

# Homework 9

*Due: Oct. 8, 2010*

## Python Basics

Open up IDLE and then open a new module and save it as YOUR-NAMEpythonHW.py. In this file you will be writing new functions the way you did in class. Remember that to run a Python program you hit the F5 key. If there are no syntactical errors in your code you should see an additional input prompt. For each of the exercises remember to test the functions you've written by calling on it and passing in some numbers. For example, to test the subtract function you might give the Python shell something like this:

```
>>>
>>> subtract(5,2)
3
>>>
```

Make sure to try a few tests for each function to see that you're doing everything right. Don't worry about finishing this all during class. Whatever you don't finish will become homework.

1. Write a function `add(a,b)` that returns the sum of two integers `a` and `b`.
2. Write a function `subtract(a, b)` that returns the difference between two integers `a` and `b`. You should be subtracting `b` from `a`.
3. Write a function `bigger(a,b)` that returns the larger of the two integers `a` and `b`.
4. Write a function `smaller(a,b)` that returns the smaller of the two integers.
5. Write a function `sumall(a,b)` that returns the sum of all the integers between the integers `a` and `b` (including `a` but not including `b`). You may assume that `a < b`.
6. What if `a > b`? Write a function `sumallsmarter(a,b)` that will sum all the numbers between `a` and `b` regardless of which one is bigger.

(Hint: you might want to use `bigger` and `smaller`).

7. Write a function that prints out “The Count says 1”, “The Count says 2,”... “The Count says 10.”
8. Write a function `average(list)` that takes in a list of integers and prints the average.
9. Write a function `median(list)` that takes in a list of integers and prints the median of the list. Don’t worry about a list with an even number of items — you can assume that the number of items in the list is odd.
10. Write a function `biggest(list)` that takes in a list of integers and outputs the biggest integer.

### Handin

E-mail YOURNAMEpythonHW.py to `cs0931tas@cs.brown.edu`.