Cryptography – credstuff

I started by downloading the program they provided in the description. We are provided a text file with usernames and a password file containing all the passwords that corresponds to the user. We need to find the password associated with the user “cultiris” and decrypt it.

We are told that the first username corresponds to the first password, so on and so forth. We can use this information to find the password that is associated with cultiris. First, I opened vim and searched for the user, using set number in vim I can easily view what the line number associated with the user is. This means the password we are looking for is on line 378 in the password file.

A picture containing shape

Description automatically generated

To find the password on that specific line I wrote a simple python script which would go through each line and if line == 378 it would print the password.

Text

Description automatically generated

Running that script, we are provided the password that we need to decrypt.

Text

Description automatically generated

Now we can see that the password itself is not the flag as the flag format is “picoCTF{flag}” but, it looks very close. Considering the {} are still present, this could be encrypted using a simple shift cipher. I took the value and put it into cyberchef and eventually found it was encrypted using ROT13 and when I used the decryption tool, the flag was found.

Graphical user interface, text, application

Description automatically generated

Flag = picoCTF{C7r1F\_54V35\_71M3}