CSCI 127: Joy and Beauty of Data

Lecture 10: Files

Reese Pearsall Snowmester 2020

https://reesep.github.io/classes/127/main.html

Lab 5 due **tomorrow** (Tuesday 11:59 PM)

- After today, you will be able to finish it
- Very similar to an example we will do later today
- There is an overview video posted

Program 2 due Wednesday @ 11:59 PM

- Should have everything you need to complete it
- I'll likely make Wednesday's lecture shorter to give you more time to work on it

Lab 6 due Thursday @ 11:59 PM

You have two options:

- 1. Come to a live virtual review session Thursday @ 11:00 AM in my Webex room
 - If you show up, you will receive a 100% for Lab 6

- 2. Answer any two example test questions and submit your python solution to D2L
 - This will largely be effort based... if you attempted them you will receive 100% for Lab 6

I'm hoping this will be an easy, non-stressful 100% for everyone.....

Midterm Exam on Friday

Will be posted at 6 AM on Friday. Due at 11:59 PM on Friday

I'm hoping that it shouldn't take more than 2 hours to complete



I'm still trying to figure out how I want it to be submitted (.py file, written down and scanned, etc)

100 Points

10 multiple choice Qs (20 pts)



Two of these will be pulled from the practice exam

3 short programming problems (60 pts)

- 1. Basic Python Calculation (20 pts)
- 2. Selection (30 pts)
- 3. Nested List (30 pts)



One of these questions will be directly pulled from the example test questions

Midterm Exam on Friday

Content covered on midterm

Data Types/Variables

Operators (+,-,*,%,...)

User input

.format

Functions

Selection

Iteration (for loops/while loops)

Lists

Strings

Modules

Files

Good ways to study:

- Review Labs/Programs
- Review in class examples
- Do example test questions
- Read through textbook

Extra Credit Opportunity

If you fill out a short, anonymous mid-semester survey (coming soon), I will add 2% to your midterm grade.

Submit a screenshot that you completed the survey to D2L

** If you get 100% on the midterm, the 2% may or may not be added

More formal announcement and instructions coming very soon

Extra Credit Opportunity

If you fill out a short, anonymous mid-semester survey (coming soon), I will add 2% to your midterm grade.

Submit a screenshot that you completed the survey to D2L

** If you get 100% on the midterm, the 2% may or may not be added

More formal announcement and instructions coming very soon

You can now sign up for a 1 on 1 meeting time w/ Reese

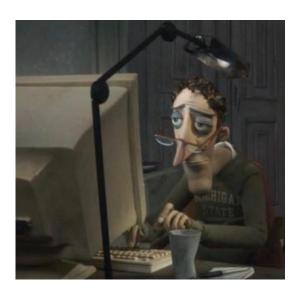
Remember that 5% of your final grade comes from meeting with me once during the semester

https://doodle.com/poll/civq435b9vgiy62w?utm_source=poll&utm_medium=link

- **EVERYONE** must sign up for a time via doodle. If none of the available times work, email me
- First come, first serve
- Please only sign up for 1 time slot. If you need more than 15 minutes, then feel free to book two consecutive time slots (times are in Mountain/Denver)

What you can expect from me

- I will have all labs/programs graded by the midterm exam (maybe not Program 2...)
- I will have solution videos for all assignments so far by the midterm
- I will post all example test questions tonight/tomorrow
- I will post practice exams tomorrow/Wednesday morning
- I will post lab 6, lab 7 and program 3 tomorrow



Today:

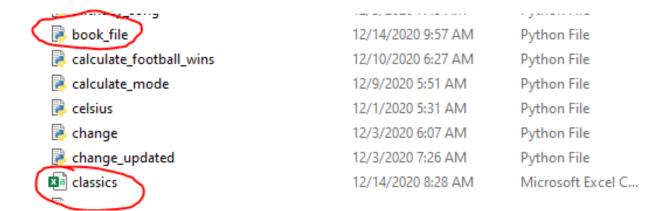
Reading from Files, Recursion (maybe?)



Reading from files

Steps for reading a file

STEP 0: Make sure your .py file and file you are reading from are in the same folder/directory!!



Reading from files

"r" means you reading Name of file. Could be Steps for reading a file from the file a .txt, .in, etc file = open("my file.csv", 1. Open the file 2. Discard the column headers (if necessary) file.readline() 3. Do a for loop through each line in the file for each line in file: row = each line.split(",") 4. Convert each line of the file (string) to a list using .split(). If you reading from a .csv file, you will always split on ## do stuff here with row a comma (","), otherwise you will need to figure out what to split on.

Announcements (Tuesday):

Lab 5 due tonight @ 11:59 PM

Program 2 due **tomorrow** @ 11:59 PM

Lab 6 due Thursday @ 11:59 PM**

Midterm Exam on Friday

Extra Credit Opportunity Available

Arrays start at 0 Arrays start at 1 @Perl Arrays can start wherever (ツ)/ Arrays start at 4, stop at 6, restart at 1, stop again at 3, restart at 7 then continue on

You can now schedule your one on one meeting w/ Reese (5% of your grade)

Today: More on reading from files, writing to files