Please turn in answers to the following questions on Monday, in class.

1. What are the advantages of using Python *interactively*? What are the advantages of using Python to *execute scripts*?

2. Comment statements cannot be understood by Python. Why, then, is it useful to write comments?

Consider the following program, which calculates \( x \) in the quadratic formula \( (ax^2 + bx + c) \), for questions 3 & 4:

```python
a = float(input('Enter the \( x^2 \) coefficient: '))
b = float(input('Enter the \( x \) coefficient: '))
c = float(input('Enter the constant coefficient: '))
rootPart = b*b - 4*a*c
rootPart = rootPart ** 0.5
root1 = (-b + rootPart)/(2*a)
c = (-b - rootPart)/(2*a)
print(root1)
print(c)
```

3. In *reading* the program above, is it *clearer* to use a single variable for multiple purposes (i.e., how *c* is used) or to have several variables each with a dedicated purpose? Explain with examples from the code.

4. Given a choice, would it be *clearer* to have variable names be short and easy to type, or longer and more descriptive? Explain using examples from the quadratic formula code above.
5. What commands are necessary to incorporate a new file, new.py, in the current git project on the server?

6. Write expressions that:
   
   (a) Compute the integer part of the quotient of integers a and b? (e.g. a=7, b=3, results in 2)

   (b) How about the fractional part of the quotient? (e.g. a=7, b=3, generates 0.333333)

   (c) Exchange the values of i and j.

7. There are two boolean values, True and False. You can convert any type of value to a boolean with the bool initializer. For example:

   >>> bool(3)
   True
   >>> bool("Hello, world.")
   True

   Find some examples of values that convert to False. How are all these values similar?

8. You have twelve TAs in this course: Noah, Chris, Will, Jimmy, Jacob, Julia, Aidan, Grace, Nevyn, Nathan, Alex, & Linda. Get four of them to sign this space (slight extra credit if six or more sign):

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