John Carrabino
carrabij@oregonstate.edu
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Lab G

TESTING:

For my driver program the user is prompted with a menu to perform a linear search, bubble sort, or a binary search on a text file filled with random integers. One file only contains the integers 1-9 and the other is a copy of the first with a 0 amended to the end. Here are some of the tests I conducted to ensure that my search and sort functions were properly implemented.

Test Case	Input	Test Function	Expected Outcomes	Observed Outcomes
Linear Search for existing target	testCopy.txt Target: 0	switch(choice){ case 1: LinearSearch	The value 0 is located at index position: 20	The value 0 is located at index position: 20
Linear Search for non-existent target	test.txt Target: 0	switch(choice){ case 1: LinearSearch	The file test.txt does not contain the value 0	The file test.txt does not contain the value 0
Binary Search for existing target	testCopy.txt Target: 0	switch(choice){ case 3: BinarySearch	The value 0 is located at index position: 20	The value 0 is located at index position: 20
Binary Search for non-existent target	test.txt Target: 0	switch(choice){ case 3: BinarySearch	The file test.txt does not contain the value 0	The file test.txt does not contain the value 0
BubbleSort	Input File: test.txt “4,3,2,1” (example values) Output File: sorted.txt	switch(choice){ case 2: BubbleSort	Contents of sorted.txt: “1 2 3 4”	Contents of sorted.txt: “1 2 3 4”