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: Write how you think local and global variables work within functions.
5: How would you check within an if statement if a variable is a list or not? Why would you need to do this?