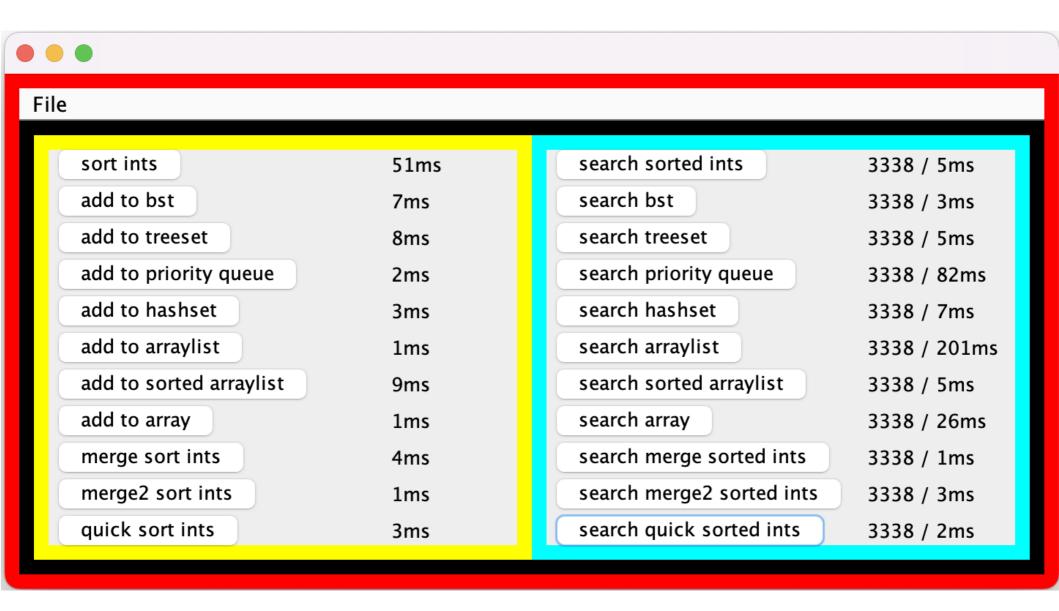- The following slides show the expected results for the various test files that are posted for program 8
- The number of search values that are found need to match my values
- The time values should be similar
- I have three extra ones on my GUI
  - Merge sort (bottom up merge sort)
  - Merge2 sort (top down merge sort)
  - Quicksort
- The merge sort line is extra credit for 10 points to offset lost points from program 8 or any other programming assignment
- I will most likely test with the 100,000 value files, since the 250,000 files take a long time to run

sort_data_1000.txt & search_data_1000.txt expected results

sort ints	5ms	search sorted ints	333 / 1ms
add to bst	9ms	search bst	333 / 0ms
add to treeset	3ms	search treeset	333 / 1ms
add to priority queue	1ms	search priority queue	333 / 7ms
add to hashset	0ms	search hashset	333 / 1ms
add to arraylist	0ms	search arraylist	333 / 4ms
add to sorted arraylist	1ms	search sorted arraylist	333 / 1ms
add to array	1ms	search array	333 / 5ms
merge sort ints	0ms	search merge sorted ints	333 / 0ms
merge2 sort ints	0ms	search merge2 sorted ints	333 / 1ms
quick sort ints	0ms	search quick sorted ints	333 / 0ms

File

sort_data_10000.txt & search_data_10000.txt expected results

sort ints	51ms	search sorted ints	3338 / 5ms
add to bst	7ms	search bst	3338 / 3ms
add to treeset	8ms	search treeset	3338 / 5ms
add to priority queue	2ms	search priority queue	3338 / 82ms
add to hashset	3ms	search hashset	3338 / 7ms
add to arraylist	1ms	search arraylist	3338 / 201ms
add to sorted arraylist	9ms	search sorted arraylist	3338 / 5ms
add to array	1ms	search array	3338 / 26ms
merge sort ints	4ms	search merge sorted ints	3338 / 1ms
merge2 sort ints	1ms	search merge2 sorted ints	3338 / 3ms
quick sort ints	3ms	search quick sorted ints	3338 / 2ms

File

sort_data_100000.txt & search_data_100000.txt expected results

sort ints	3628ms	search sorted ints	33281 / 22ms
add to bst	44ms	search bst	33281 / 26ms
add to treeset	56ms	search treeset	33281 / 29ms
add to priority queue	11ms	search priority queue	33281 / 5848ms
add to hashset	32ms	search hashset	33281 / 9ms
add to arraylist	6ms	search arraylist	33281 / 19323ms
add to sorted arraylist	49ms	search sorted arraylist	33281 / 33ms
add to array	2ms	search array	33281 / 1548ms
merge sort ints	20ms	search merge sorted ints	33281 / 20ms
merge2 sort ints	13ms	search merge2 sorted ints	33281 / 12ms
quick sort ints	31ms	search quick sorted ints	33281 / 12ms

sort_data_250000.txt & search_data_250000.txt expected results

File

sort ints	22201ms	search sorted ints	83197 / 45ms
add to bst	103ms	search bst	83197 / 72ms
add to treeset	127ms	search treeset	83197 / 84ms
add to priority queue	44ms	search priority queue	83197 / 36315ms
add to hashset	38ms	search hashset	83197 / 20ms
add to arraylist	7ms	search arraylist	83197 / 67624ms
add to sorted arraylist	118ms	search sorted arraylist	83197 / 74ms
add to array	3ms	search array	83197 / 8782ms
merge sort ints	43ms	search merge sorted ints	83197 / 46ms
merge2 sort ints	31ms	search merge2 sorted ints	83197 / 37ms
quick sort ints	50ms	search quick sorted ints	83197 / 35ms