Kth Largest element. QuickSelect

QuickSelect Algorithm

```python
def pivotIdx(arr,pivot,lo,hi):
    i = lo
    j = lo
    while i<=hi:
        if arr[i]>pivot:
            i=i+1
        else:
            arr[i],arr[j]=arr[j],arr[i]
            i = i+1
            j = j+1
    return j-1

def KthSmallestElement(arr,lo,hi,k):

    pivot = arr[hi]
    pi = pivotIdx(arr,pivot,lo,hi)
    if k>pi:
        return KthSmallestElement(arr, pi+1, hi, k)
    elif k<pi:
        return KthSmallestElement(arr, lo, pi-1, k)
    else:
        return arr[pi]


arr = [4,0,9,3,-2,12,6,-8]
# -8,-2,0,3,4,6,9,12
print(KthSmallestElement(arr,0,len(arr)-1,1))
```