

PatriotCTF2023 Write Ups:

1. Uh Oh!:

- a. Downloaded the zip file named “rockyou.zip” and used the command “unzip rockyou.zip” to extract the file.
- b. The objective of the problem is to find a phone number and the line it’s on in a very large text file filled with passwords.
- c. The problem provided a link to get more information about a phone numbers structure (NXX) NXX-XXXX, where N is a number in range [2-9] and X in range [0-9]. Link provided: https://en.wikipedia.org/wiki/North_American_Numbering_Plan#Modern_plan.
- d. Since the file is too big to search manually a grep is necessary, I used the command ‘grep -n “^([2-9][0-9][0-9]) [2-9][0-9][0-9]-[0-9][0-9][0-9][0-9]” rockyou.txt’ to search for the specific format of the phone number and the “-n” provides the line as well.
- e. The result is “7731484:(404) 303-7283” where the first part is the line, and the second part is the phone number.
- f. As a result, the flag is PCTF{7731484_4043037283}

2. Twins:

- a. Downloaded the two files named “he.txt” and “she.txt” that the problem provided.
- b. The files are two text files filled with short stories that at first glance seem identical, however, they are not.
- c. I used the command “diff - -color he.txt she.txt” and there were a couple of lines that showed that they were different. After reading carefully the differences are words that are missing letters, the letters are replaced with numbers or “_”.
- d. Differences between “he.txt” and “she.txt”:
 - i. abundance : abund4nce
 - ii. was : as
 - iii. traveling : travling
 - iv. collapsed : collaped
 - v. 2050 : 250
 - vi. mia : ia
 - vii. showed, engineering : show3d, engineering_
 - viii. they, others, skills : hey, thers, skill
 - ix. survivors, remained : survvors, emained
 - x. errand : rrand
 - xi. currents : current
 - xii. where : where_
 - xiii. transformed, had : transfored, hd
 - xiv. long : log
- e. Now, by taking each of the missing or replaced letters from the words and reorganizing them I ended up with “4wes0m3_stories_man”.
- f. Finally, I used PCTF{4wes0m3_stories_man} and it was the correct solution.