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CS 300

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Module 2

Code Reflection: This program has a method to read the csv file and import it into a container, then has a method for implementing the quick sort algortithm then a method to perform the quick sort. It also has a method for the selection sort algorithm. After that it has the main program where it prompts the menu choices and the user input for the choice. Based on what the user inputs there are different outputs. It will display the time in seconds it took to sort the data for quick sort and selection sort. I found coding the algorithms to be straight forward and very similar to the Zybooks lessons. I did have trouble when trying to run my code I would get a “ld: symbol(s) not found for architecture arm64” error. The error ended up being because the csv library is not being linked properly during compilation. I fixed this by updating the command when running it.

Pseudocode or Flowchart:

Start

Display menu prompts to user

Take in input for menu prompt

If 1 load the bids with clock time

Implement load bids method that parses csv file into a vector.

If 2 display all bids

If 3 use selection sort algorithm to sort bids

If 4 use quick sort algorithm to sort bids

If 9 exit menu

If 3, call selection sort algorithm,

If 4, call the quick sort algorithm,

Implement partition, Partition the vector of bids into two parts, low and high.

Implement the quick sort algorithm.

Output based on which menu option user choose

Output clock times for each to see which is faster.

end