Assume there is a space at the end of each word except for Query because Radix sort only runs correctly on n elements with d digits. Query has 1 more “digit” than the rest of the input values.

1. 
2. 
3. Preprocessing:
   1. Make a “Node” inner class that contains original index and value
   2. Pass in a “new Node(originalIndex, value)” to the ArrayList<Node>

Perform Quicksort based on the Node’s value

Postprocessing:

1. ArrayList is sorted, but original indices are out of order, so perform counting sort on the Node’s original indices.