

Duane A. Bailey

Homework 1 – *Due: Monday, in class*

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?
3. Suppose you were *reading* a program. Would it be *clearer* to use a single variable for multiple purposes or to have several variables each with a dedicated purpose? Explain.
4. Given a choice, would it be *clearer* to have variable names be short and easy to type, or longer and more descriptive? Explain.
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=5, b=3, results in 1)

(b) How about the fractional part of the quotient? (e.g. a=5, b=3, generates 0.666666)

(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: Abby, Alex₁, Alex₂, Ariel, Betsy, David, Dzung, Grace, Javier, Maria, Peter, and Will. Get four of them to sign this space (slight extra credit if six or more sign):