Student 1: Ethan Coyle

Student 2: Daniel Portillo

Instructor: Dr. Colmenares

Class: CMPS 3013 Advanced Algorithms

Assignment: Mandatory Assignment 4

Time to execute the 6 cpp files with selection Sort and the Counting Sort

Counting Sort:

Ascending Order- Using Counting Sort, it took: 1 milliseconds to sort Ascending InFile

Descending Order- Using Counting Sort, it took: 1 milliseconds to sort Descending InFile

Random Order- Using Counting Sort, it took: 1 milliseconds to sort Random InFile

Result Analysis

Given the analysis drawn on running off of a Razer 13 Visual Studio Compiler, the conclusion that we can draw is that for the counting sort for each of the infiles was so minimal that the timing between all of them was equivalent to one another

Selection Sort

Ascending Order- Using Selection Sort, it took : 9 seconds to sort Ascending InFile

Descending Order- Using Selection Sort, it took : 8 seconds to sort Descending InFile

Random Order- Using Selection Sort, it took : 9 seconds to sort Random InFile

Result Analysis

Judging off of the results from compiling this program to iterate and sort through the data file on each one, Being ran off of a Razer 13, the compile times were very similar to one another. Although, the compile and sorting time for the Descending Order beat both of the other sorting by one second the Ascending Order and the sorting of the Random Order were both timed the same.