ENGR141 Grade Report: Python 2 PA

Name	Kathryn Atherton	**Total Points Earned**	14.5
Team	59	**Total Points Possible**	20
Grader	Casey Schilling	**Percentage Earned**	73%

Grading System Message(s)	Individual Assignment Grade

Does flow diagram:	**Pass**	**Part**	**Fail**
Follow correct formatting shapes?	**0**	NA	-0.5
Follow flow diagram language independence?	**0**	NA	-0.5
Have a repetition structure to iterate over the entire inputted list?	**1**	0.5	0.0
Have a conditional structure to determine whether to swap values?	**1**	0.5	0.0
Has a process to swap inputted values as necessary?	**1**	0.5	0.0
Subtotal	**3 of 3**		

Does the program:	**Pass**	**Part**	**Fail**
Have correct filename?	**0**	NA	-0.5
Have no code standard issues?	0	-0.5	**-1**
Have an appropriate message requesting inputs?	**1**	0.5	0
Pass inputs to a function called list_sort to be sorted?	**1**	0.5	0
Use a loop to iterate over the input values?	**1**	0.5	0
Has a conditional statement to determine the lower of two values within the list?	**1**	0.5	0
Swap values WITHOUT creating a new list?	**1**	0.5	0
Subtotal	**4.0 of 5**		

Test Case 1

Input	**Output**	**Pass**	**Part**	**Fail**
5 8 7 9 6 4 1 2 35 0	[0, 1, 2, 4, 5, 6, 7, 8, 9, 35]	**1**	0.5	0

Test Case 2

Input	**Output**	**Pass**	**Part**	**Fail**
5 8 9 -1 5 7	[-1, 5, 5, 7, 8, 9]	**1**	0.5	0
Subtotal		**2 of 2**		

Task 2

Does flow diagram:	**Pass**	**Part**	**Fail**
Follow correct formatting shapes?	**0**	NA	-0.5
Follow flow diagram language independence?	**0**	NA	-0.5
Logically solve the given problem?	**2**	1	0
Subtotal	**#### of 2**		

Does the program:	**Pass**	**Part**	**Fail**
Have correct filename?	**0**	NA	-0.5
Have no code standard issues?	0	-0.5	**-1**
Input all data (a1, a2, y, d, e, m, t)?	**1**	NA	0
Use looping structure to approximate solution?	2	**1**	0
Calculate magnitude of error?	**1**	0.5	0
Reduce step size and increase number of steps if no solution is found?	1	**0.5**	0
Stop looping when solution is within error tolerance?	1	**0.5**	0
Output solution, error, total iterations & number of step size reduction or an error message?	1	**0.5**	0
Subtotal	**3.5 of 7**		

Test Case 1

Input	**Output**	**Pass**	**Part**	**Fail**
1 2 5 7 0.2 30 5	The algorithm converges to the following values: Estimated Solution: 3.0625 Magnitude error: 0.0625 Total number of iterations: 458 Number of times step size was reduced: 4	1	0.5	0
Subtotal		**- of 1**		

Total	**14.5 of 20**

Grader Comments

Flowcharts: For Task 1, it's a good flowchart overviewing the logic of the problem. For Task 2, the logic of the issue seems alright, however try to keep make sure your flowcharts still look neat once you are finished. Neatness would fall under part of "logically solve the problem" because if I have to interpret your flowchart, it opens the possibility of interpretting it wrong and getting the logic incorrect.

Task 1: Watch your code standard things like line length. Removing comments from every individual line of code will help you with this and make the code a little easier to read through. You also made a new list technically by assigning the returned list value to a new variable name, so I gave you partial because we asked you to not create a new list.

Task 2: It looked as though you tried to use conditional to compare the values of f(x) compared to y as well as other values comparisons, which would have been okay if you hadn't needed to compare these values multiple times, which is were it looked like you struggled with this program. With this program, it is actually relatively simple using compound while loops (while error > e and reductions < Max_Reductions for example). This would be a good program to go back and try to solve again to ensure you understand the purpose of while loops versus conditionals. Also, make sure you are taking the inputs in the way we asked for - Your program asks for a1 and a0 separately, but they are given as a list.