Algorithms and Analysis

Sorting in Linear Time – participation

Pengpeng Lin, Ph.D.

Department of Mathematics, Statistics, and Computer Science

University of Wisconsin – Stout

Objectives

- Practice on the sorting algorithms that surpass nlgn limit for comparison based algorithms

1. Write a program that implements the Counting and Bucket sorting algorithms.

2. You program should use a random number generator to randomly generate 15 random real numbers in the interval of [0, 1) for Bucket Sort.

3. You program should use a random number generator to randomly generate 15 random integers in the interval of [0, 100] for Counting Sort

4. Display the numbers before and after the sorting process for both Bucket and Counting sorts.

5. Remember the submission to D2L for credits.