

Names: \_\_\_\_\_  
 CS Logins: \_\_\_\_\_

**Activity #5:** Show how you would Radix Sort the following input sequence: **[43, 91, 25, 63, 5, 42]**

1's place

0	1	2	3	4	5	6	7	8	9
			43						

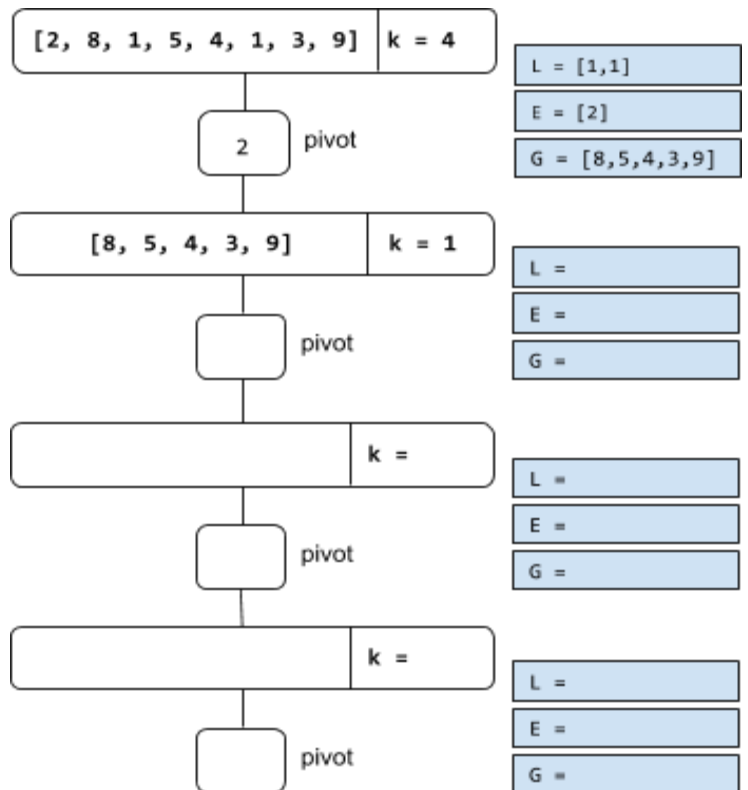
New list:

10's place

0	1	2	3	4	5	6	7	8	9

New List (whoa, it's sorted!):

**Activity #1: Selection.** Try to hand-simulate `quickselect(list, k)` with the given inputs, and a random pivot (in this case we'll use the first element):  
`listy = [2, 8, 1, 5, 4, 1, 3, 9]`,  
`select(listy, 4)`:



**Activity #2: What is the worst case runtime of Hoare's Selection?**

What case gives us this runtime?