

Jesse Reid CSC6013 Coding Project 3

Python 3.12.0 (v3.12.0:0fb18b02c8, Oct 2 2023, 09:45:56) [Clang 13.0.0 (clang-1300.0.29.30)]
on darwin

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==== RESTART: /Users/jreid/Documents/JLR_dev_code/merrimack/CSC6013/test.py ====

Running P3_1.py for selection sort algorithm.

[63, 44, 17, 77, 20, 6, 99, 84, 52, 39]
"39" was compared 9 times and swapped as max 3 times.
[63, 44, 17, 77, 20, 6, 39, 84, 52, 99]
"52" was compared 8 times and swapped as max 3 times.
[63, 44, 17, 77, 20, 6, 39, 52, 84, 99]
"52" was compared 7 times and swapped as max 2 times.
[63, 44, 17, 52, 20, 6, 39, 77, 84, 99]
"39" was compared 6 times and swapped as max 1 times.
[39, 44, 17, 52, 20, 6, 63, 77, 84, 99]
"6" was compared 5 times and swapped as max 3 times.
[39, 44, 17, 6, 20, 52, 63, 77, 84, 99]
"20" was compared 4 times and swapped as max 2 times.
[39, 20, 17, 6, 44, 52, 63, 77, 84, 99]
"6" was compared 3 times and swapped as max 1 times.
[6, 20, 17, 39, 44, 52, 63, 77, 84, 99]
"17" was compared 2 times and swapped as max 1 times.
[6, 17, 20, 39, 44, 52, 63, 77, 84, 99]
"17" was compared 1 times and swapped as max 0 times.
[6, 17, 20, 39, 44, 52, 63, 77, 84, 99]

[84, 52, 39, 6, 20, 17, 77, 99, 63, 44]
"44" was compared 9 times and swapped as max 2 times.
[84, 52, 39, 6, 20, 17, 77, 44, 63, 99]
"63" was compared 8 times and swapped as max 1 times.
[63, 52, 39, 6, 20, 17, 77, 44, 84, 99]
"44" was compared 7 times and swapped as max 2 times.
[63, 52, 39, 6, 20, 17, 44, 77, 84, 99]
"44" was compared 6 times and swapped as max 1 times.
[44, 52, 39, 6, 20, 17, 63, 77, 84, 99]
"17" was compared 5 times and swapped as max 2 times.
[44, 17, 39, 6, 20, 52, 63, 77, 84, 99]
"20" was compared 4 times and swapped as max 1 times.
[20, 17, 39, 6, 44, 52, 63, 77, 84, 99]
"6" was compared 3 times and swapped as max 2 times.
[20, 17, 6, 39, 44, 52, 63, 77, 84, 99]
"6" was compared 2 times and swapped as max 1 times.
[6, 17, 20, 39, 44, 52, 63, 77, 84, 99]
"17" was compared 1 times and swapped as max 0 times.
[6, 17, 20, 39, 44, 52, 63, 77, 84, 99]

[99, 84, 77, 63, 52, 44, 39, 20, 17, 6]
"6" was compared 9 times and swapped as max 1 times.

[6, 84, 77, 63, 52, 44, 39, 20, 17, 99]
"17" was compared 8 times and swapped as max 1 times.
[6, 17, 77, 63, 52, 44, 39, 20, 84, 99]
"20" was compared 7 times and swapped as max 1 times.
[6, 17, 20, 63, 52, 44, 39, 77, 84, 99]
"39" was compared 6 times and swapped as max 1 times.
[6, 17, 20, 39, 52, 44, 63, 77, 84, 99]
"44" was compared 5 times and swapped as max 1 times.
[6, 17, 20, 39, 44, 52, 63, 77, 84, 99]
"44" was compared 4 times and swapped as max 0 times.
[6, 17, 20, 39, 44, 52, 63, 77, 84, 99]
"39" was compared 3 times and swapped as max 0 times.
[6, 17, 20, 39, 44, 52, 63, 77, 84, 99]
"20" was compared 2 times and swapped as max 0 times.
[6, 17, 20, 39, 44, 52, 63, 77, 84, 99]
"17" was compared 1 times and swapped as max 0 times.
[6, 17, 20, 39, 44, 52, 63, 77, 84, 99]

Running P3_2.py for bubble sort algorithm.

[44, 63, 77, 17, 20, 99, 84, 6, 39, 52]
"9" elements were compared and 6 elements were swapped.
[44, 63, 17, 20, 77, 84, 6, 39, 52, 99]
"8" elements were compared and 5 elements were swapped.
[44, 17, 20, 63, 77, 6, 39, 52, 84, 99]
"7" elements were compared and 5 elements were swapped.
[17, 20, 44, 63, 6, 39, 52, 77, 84, 99]
"6" elements were compared and 3 elements were swapped.
[17, 20, 44, 6, 39, 52, 63, 77, 84, 99]
"5" elements were compared and 2 elements were swapped.
[17, 20, 6, 39, 44, 52, 63, 77, 84, 99]
"4" elements were compared and 1 elements were swapped.
[17, 6, 20, 39, 44, 52, 63, 77, 84, 99]
"3" elements were compared and 1 elements were swapped.
[6, 17, 20, 39, 44, 52, 63, 77, 84, 99]
"2" elements were compared and 0 elements were swapped.
[6, 17, 20, 39, 44, 52, 63, 77, 84, 99]

[52, 84, 6, 39, 20, 77, 17, 99, 44, 63]
"9" elements were compared and 7 elements were swapped.
[52, 6, 39, 20, 77, 17, 84, 44, 63, 99]
"8" elements were compared and 6 elements were swapped.
[6, 39, 20, 52, 17, 77, 44, 63, 84, 99]
"7" elements were compared and 4 elements were swapped.
[6, 20, 39, 17, 52, 44, 63, 77, 84, 99]
"6" elements were compared and 2 elements were swapped.
[6, 20, 17, 39, 44, 52, 63, 77, 84, 99]
"5" elements were compared and 1 elements were swapped.
[6, 17, 20, 39, 44, 52, 63, 77, 84, 99]
"4" elements were compared and 0 elements were swapped.

[6, 17, 20, 39, 44, 52, 63, 77, 84, 99]

[6, 17, 20, 39, 44, 52, 63, 77, 84, 99]

"9" elements were compared and 0 elements were swapped.

[6, 17, 20, 39, 44, 52, 63, 77, 84, 99]