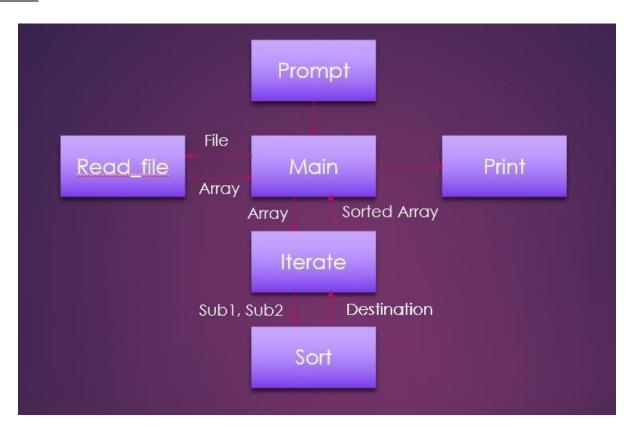
- # 1. Name:
- # Penelope Sanchez
- # 2. Assignment Name:
- # LAB 08: SUB-LIST SORT ANALYSIS
- #3. Assignment Description:
- # Demonstrate how to verify and compute metrics for a nontrivial algorithm.
- # 4. What was the hardest part? Be as specific as possible.
- # Create the test cases
- # 5. How long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

Modularization Metrics



Algorithmic Metrics

```
array: sortable values len: length
```

```
\begin{array}{lll} x & \leftarrow 1 & \text{while } x < \\ \text{len} & y \leftarrow x \\ & \text{while } y > 0 \text{ & array[} y - 1] > \text{array[} y] & \text{swap} \\ \text{array[} y - 1] \text{ & array[} y] \\ y & \leftarrow y - 1 & \text{end} \\ \text{while} & x \leftarrow x + 1 \\ & \text{end while end} \\ \text{procedure} \end{array}
```

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: []
- 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]