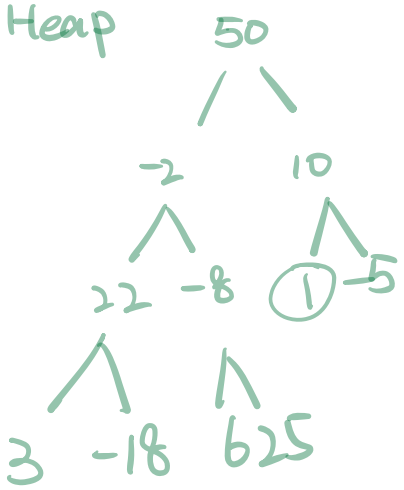
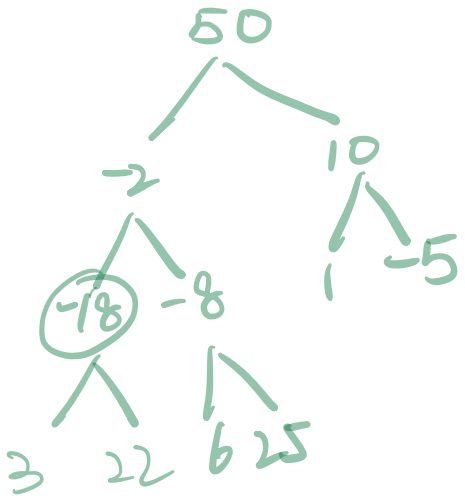
Min Heap



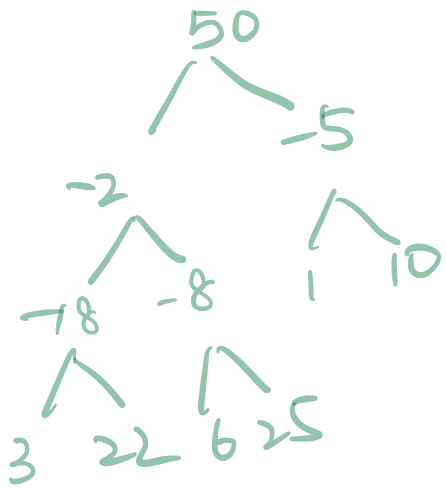
Index 5 : no change

Index 4 . no change -8 is smaller one

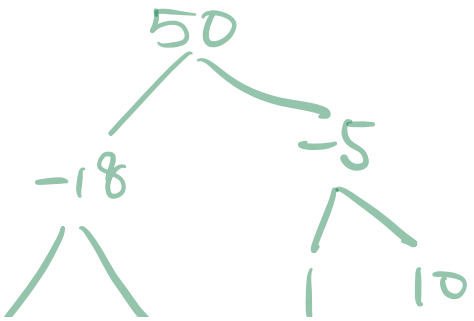
Index 3 . -18 < 22 . swap

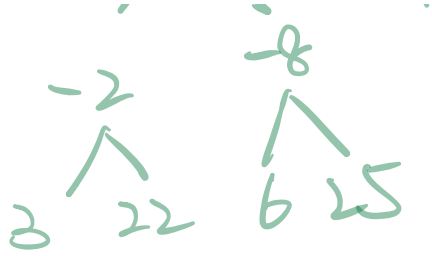


Index 2 . -5 < 10 , swap



Index 1 . -18 -2 , swap

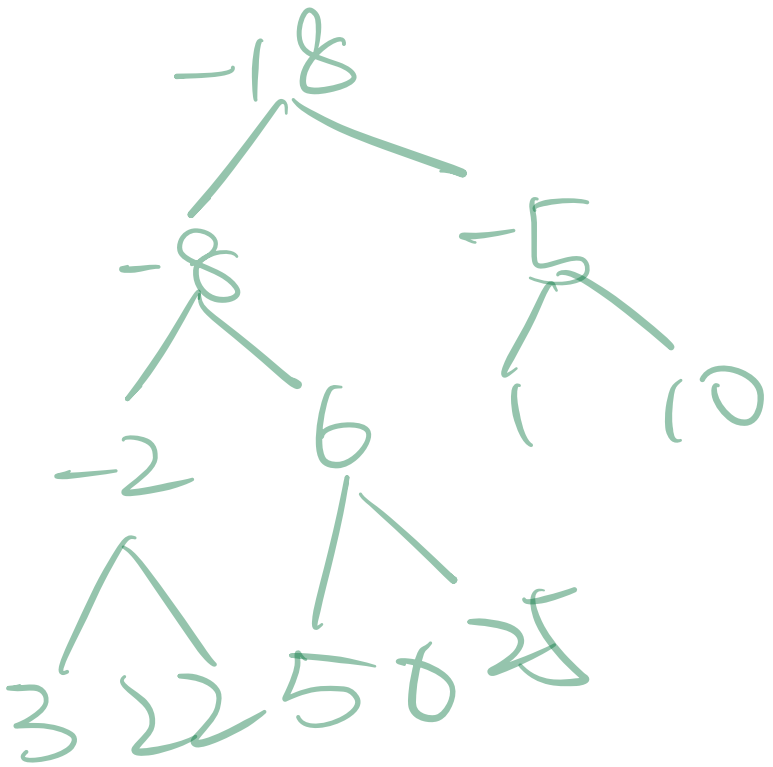




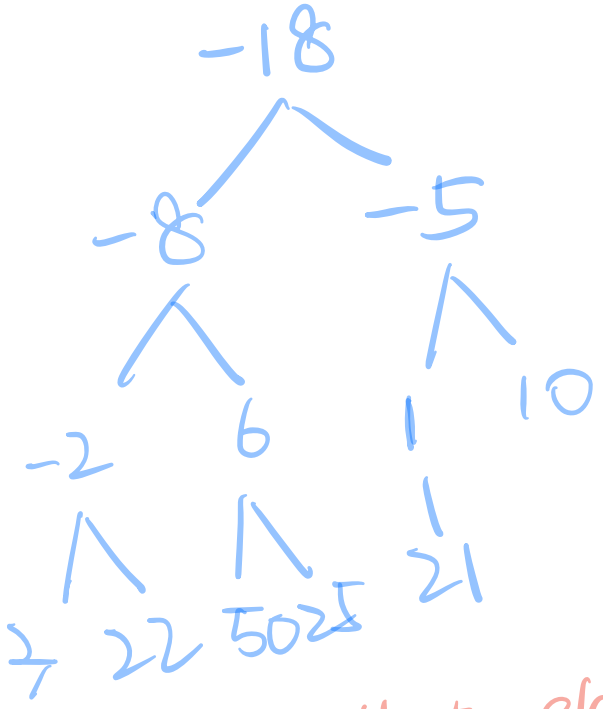
Index 0, $-18 < 50$ swap

$-8 < 50$ swap

$6 < 50$ swap



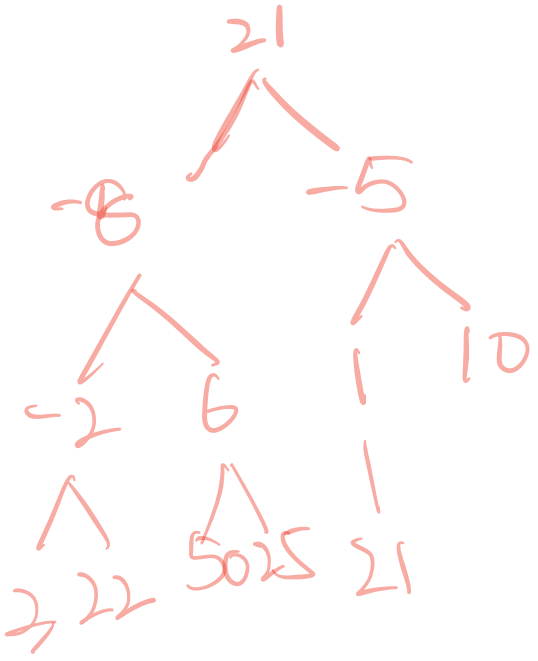
Insert 21 to the heap



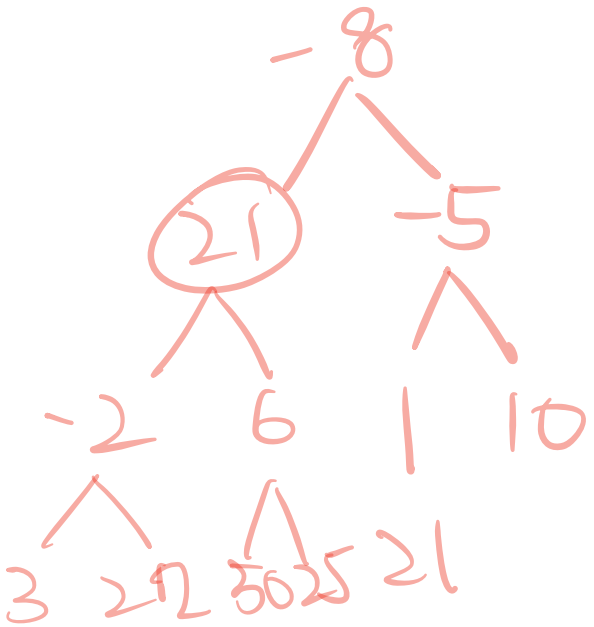
21 > 1, no change

Remove smallest element.

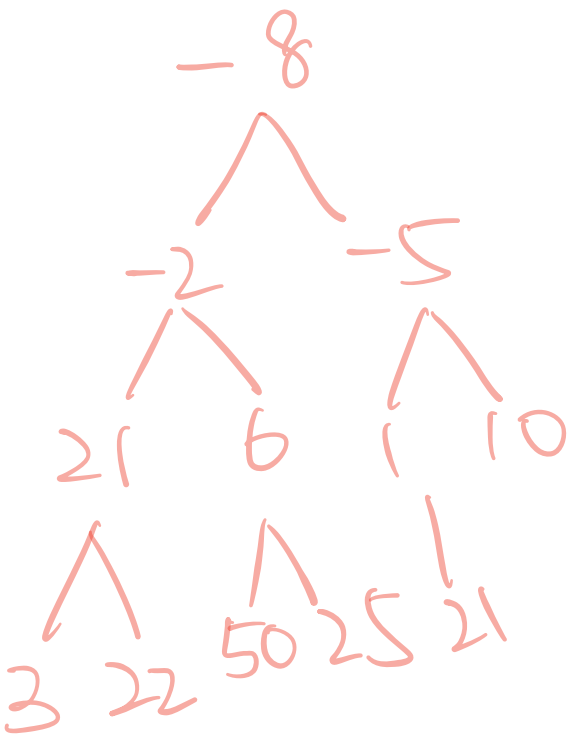
A[1] = A[12] = 21



-8 < 21, swap



-2 < 21 , swap



3 < 21 , swap