Lab 12 - Computing In Context

Instructor: Griffin Newbold

12/7/22 Agenda

1.) Epilogue
2.) Beyond 1002
3.) Concluding Remarks
4.) Project 3 Help

Why learn Python?

You learned Python this semester to give you a simple introduction to programming and to give you the necessary tools needed to do high level research tasks if you so desire.

Okay but Why Python Specifically?

1. To novice programmers it is the easiest language to learn
2. It has the easiest gateway to lots of tools
3. It supports multiple programming paradigms

Beyond 1002

If you are interested in learning more programming you have a few options for next steps currently:

COMS 1004: Introduction to CS/Prog in JAVA

COMS 3132: Intermediate Computing in Python (the direct sequel for this course)

COMS 3136: Essential Data Structures

1004 is a course you must take if you wish to pursue the major, if you have questions about the major then please ask me.

Beyond 1002

1004 teaches you how to program in Java and will be taught by Adam Cannon in the Spring, meaning I will be TAing for 1004 next semester.

1006 is a slightly more difficult version of 1002 intended for majors and SEAS students, massive content overlap

3132 is a new course designed to pick up where the programming skills leave off here.

3136 is a Data Structures course taught in C/C++ apparently intended for nonmajors

Concluding Remarks

Thank you I appreciate all the work you have put in this semester and now this class has pretty much concluded, once you submit this homework assignment you are free.

To those of you who are taking 1004 next semester, you'll see me again!

Stay Connected

Professionally: LinkedIn - @griffinnewbold

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Don’t forget to leave me a nice review for the course evaluations! :^D

Problem 1

1. Make sure you make lists containing the EC values
2. In def target _ estimator(ec, target, trials):
    a. Keep a count of the matches to target
    b. Use the logic from last lab to get the total for the iteration
    c. Remember to expand the probability for all possible elections and that it is an integer

Problem 2 Part I

1. The ec_estimator(ec_in_the_bag, v_left, trials) function looks really similar to the previous function you wrote!
   a. There are two major differences! What are they?

2. Consider the aspect of when to increment the counter
3. Consider the return value for the function as well

Problem 2 Part 2

1. Be sure to add the gore _ probilities list as well as the bush _ probabilities list, you are given gore so you can just copy it down, is there an easy way to dynamically create the list for bush?
2. This really is just combining the two previous problems together
3. How do we determine the estimate for the tie?