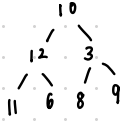


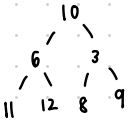
PART 4A: [10, 12, 3, 11, 6, 8, 9]



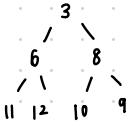
heapify(2) → [10, 12, 3, 11, 6, 8, 9]



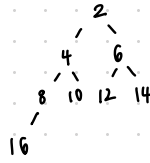
heapify(1) → [10, 6, 3, 11, 12, 8, 9]



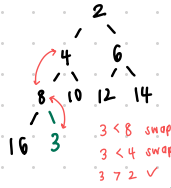
heapify(0) → [3, 6, 8, 11, 12, 10, 9]



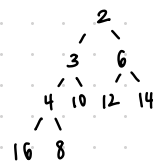
PART B: [2, 4, 6, 8, 10, 12, 14, 16]



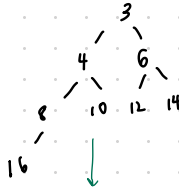
insert(3)



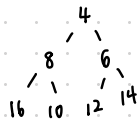
result



pop top



pop top



insert(5)

result

