

Assignment 9

Course name: Data Structures

Course id: 14461002

Student id: 202033762

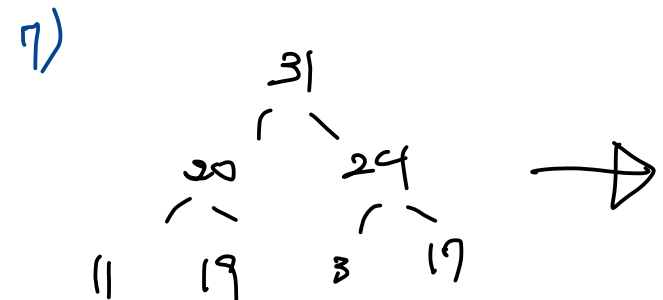
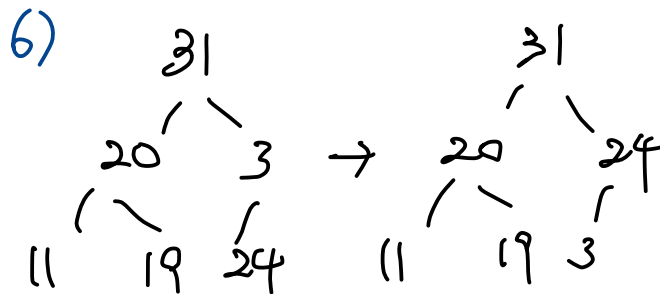
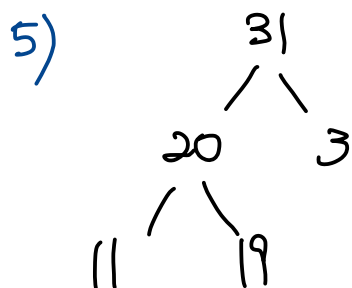
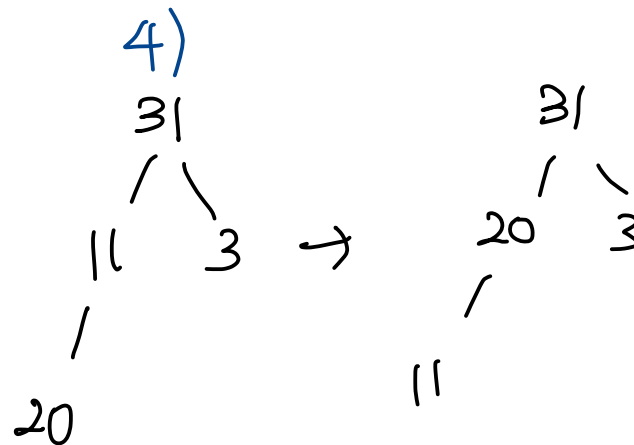
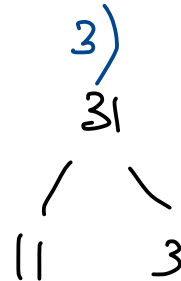
Student name: 장민호

Student major: 설비소방공학과

Submission date: 2022. 05.19 

HW-9(P1): Descending Order Heap Sort (Max Heap)

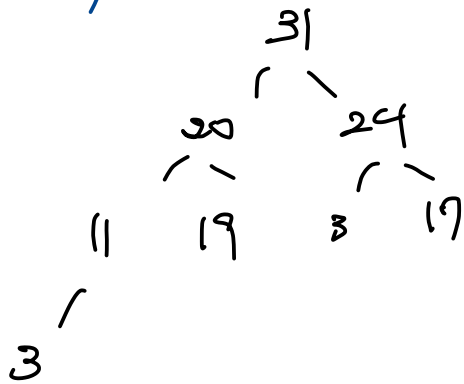
31, 11, 3, 20, 19, 24, 17, 3, 31



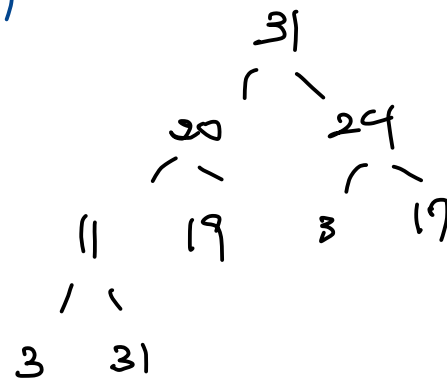
HW-9(P1): Descending Order Heap Sort (Max Heap)

31, 11, 3, 20, 19, 24, 17, 3, 31

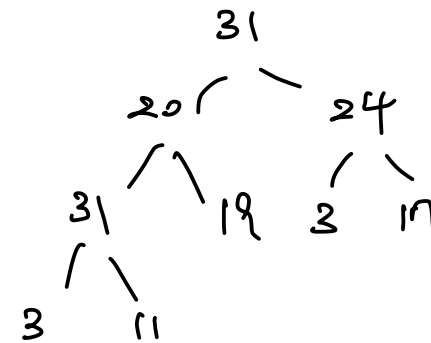
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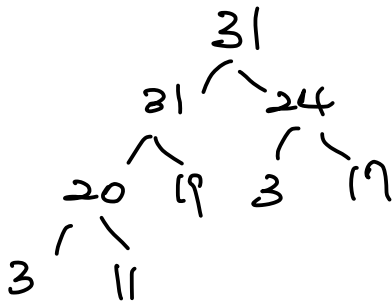
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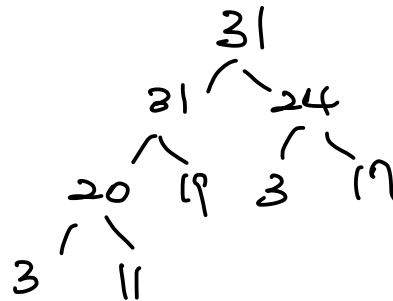
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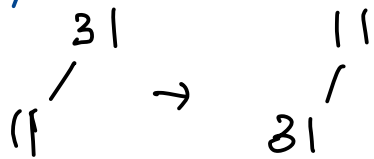
HW-9(P2): Ascending Order Heap Sort (Min Heap)

31, 11, 3, 20, 19, 24, 17, 3, 31

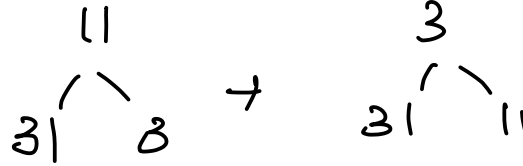
1)

31

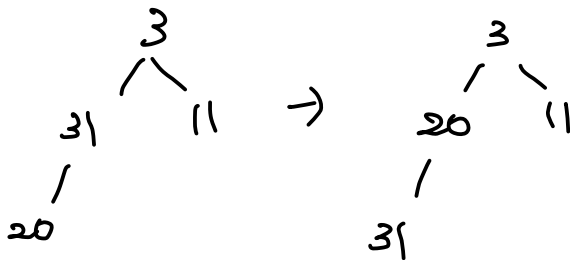
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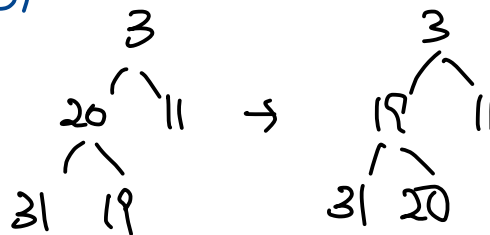
3)



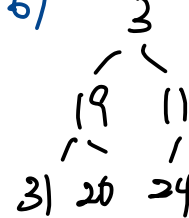
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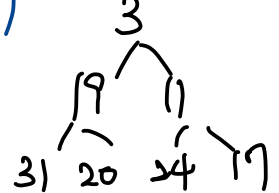
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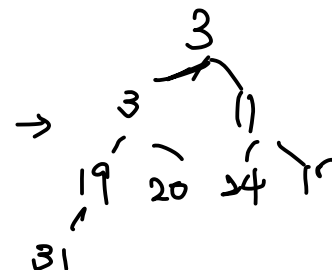
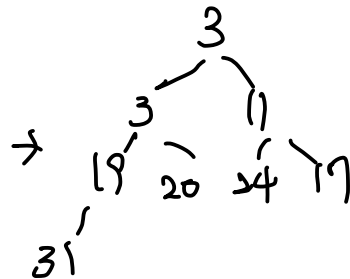
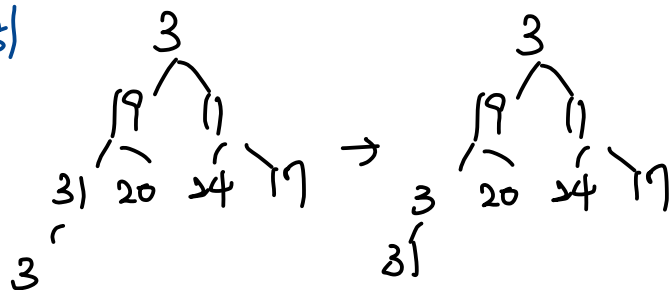
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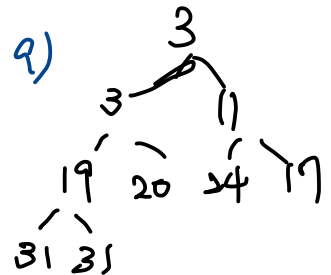
7)



8)



9)





HW-9(P3): LSD Radix Sort

310, 11, 3, 20, 11119, 24, 17, 3, 31

1st pass 310, 20 / 11, 31 / 3, 3 / 24 / 17 / 11119

2nd pass 3, 3 / 310, 11, 17, 11119 / 20, 24 / 31

3rd pass 3, 3, 11, 17, 20, 24, 31 / 11119 / 310

4th pass 3 3 11 17 20 24 31 310 / 11119

5th pass 3 3 11 17 20 24 31 310 11119 <Sort clear>



HW-9(P4): MSD Radix Sort

310, 11, 3, 20, 11119, 24, 17, 3, 31

1st pass 310 11 3 20 24 17 3 31 / 11119

2nd pass 310 11 3 20 24 17 3 31 / 11119

3rd pass 11 3 20 24 17 3 31 / 310 / 11119

4th pass 3 3 / 11 17 / 20 24 / 31 / 310 / 11119

5th pass 3 3 11 17 20 24 31 310 11119