Assignment 2 outline
radix sort with a special number system

0 1 2 3 4 5 6 7 8 9 a b c d e f g h I j k l m n o p q r s t u v w x y z A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

This numbering system has 10 + 26 + 26 = 62 digits, that represent the numbers 0 – 61 in decimal. This numbering system might be considered “base 62.” Given a long list of base 62 numbers, sort them in ascending and descending order using radix sort. Also write functions to convert base 62 numbers to base 10 and vice versa. The inputs to these conversions will be guaranteed to be small enough to be represented in java integers. The numbers for the radix sort can and will be quite large though, so that they cannot just be converted to ints and sorted that way.

Example numbers:
1a = 1 * 62 + 10 * 1 = 72
3bb = 3 * 62^2 + 11 * 62 + 11 * 1
AAzAzZZ55798AAz = a really huge number for sure. Still radix sortable.

Perhaps this assignment could not say “you must use radix sort” but it would become obvious after realizing the massive size of these numbers that radix sort is required.

Babylonians used a base 60 system. I’ll probably model this after that for some real world context.