No: Date: / /

* Kth Smallest Element in a Sorted Matrix

sorted →

1	2	2	4	5
1	2	3	4	8
2	2	4	5	10
3	3	5	5	12
5	6	7	7	16

sorted ↓

find 4th smallest

1, 1, 2, 2, 2, 2, 2, 3, 3, 3, ---

O(n log k)
O(k)

Using a priority queue & when size exceeds K, remove from top ; max priority queue.

can use binary search as well.
take m[0][0] as min
take m[len][len] as max.
take mid.
Count elements # less than mid.
if count is less, low = mid+1
else high = mid-1