

Homework 3-3

Due: Nov. 10, 2011, 2:25 pm

Task 1:

A random guessing game consists of 100 coin flippings. The score is the number of heads. For this homework, you want to answer the question: if I play this game 1000 times, what is the percentage of times that I get a score of 62 or more?

Here are steps to guide you through the process of answering this question. If you are confident enough, you should try to break the task down into steps yourself.

1. Flip a coin, print 0 if it comes out tails or 1 otherwise.
2. Repeat 100 times. Instead of printing 0s and 1s, keep a count of how many 1s you have seen. That is your score of one game. Print the score.
3. Now repeat the game 1000 times. instead of printing out the scores, keep a count of how many of the scores are 62 or greater. Print that number. Calculate the percentage.

Reminders

- Do not forget to say `import random` at the beginning of your program. Then `random.random()` will return a random number between 0 and 1 for you every time it is called.
- You can have a for-loop within another
- The following for-loop gets you execute something multiple times:

```
for i in range(0,100):
```

- Make sure you are keeping the counts in the right way (i.e., think about when you should reset your count and when you shouldn't).

CS0931

Homework 3 **Due: Nov. 10, 2011, 2:25 pm**

Handin

Email your program to `cs0931tas@cs.brown.edu` and title the file `'YOURNAME'HW3-3.py` — for example, `DylanFieldHW3-3.py`.