

## Part 4 - Heaps

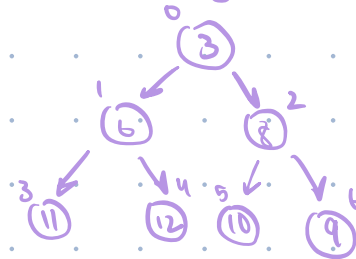
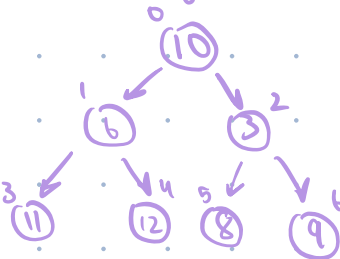
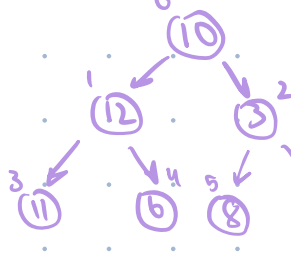
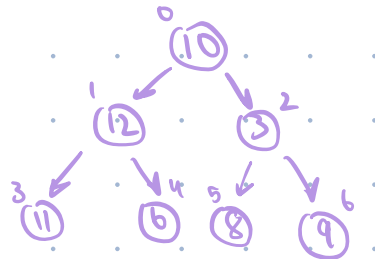
Samantha Sung

4a) buildHeap: [10, 12, 3, 11, 6, 8, 9]

heapify(2)

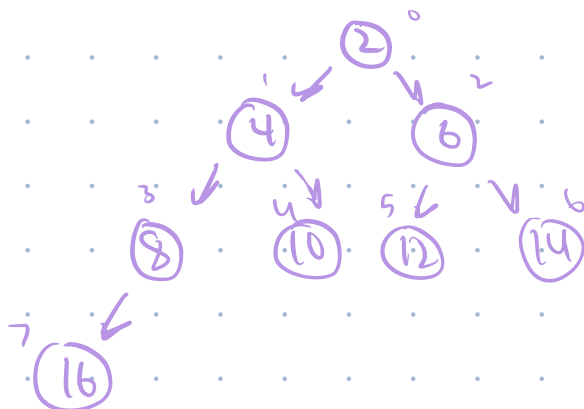
heapify(1)

heapify(0)

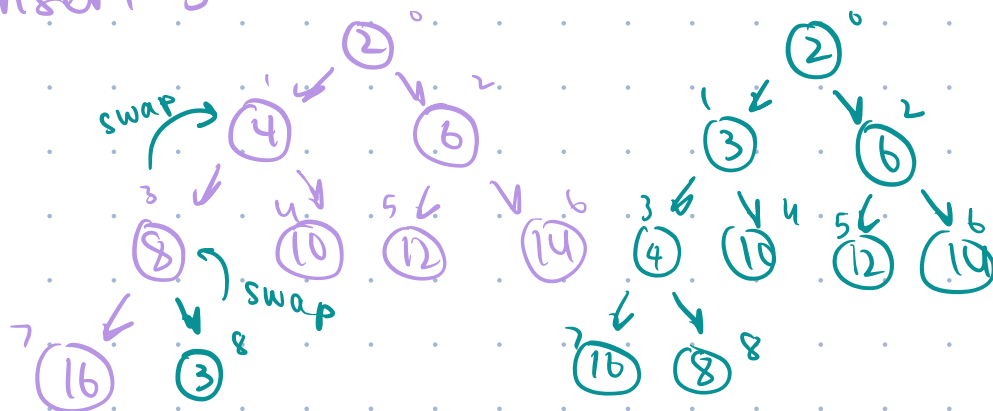


[3, 6, 8, 11, 12, 10, 9]

4b) initial configuration: [2, 4, 6, 8, 10, 12, 14, 16]



Insert 3

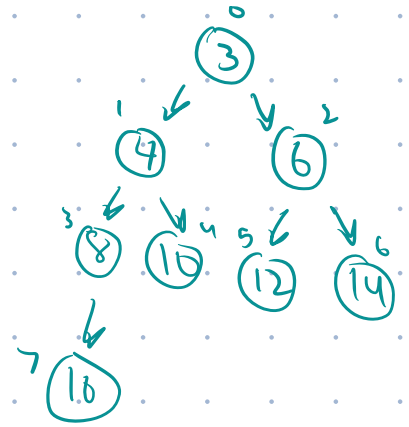
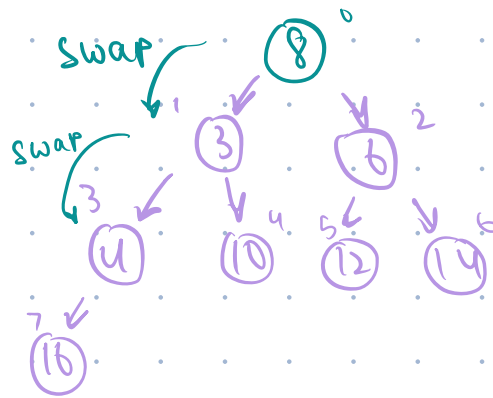


[2, 3, 6, 4, 10, 12, 14, 16, 8]

pop

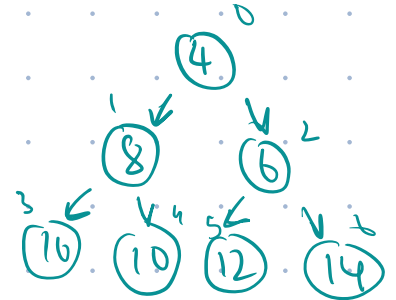
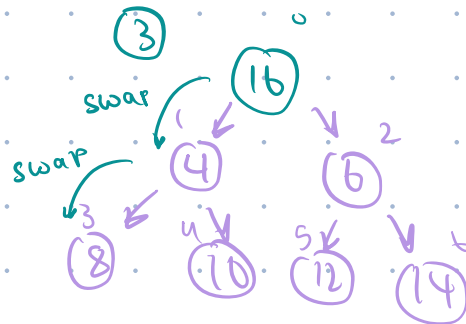
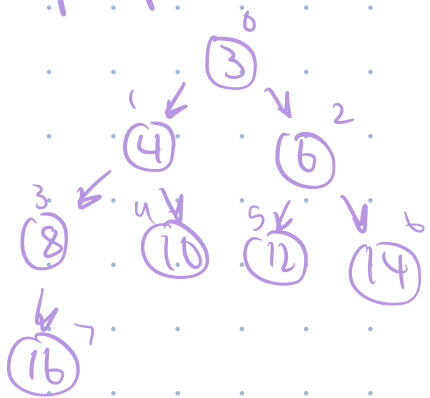


2



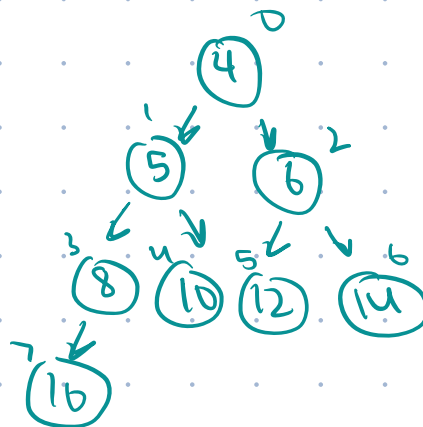
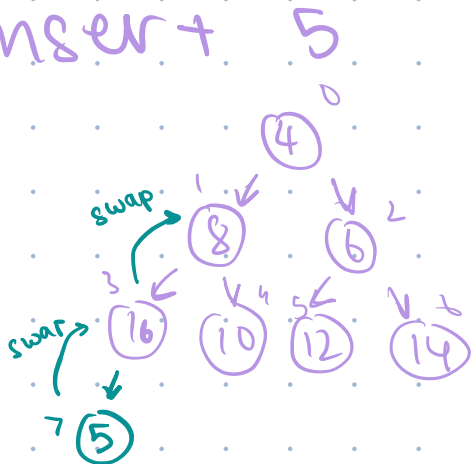
[3, 4, 6, 8, 10, 12, 14, 16]

pop



[4, 8, 6, 16, 10, 12, 14]

insert 5



[4, 5, 6, 8, 10, 12, 14, 16]