

Name: *Matt Moore*

Assignment: 7

## Submission and Compilation

- Builds and Compiles Successfully

Complete & Correct: 25/25

- Unit Test Results:

```
[=====] Running 14 tests from 1 test case.
[-----] Global test environment set-up.
[-----] 14 tests from BSTCollectionTest
[ RUN      ] BSTCollectionTest.CorrectSize
[ OK      ] BSTCollectionTest.CorrectSize (0 ms)
[ RUN      ] BSTCollectionTest.SimpleFind
[ OK      ] BSTCollectionTest.SimpleFind (0 ms)
[ RUN      ] BSTCollectionTest.SimpleRemove
[ OK      ] BSTCollectionTest.SimpleRemove (0 ms)
[ RUN      ] BSTCollectionTest.SimpleRange
[ OK      ] BSTCollectionTest.SimpleRange (0 ms)
[ RUN      ] BSTCollectionTest.SimpleSort
[ OK      ] BSTCollectionTest.SimpleSort (0 ms)
[ RUN      ] BSTCollectionTest.ResizeTest
[ OK      ] BSTCollectionTest.ResizeTest (0 ms)
[ RUN      ] BSTCollectionTest.CopyAndAssignment
[ OK      ] BSTCollectionTest.CopyAndAssignment (0 ms)
[ RUN      ] BSTCollectionTest.RemoveNodeWithTwoChildren
[ OK      ] BSTCollectionTest.RemoveNodeWithTwoChildren (0 ms)
[ RUN      ] BSTCollectionTest.RemoveNodeWithTwoChildrenWithLeft
[ OK      ] BSTCollectionTest.RemoveNodeWithTwoChildrenWithLeft (0 ms)
[ RUN      ] BSTCollectionTest.SimpleHeight
[ OK      ] BSTCollectionTest.SimpleHeight (0 ms)
[ RUN      ] BSTCollectionTest.RemoveRL
[ OK      ] BSTCollectionTest.RemoveRL (0 ms)
[ RUN      ] BSTCollectionTest.RemoveLL
[ OK      ] BSTCollectionTest.RemoveLL (0 ms)
[ RUN      ] BSTCollectionTest.RandomeRemove
[ OK      ] BSTCollectionTest.RandomeRemove (0 ms)
[ RUN      ] BSTCollectionTest.LargeScaleSort
[ OK      ] BSTCollectionTest.LargeScaleSort (0 ms)
[-----] 14 tests from BSTCollectionTest (0 ms total)

[-----] Global test environment tear-down
[=====] 14 tests from 1 test case ran. (0 ms total)
[ PASSED  ] 14 tests.
```

- Performance Tests:

- Test 1: Finished in 60.5196 s
- Test 2: Finished in 66.8774 s
- Test 3: Finished in 65.5248 s
- Test 4: Finished in 63.5928 s
- Test 5: Finished in 67.5564 s
- Test 6: Finished in 19.356 s

**Testing:** 5/5

**Format and Comments:** 5/5

**Discussion and Analysis:** 4/5

- sort is  $O(n)$

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**Total Score:** 39/40

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