

1. Name:
 # Penelope Sanchez
 # 2. Assignment Name:
 # LAB 08: SUB-LIST SORT ANALYSIS
 # 3. Assignment Description:
 # Demonstrate how to verify and compute metrics for a nontrivial algorithm.
 # 4. What was the hardest part? Be as specific as possible.
 # Create the test cases
 # 5. How long did it take for you to complete the assignment?
 # 4 hrs

Modularization Metrics



Algorithmic Metrics

array: sortable values len: length

```

x      ← 1  while x <
len    y ← x
      while y > 0 & array[y - 1] > array[y]      swap
array[y - 1] & array[y]
y      ← y - 1  end
while  x ← x + 1
      end while end
procedure
```

Test Cases

1. Read no input
2. Read short number of inputs
3. Read large number of inputs
4. Read symbols
5. Read repeated number of inputs
6. Random numbers

Trace Verification

1. Read no input
Output: []
2. Read short number of inputs
[5, 8, 3]
Output: [8, 5, 3]
3. Read large number of inputs
[5, 8, 3, 1, 0, 2, 9, 7, 4, 6]
Output: [9, 8, 7, 6, 5, 4, 3, 2, 1, 0]
4. Read symbols
[\$, #, @, !]
Output: []
5. Read repeated number of inputs
[9, 5, 8, 3, 1, 0, 2, 9, 7, 4, 6, 0]
Output: [9, 9, 8, 7, 6, 5, 4, 3, 2, 1, 0, 0]
6. Random numbers
[1, 5, 6] random
Output: [6, 5, 1]