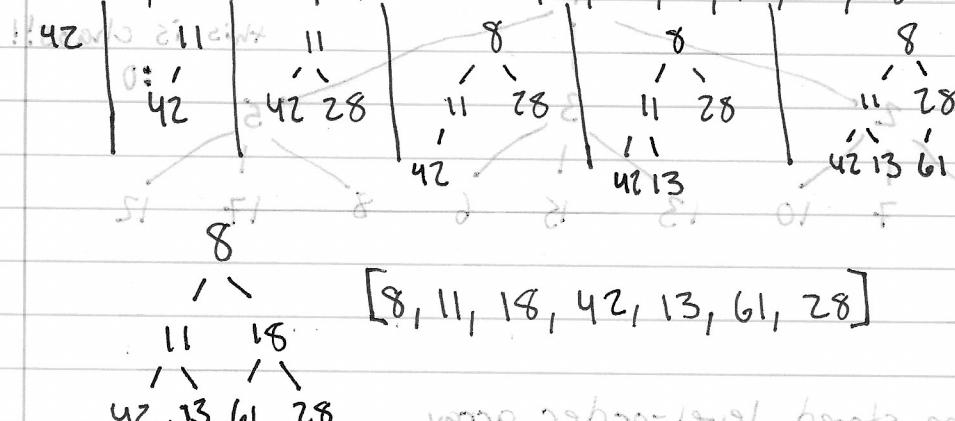
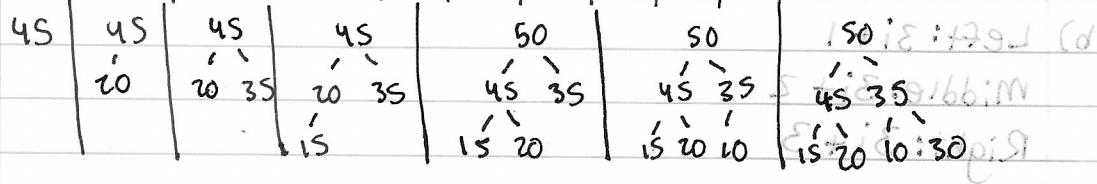


Assignment 4

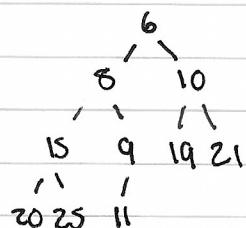
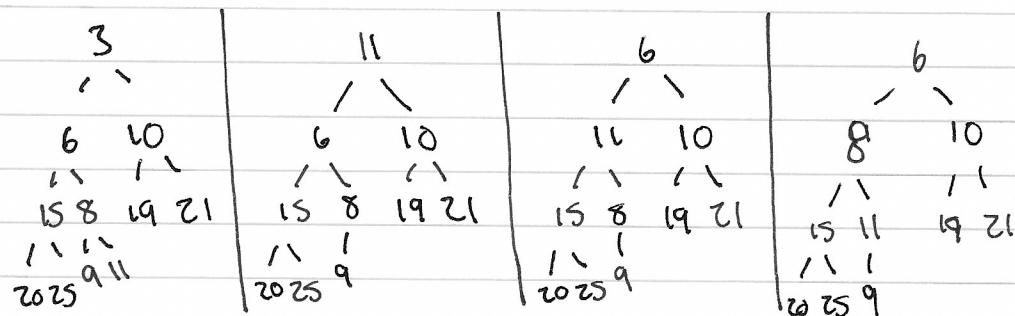
- 1.) Binary min-heap insert: 42, 11, 28, 8, 13, 61, 18



- 2.) Max-heap insert: 45, 20, 35, 15, 50, 10, 30

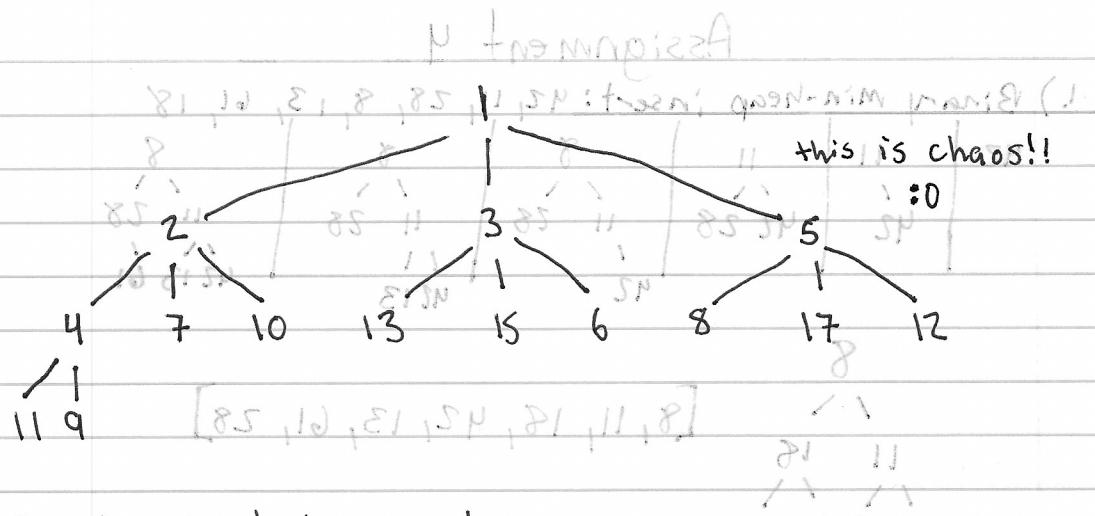


3.)



[6, 8, 10, 15, 9, 19, 21, 20, 25, 11]

4.)

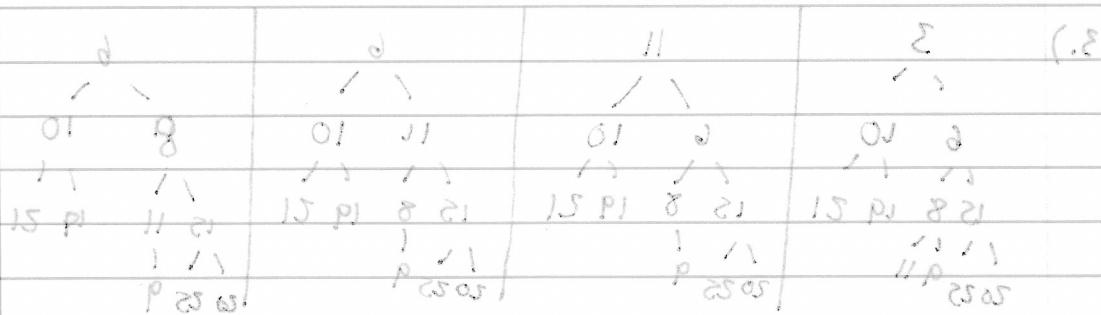


a) Can be stored level-order array
[1, 2, 3, 5, 4, 7, 10, 13, 15, 6, 8, 17, 12, 11, 9]

b) Left: $3i+1$ Middle: $3i+2$ Right: $3i+3$

c) Parent: $\frac{i-1}{3}$

[08, 01, 05, 21, 28, 24, 02]
08 01 05 21 28 24
02 01 05 21



[11, 25, 05, 15, P1, P, 21, 01, 8, 0]

01 05
15 P1 P 21
11 25 05