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:

```python
>>> 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:

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

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

```python
>>> 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