Kristle Morales Figueroa

CS 300 Module 2 Assignment

Vector Sorting

**Code reflection**

The purpose of this code is to apply the learnings of vector sorting. Two kinds of vector sorting implementation happen in the code. A selection sort finds the maximum and minimum values inside the vector and rearranges the vector from largest to smallest. A quick sort splits the vector into low and high values then repeatedly compares the values until the full list is sorted. The expected result is that the quick sort is a faster process than the selection sort.

**Pseudo code**

Pseudo code was only written for the parts of the code that had to be finished.

**Selection Sort**

Define a minimum value

Define a maximum value

Define the vector size

Define position for sorted vs. unsorted items

Loop through the vector comparing values determining lowest

If value is lower than compared value swap to lowest position

**Quick Sort**

Determine the Partition algorithm

Determine the low value to the start of the vector

Determine the high value to the end of the vector

Calculate the middle point of the vector and Determine the pivot value

Once the partition is set up the quick sort algorithm runs, sending values to one side of the partition or the other.