2016000000 김영민

1. 가. $C_N = C_{\frac{N}{2}} + 1 \quad N \geq 2 \quad C_1 = 0$

$N = 2^n \quad C_{2^n} = C_{2^{n-1}} + 1$

$n = \log_2 N \quad = C_{2^{n-2}} + 1 + 1$

$\vdots$

$= 1 + 1 + 1 \cdots + 1 = n$

$\therefore O(\log N)$

1. 나. $C_N = 2C_{\frac{N}{2}} + N^2 \quad C_1 = 1$

$N = 2^n \quad \frac{C_N}{2^n} = \frac{C_{2^{n-1}}}{2^{n-1}} + 2^n$

$= \frac{C_{2^{n-2}}}{2^{n-2}} + 2^{n-1} + 2^n$

$\frac{C_N}{2^n} = 1 + \cdots 2^{n-1} + 2^n$

$= \frac{2^n}{1 - \frac{1}{2}} = 2 \cdot 2^n$

$\therefore C_N = 2^{n+1} \cdot 2^n$

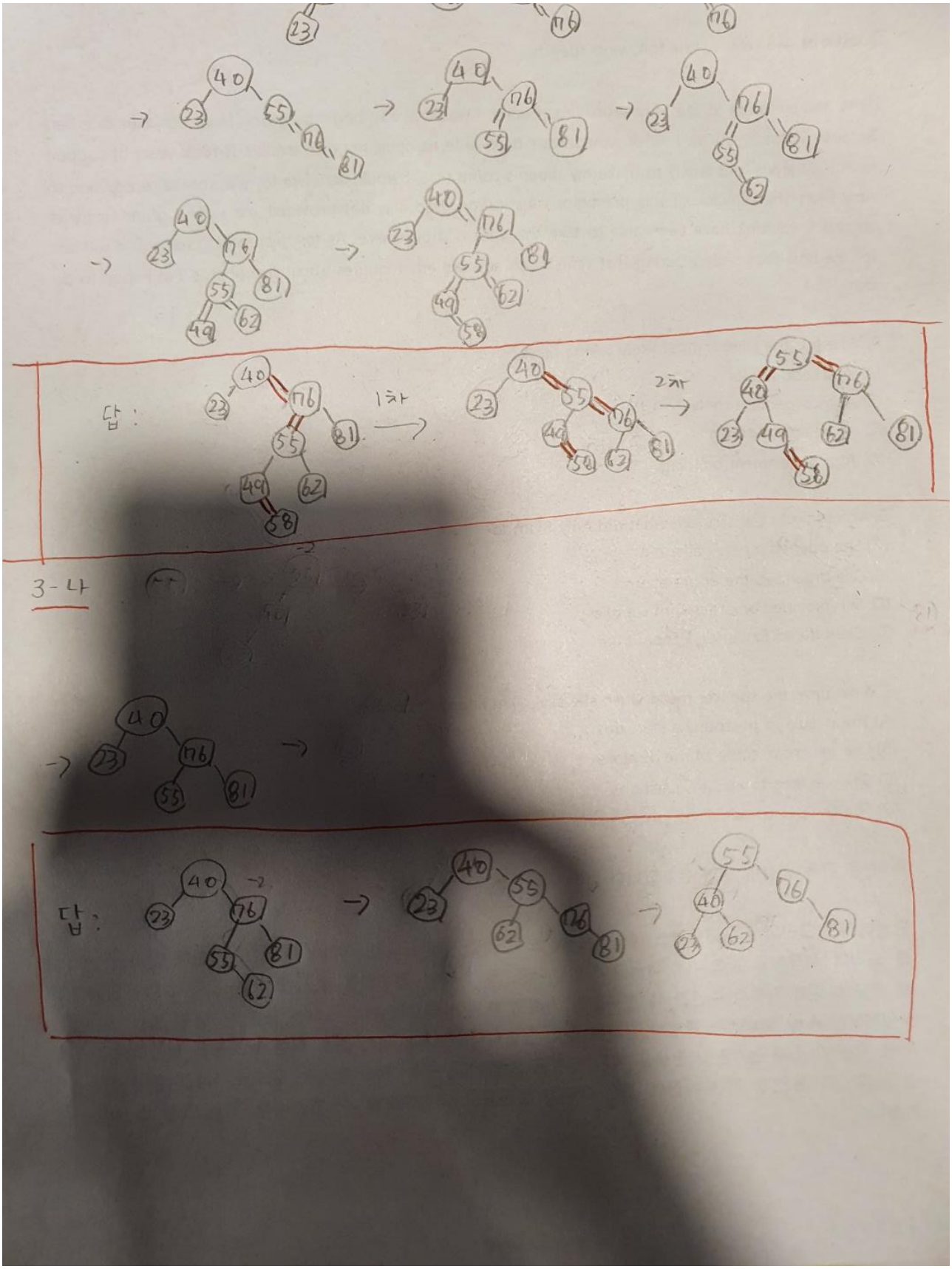
$\Rightarrow O(N^2)$

ㄹ: 퀵 정렬 ㅁ: 삽입 정렬 ㅂ: 선

201600 774 김영민

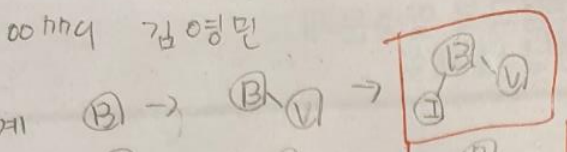
2. ㄱ 합병 ㄴ 히프 ㄷ 쉘

ㄹ 퀵 ㅁ 삽입 ㅂ 선택


답:
1차
2차
3-나
답:

2016 00 hhd 김형민

4-가 1단계



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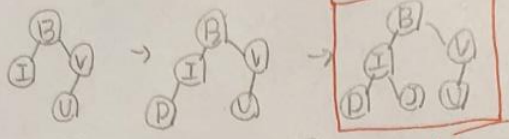

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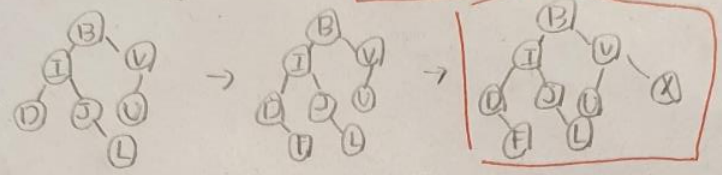

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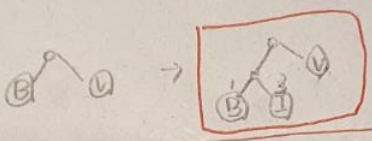

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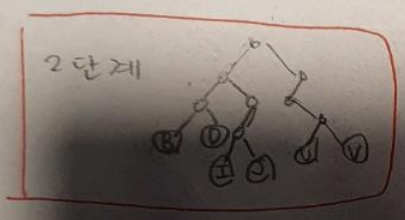

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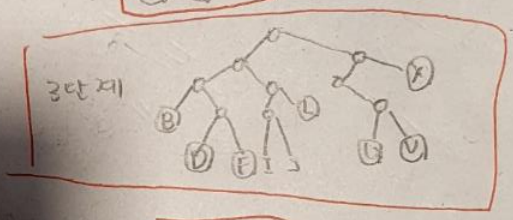

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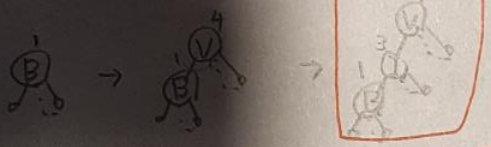

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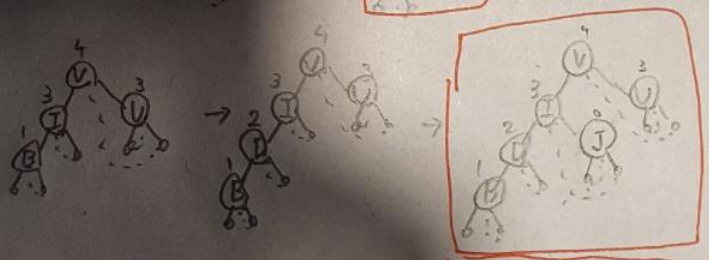

3단계 :