Tyler DeFoor PA3 - Bucketsort 3/29/2017 Dr. Harris

## **Sequential**

Sequential Bucketsort is a program that reads in numbers, then sorts them. The sorting algorithm separates all of the numbers into corresponding buckets, then sorts the buckets. The input file's first number is the amount of ints that are to be sorted, followed by the ints. The program reads them in, puts them in an array named unsorted, and finds the maximum number.

The unsorted array is then passed to the bucketsort method, that puts the numbers into their corresponding buckets and sorts the buckets. It then puts the sorted buckets back into the array and returns the array.

Sorting one thousand integers took 0.000212193 seconds, while one million integers took 0.0633836 seconds.