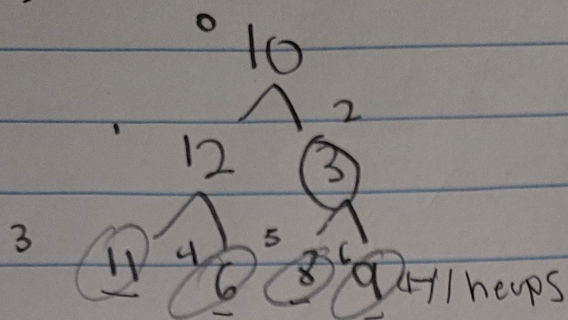


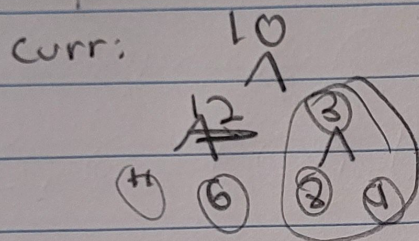
P4 - heaps

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



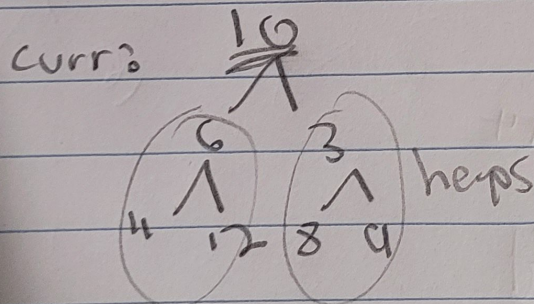
heap: f(2):

don't swap



heapify(1):

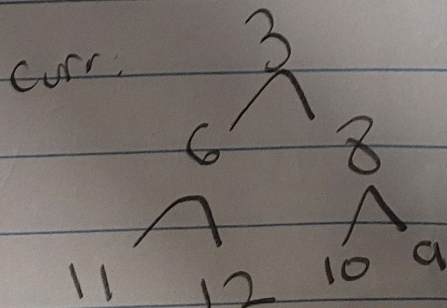
Swap 12 and 6



heapify(0):

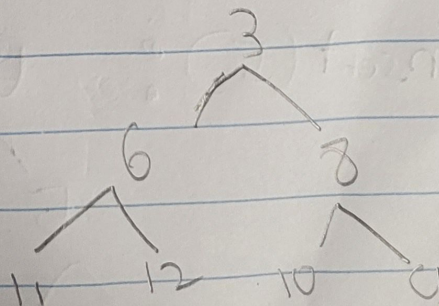
Swap 10 and 3

Swap 10 and 8

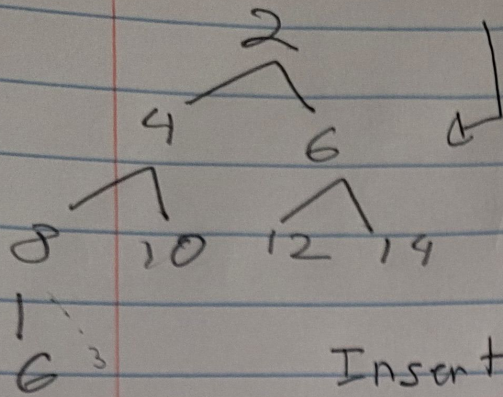


Final min-heap:

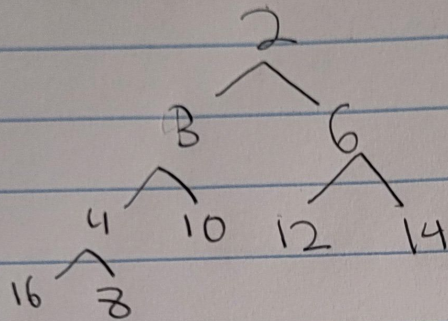
[3, 6, 8, 11, 12, 10, 9]



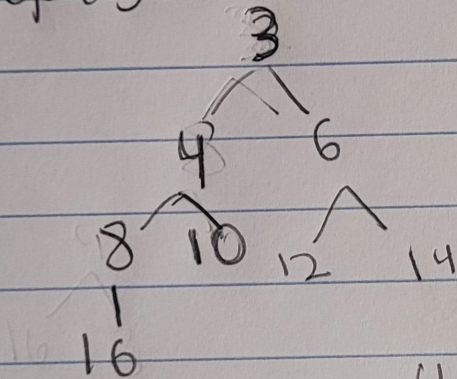
b) init: [2, 4, 6, 8, 10, 12, 14, 16]



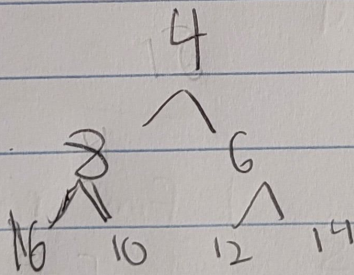
Insert (3) :



Pop() :



Pop() :



Insert (5) :

