

# Radix Sorts

## Counting Sort

• Good sort for sorting elements that can belong in "categories."

- ① Count number of elements in each category and store it in map
- ② Pick category starting point for each category and store into map (*start-pts*)
- ③ Go through unsorted array one by one, add to new sorted array at mapped index of *start-pts* in its category, then increment index in *start-pts*

Unsorted array

A	Mike
C	Tom
B	Jeff
B	Crystal
C	Allen
A	Jenny
B	Liz
A	Alex
A	Sam

Counts

A	4
B	3
C	2

*start-pts*

A	0
B	4
C	6

On each iteration, put item in the index of *start-pt* that corresponds to its category



















