ENGR141 Grade Report: Python 1 PA

Name	Kathryn Atherton	**Total Points Earned**	14.5
Team	59	**Total Points Possibl**	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**
Logically solve the given problem?	**2**	1	0
Subtotal	**1.5**	**of**	**2**

Does program:	**Pass**	**Part**	**Fail**
Have correct filename?	**0**	NA	-0.5
Have no code standard issues:	0	**-0.5**	-1
Generate two random numbers between zero and ten?	**1**	0.5	0
Round numbers to the nearest tenth?	**1**	0.5	0
Convert decimal numbers to fractions?	**1**	0.5	0
Calculate sum of two randomly generated numbers?	**1**	0.5	0
Attempts to output randomly generated numbers, addition of decimal numbers, and addition of fractions on separate lines?	**1**	0.5	0
Attempts to output each fraction with lowest common denominator?	2	1	**0**
Subtotal	**4.5**	**of**	**7**

Test Case 1

Input	**Output**	**Pass**	**Part**	**Fail**
None	First Random Number: 1.34364244 Second Random Number: 8.47433737 1.3 + 8.5 = 9.8 13/10 + 17/2 = 49/5	1	**0.5**	0
Subtotal		**0.50**	**of**	**1**

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	**1**	**of**	**2**

Does program:	**Pass**	**Part**	**Fail**
Have correct filename?	0	NA	-0.5
Have no code standard issues:	0	NA	-1
Import the math module?	1	0.5	0
Initialize two resistance values?	1	0.5	0
Calculate equivalent resistance in series?	1	0.5	0
Calculate equivalent resistance in parallel?	1	0.5	0
Attempts to output in a neat tabular format?	1	0.5	0
Attempts to output values rounded to the nearest tenth?	1	0.5	0
Subtotal	**5.0**	**of**	**6**

Test Case 1

Input	**Output**	**Pass**	**Part**	**Fail**
3.9	Type of Resistance First Resistance Second Resistance Equivalent Resistance Parallel 3.9 ohms 7.4 ohms 2.6 ohms Series 3.9 ohms 7.4 ohms 11.3 ohms	2	1	0
Subtotal		**2.0**	**of**	**2**

Total	**14.5 of 20**

Grader Comments

For the flowcharts, your language dependence points it comes from how you imported the separate modules. This is something you have to do in Python, but it isn't necessarily the same in other programming languages. A flowchart should avoid using steps like this and should remain solely about the process of solving the problem which could be in any program. Also for the second task, you have an input block that inputs R1 and sets R2. This is the right shape for inputing R1 from the user, but you are simply initializing the value of R2 which is a process step as it doesn't take an input into the program.

Task 1: Good work. Per code standard, remember to comment your code. In addition, within fractions there is a limitDenominator command that will help find the lowest common denominator to make fractions look better.

Task 2: Keep in mind your code standard line length requirements. Something that could help might be variable names, while code standard recommends descriptive names, often you can shorten them without losing the descriptiveness. Keep in mind to comment your code. It doesn't have to be every line, but aim for blocks of code (for this one it may have been enough to break off an input section, calculations, and outputs). Great table!

Also it is a good idea to always include units for inputs and outputs.