

# Heap / Priority queue

Q Kth element max or min :

Q sort a k sorted arr :

nums: [ ] K sorted array, nums[i] is not more than K positions away from position in sorted list.

min heap C ;  
when heap size > K  
heap pop to answer array.

Q K closest element to x 100 7 8 300 9 10 400

return K elements closest to 5  
heap on abs(nums[i] - 5)

Q Join rope in minimum cost :-

Ropes: [ 2 4 6 7 9 ]

2+4 cost = 6    6+6 = 12    12+7 = 19    19+9 = 28    → Total = 65

or 2+4 = 6    6+6 = 12    7+9 = 16    → Total = 62

12+16 cost = 28

Sum 6    12    16

insert current len in heap

2 4 6 7 9    6 6 7 9    7 9 12

current length = 6    cost = 6    cost = 12    16

current len = 12

