

Assignment 3: Cracking

ESOC 495: Information Privacy with Applications
Total Homework/Assignment Points: 100 (+5 EC)

Due: Tuesday, 16 Sep 2021

Mr. Phony Pants is dismayed at his mistake, and has vowed to improve. He has taken an interest in security, and is now playing around inside his home directory. He has also locked down his home directory to prevent access to his experiments, but he is still new at all this, and sometimes he makes mistakes!

*Create a **plain text** file (not word, pdf, or anything else) called ‘watchfulness_challenge’ for your answers; write your netid as the first line in the file. For each question below, write your answer on a new line. Do not add question numbers before writing your answers. If you skip any problems, create a line called ‘skipped,’ again with your netid as the first line, and afterward write the number of each skipped problem on a separate line, along with what you tried that ultimately did not work for potential partial credit (if you don’t skip any problems, you need not create the file).*

Finding the target

1. [25] Write a ksh script to repeatedly check whether mr_phony_pants has made a mistake with the permissions on his directory. If he has made a mistake, immediately copy his directory contents to your home directory. Describe clearly and exactly what the script does. (Do not check more than once per minute).
2. [25] Write a one-line pipeline to do the same thing as your script. Again, describe clearly and exactly what each part of the pipeline does.

Reading the secret

3. [25] Describe what each file in Mr. Phony Pants’s directory is (you may need to look at the contents of the files).
4. [25] Use one of Mr. Phony Pants’s files to get the information you need to log in as mr_phony_pants. Describe clearly what you did to do this.