02: PYTHON BASICS CONTINUED

1: How many bisections do you expect to need if the tolerance is 10^{-3}? 10^{-6}? 10^{-9}? Explain your reasoning.

2: How (aside from actually changing the function in the code) could you make `bisection.py` easier to use for different functions?

3: What are the differences between lists and tuples? Tuples and dictionaries? Sets and dictionaries? In what cases might you use each?

4: How would you check within an `if` statement if a variable is a list or not? Why would you need to do this?