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category topic: <u>CSC 135</u> full title: Python Homework

related notes: 2022-01-26T1755-Python Homework Setup 2022-01-25T1026-Python in

<u>CSC 135</u>

source: https://krovetz.net/135/module\_python/hw.html

## **Graded Homework**

WW04.3 | Wednesday, January 26, 2022 | 06:15 PM

## **Python Homework**

- 1. May collaborate with one or two other students on this homework if you wish
- 2. Collaboration: Work put into each problem should be roughly equal and all parties should come away understanding the solution
  - 1. Pair programming Problems solved this way can be individually submitted
    - Two or three look at the screen while one of the members operate the keyboard.
    - 2. The one operating the keyboard is the "driver" and the other is the "navigator".
      - 1. The driver explains talks through their code
      - 2. The navigator asks questions and make suggestions.
        - 1. Tutors the driver to help them understand the solution if driver is "stuck"
    - 3. The driver and navigator should switch roles every 10 to 15 minutes.

## 2. Code review

- 1. Members of the collaborative each try to solve the problem independently
- 2. Each member take turn analyzing each other's code
  - 1. Ask questions to understand each other's algorithm
  - 2. Suggesting improvements
- 3. After code reviews each collaborator can then fix their own code
  - 1. Do not copy code
  - 2. Recreate your own variant without looking at your partner's
- Goal is to learn from one another, so you can write similar code on your own during exam
- 4. Find collaborators via Discord and/or use group-finding post on Piazza

## **Homework Exercises**

Tasks are due by Midnight Sunday, February 6 (1% of grade)

- 1. Do 10-20 Python exercises from Code Step By Step
  - 1. Do at least two from each of the sections
    - 1. collections/list
    - 2. collections/dict
    - 3. collections/set
    - 4. loops
    - 5. parameters and return
  - 2. Among the 10-20 exercise you do, include the following
    - 1. codestepbystep problem python > parameters > count\_digits
      - 1. CodeStepByStep Python Parameters count\_digits
    - 2. codestepbystep problem python > collections > set > num\_in\_common
    - 3. codestepbystep problem python > collections > list > collapse
    - codestepbystep problem python > collections > dict > has\_duplicate\_value
- 2. On our programming exam, you will be asked to bring a laptop to class and use the Mimir web programming interface to edit and submit small Python programs
  - 1. Will soon put a Python problem on Mimir to practice
  - 2. Go to Mimir and practice editing and submitting a Python solution there
  - 3. A tester will tell you whether your code passes my test cases
  - 4. Do not need to click the submission button
    - 1. Whatever code was the last one you ran the tester on is the version that will ultimately get graded