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Assignment: 1

Complete & Correct:	42 / 42
Tests:	6 / 6
Format and Comments:	6 / 6
Writeup:	6 / 6
Total Score:	60 / 60

Comments:

1. In regards to your question about access to local files on ada, you can "upload" files to ada via VS Code. The easiest way to do this is just drag and drop a local file in VS Code (in one window) to your folder on ada (in another window). You don't need any special extensions for dragging and dropping like this.

Unit test output:

```
[======] Running 15 tests from 3 test suites.
[-----] Global test environment set-up.
[-----] 5 tests from BasicBubbleSortTest
[ RUN
          ] BasicBubbleSortTest.EmptyArray
        OK ] BasicBubbleSortTest.EmptyArray (0 ms)
[ RUN
          ] BasicBubbleSortTest.ReverseOrder
        OK | BasicBubbleSortTest.ReverseOrder (0 ms)
Γ
[ RUN
          ] BasicBubbleSortTest.InOrder
        OK ] BasicBubbleSortTest.InOrder (0 ms)
Γ
[ RUN
          ] BasicBubbleSortTest.PartiallyUnorderedList
        OK ] BasicBubbleSortTest.PartiallyUnorderedList (0 ms)
Γ
[ RUN
          ] BasicBubbleSortTest.UnorderedList
Γ
       OK ] BasicBubbleSortTest.UnorderedList (0 ms)
   -----] 5 tests from BasicBubbleSortTest (0 ms total)
[-----] 5 tests from BasicInsertionSortTest
[ RUN
          BasicInsertionSortTest.EmptyArray
       OK ] BasicInsertionSortTest.EmptyArray (0 ms)
[ RUN
          ] BasicInsertionSortTest.ReverseOrder
       OK | BasicInsertionSortTest.ReverseOrder (0 ms)
Γ
[ RUN
          ] BasicInsertionSortTest.InOrder
        OK ] BasicInsertionSortTest.InOrder (0 ms)
Γ
          ] BasicInsertionSortTest.PartiallyUnorderedList
[ RUN
        OK ] BasicInsertionSortTest.PartiallyUnorderedList (0 ms)
Γ
[ RUN
          ] BasicInsertionSortTest.UnorderedList
Γ
        OK ] BasicInsertionSortTest.UnorderedList (0 ms)
   -----] 5 tests from BasicInsertionSortTest (0 ms total)
[-----] 5 tests from BasicSelectionSortTest
[ RUN
          ] BasicSelectionSortTest.EmptyArray
        OK ] BasicSelectionSortTest.EmptyArray (0 ms)
[ RUN
          ] BasicSelectionSortTest.ReverseOrder
        OK ] BasicSelectionSortTest.ReverseOrder (0 ms)
Γ
          ] BasicSelectionSortTest.InOrder
[ RUN
        OK ] BasicSelectionSortTest.InOrder (0 ms)
```

```
[ RUN ] BasicSelectionSortTest.PartiallyUnorderedList
[ OK ] BasicSelectionSortTest.PartiallyUnorderedList (0 ms)
[ RUN ] BasicSelectionSortTest.UnorderedList
[ OK ] BasicSelectionSortTest.UnorderedList (0 ms)
[-----] 5 tests from BasicSelectionSortTest (0 ms total)

[------] Global test environment tear-down
[=======] 15 tests from 3 test suites ran. (0 ms total)
[ PASSED ] 15 tests.
```

Performance test output:

```
# All times in milliseconds (msec)
# Column 1 = input data size
# Column 2 = avg time bubble sort, sorted
# Column 3 = avg time bubble sort, reversed
# Column 4 = avg time bubble sort, shuffled
# Column 5 = avg time insertion sort, sorted
# Column 6 = avg time insertion sort, reversed
# Column 7 = avg time insertion sort, shuffled
# Column 8 = avg time selection sort, sorted
# Column 9 = avg time selection sort, reversed
# Column 10 = avg time selection sort, shuffled
 \begin{smallmatrix} 0 & 0.00 & 0.00 & 0.00 & 0.00 & 0.00 & 0.00 & 0.00 & 0.00 \end{smallmatrix} 
1000 0.00 4.33 3.33 0.00 2.00 1.00 2.00 2.00 1.67
2000 0.00 9.33 7.00 0.00 5.00 2.00 5.00 4.00 5.00
3000 0.00 20.00 16.00 0.00 12.00 6.00 12.00 10.00 12.00
4000 0.00 36.00 33.00 0.00 21.33 10.00 21.00 19.00 22.00
5000 0.00 57.33 46.00 0.00 34.00 16.00 33.00 30.00 34.00
6000 0.00 145.33 109.33 0.00 110.00 53.00 48.00 44.00 49.00
7000 0.00 176.67 138.33 0.00 150.00 73.00 66.00 59.00 67.00
8000 0.00 247.67 230.00 0.00 196.00 95.00 86.00 78.00 87.00
9000 0.00 285.33 225.00 0.00 249.00 120.00 109.00 98.00 110.00
10000 0.00 367.33 301.00 0.00 307.00 149.00 135.00 122.00 136.00
```