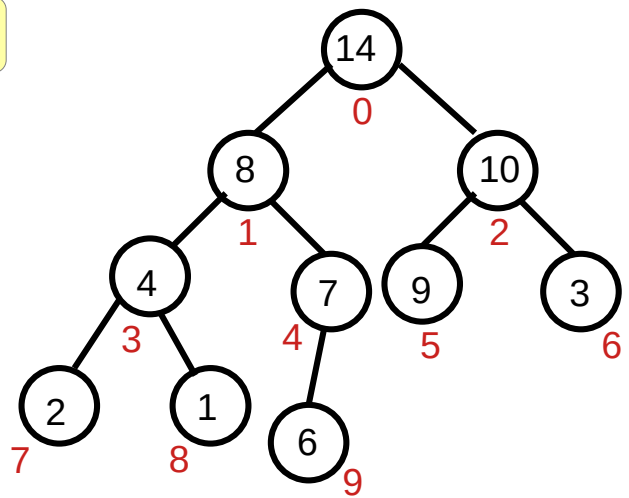

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EMERTXE

Heap Sort