

INTRODUCTION TO COMPUTER SCIENCE I

Spring 2014

LAB 5 Functions and coin flips

This week, we're going to write a program that plays a silly little coin flipping game. The user's inputs will need to be checked. Most of all, the program is broken down into functions; your job will be to write the functions.

1 Your assignment

This week, we're going to jump straight into the code. Begin by grabbing the beginnings of a program from here:

```
https://app.cs.amherst.edu/sfkaplan/courses/2014/spring/COSC-111/coinflip.py
```

The code contains a great deal of commentary about the what the game is. Note that the `main()` function is the first function called to start your program, and that it, in turn, calls four other functions. Above `main()`, there are four `TASKs` that describe the four functions you need to write. Once you write them, the program should work!

2 Indexing into strings

If you are interested in the *extra challenge* contained in `coinflip.py`, then you must know how to grab individual characters out of a string. To explain this concept, let's start with a string, like so, in the shell window:

```
>>> s = 'My dog has fleas.'
```

Consider the string as a sequence of *characters* (e.g., 'M', verb+'y'+, the space character ' '). Further consider the sequence to start at position 0 (**not** position 1). It turns out that Python allows you to use the *square brackets* to specify one position in the sequence and get its character, like so:

```
>>> s[0]
'M'
>>> s[5]
'g'
```

You can further find out how long the string is with the `len()` function:

```
>>> len(s)
17
```

Useful, eh?

3 Submitting your work

Go to the CS submission system to submit your work for this lab. You need only submit your `coinflip.py` module.

This assignment is due on Sunday, Feb-23, 11:59 pm