**Partner Assignment: Practice Interview**

**Objective**

The partner assignment aims to provide students with the opportunity to practice coding in an interview context.

**Group Size**

Each group should have 2 people.

**Outline**

**Part 1:**

Hop on a Zoom call with your partner. One of you is the interviewer. The interviewee will record the Zoom call (get the necessary permissions).

The interviewer will ask either one of the questions they have mastered in Assignment 1 i.e. say the question number. The interviewee will click on the link associated with that number and share their screen. Give the interviewee around 20 minutes to solve the problem. Feel free to give hints or calcifications about the problem. The interviewee should:

* Attempt to solve the problem while explaining their thought process using correct terminology learned in class
* When proposing the final solution, give its time and space complexity
* Explain why their solution works using words

It’s totally normal if the interviewee doesn’t solve the problem! Real-interviewers care about your thought process and any progress you make counts. Moreover, real interviewers usually give you twice as long.

At the end of the 20 minutes, the interviewee should stop the recording and take a screenshot of what they’ve done. Now, the interviewer and interviewee switch.

**Part 2:**

Create a Juypter Notebook and complete the following about the problem you were asked during the interview.

* Paraphrase the problem in your own words
* Create 2 new examples of each problem
* Code the solution in Python (code chunk). Try to find the best time and space complexity solution!
* Explain why your solution works
* Explain the problem’s and space complexity
* Explain the thinking to an alternative solution (no coding required, but a classmate reading this should be able to code it up based off your text)

This is the same as part 1 of assignment 1!

**Part 3:**

Please write a 200 word reflection documenting your studying process from assignment 1 and the interview (part 1) at the bottom of the Juypter Notebook. Again, export this Notebook as pdf.

**Submission Requirements**

In the same repository you submitted assignment 1, please ADD the following

* EITHER
  + The Zoom video recording where you were the interviewee. Note, GitHub has a 2GB file size limit.
  + A text file containing a link to google drive or other *public* cloud storage. Make sure the permissions are such that anyone with the link can view
* The PDF of part 2 and part 3

Please name your files appropriately!

**Evaluation Criteria**

For the interview, we are looking for the following

* Student understands what the question is asking
* Correctness, time, and space complexity of the coding solution
* Clarity in explaining why the solution works, its time and space complexity

For the PDF, we are looking for the same points as assignment 2

* Problem is accurately stated in the student’s own words
* Two examples are correct and easily understandable
* Correctness, time, and space complexity of the coding solution
* Clarity in explaining why the solution works, its time and space complexity
* Clarity in the proposal to the alternative solution