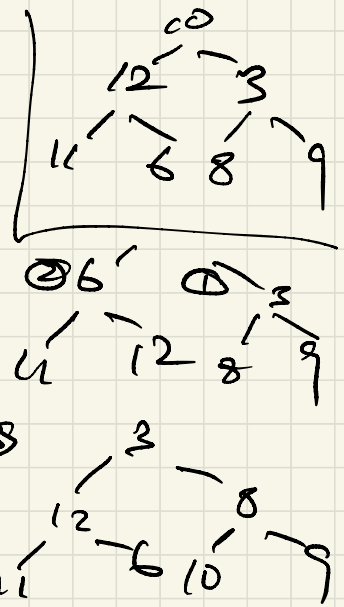
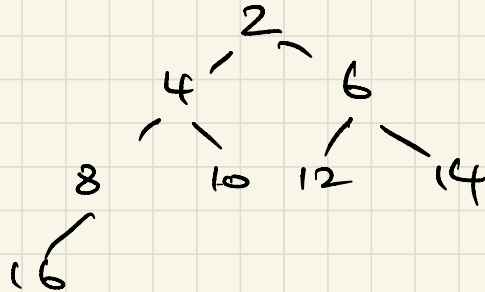


Part 4(a): [10, 12, 5, 11, 6, 8, 9]  
 heapify(2)  $\Rightarrow$  [10, 12, 3, 11, 6, 8, 9]  
 heapify(1)  $\Rightarrow$  [10, 6, 3, 11, 12, 8, 9]  
 heapify(0)  $\Rightarrow$  [3, 12, 2, 11, 6, 10, 9]

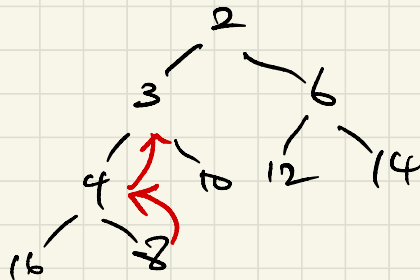


Part (b)

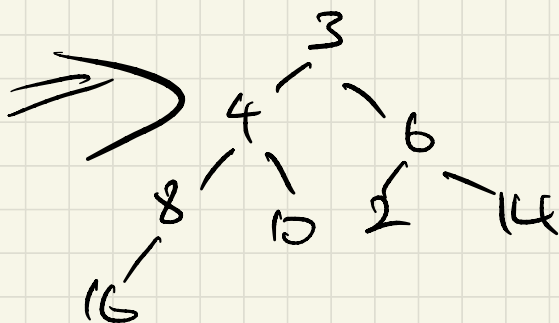
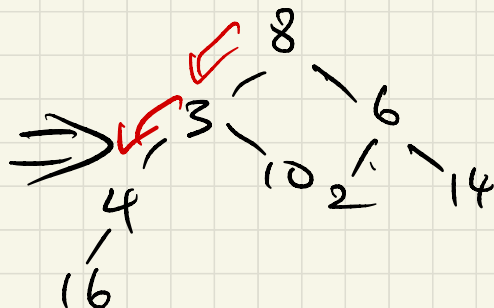
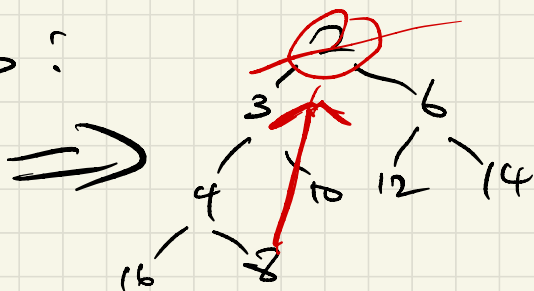
Initial config: [2, 4, 6, 8, 10, 12, 14, 16]



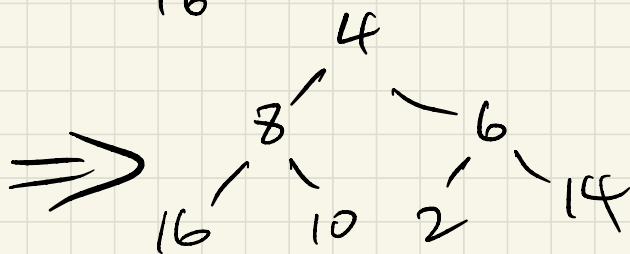
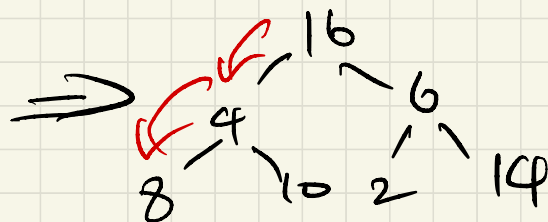
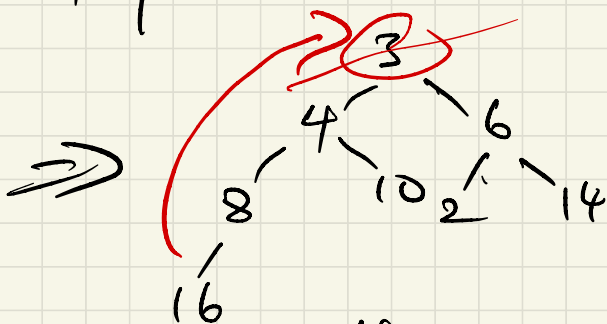
Insert 3!



Pop:



Pop:



Insert 5:

