
MATH 20 FALL 14 ASSIGNMENT 8, DUE Friday 11/7

The usual: hand in solutions to the problems on Friday, send the code in by email.

1 Joint Distributions and Random Walks

1. Coin
2. Another version of x,y
3. Cycle

2 Book problems

3 Code: Betting Game

This time you're going to write a simple interactive game. If you write:

```
var=raw_input("Enter something:")
```

The console will print *Enter something:* (That's your *prompt message*) and then you can click that place on the console, type whatever you wish, and press enter to input it. Try it. If you want it to be an integer value, make it:

```
var=int(raw_input("Enter something:"))
```

Now, to your actual task:

Write a game that asks you to enter an integer from -10 to 10, then simulates a 10-step simple random walk on integers starting at 0. If the final position matches the number you entered, it prints "you won", otherwise it prints "try again"

Tip: if you want to try out if your game works, do it with a just 4-step random walk, you're more likely to win. Also, this whole game can be coded in very few lines. How do you simulate this random walk?

For the class on Friday the 7th, try to think about how to construct a 10-step (not necessarily simple) random walk on integers starting at 0 that makes it less likely to make a successful bet, even if the person betting can see your code.