

## Gatta Catch Em All

Problem: Find flag in the given text file

Hint: That's a lot of lines, a script might be useful.

Given: given-easy.txt

Steps:

1) Notice that most the lines end in ==. This is a sign of base64.

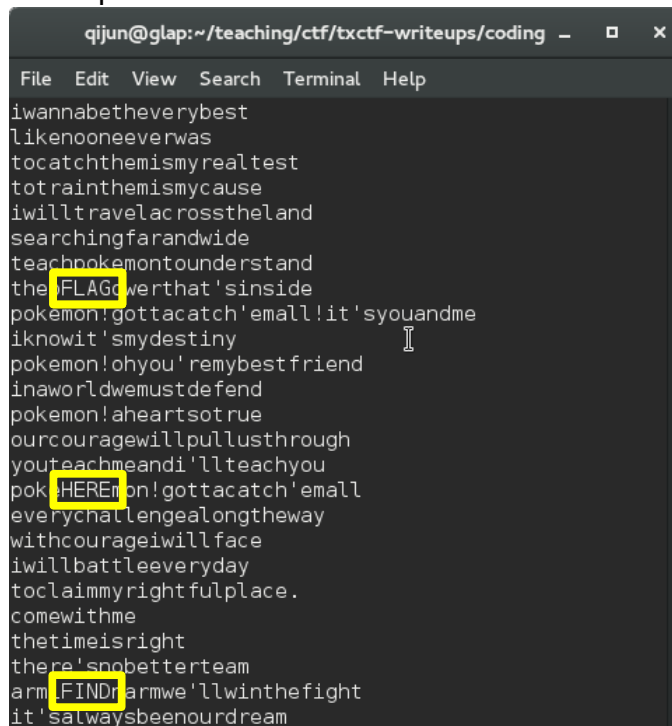
Note: Base64 is an ASCII encoding scheme. The = at an end of a string is a good clue. To read more on base64 visit <https://en.wikipedia.org/wiki/Base64>.

2) Write a short python script to open the file and decode each line. This script will open the given file, and read each line from the file. Then, it decodes each line with base64, and print the decoded string. "base64.b64decode()" is the base64 decoding function. To learn more about this base64 library, visit <https://docs.python.org/2/library/base64.html>.

```
#!/usr/bin/python
# -*- coding: utf-8 -*-
from pwn import *
import base64

with open("gotta.given.txt", "r") as f:
    for line in f:
        print base64.b64decode(line),
```

3) Then, we will have the output as below.



```
qijun@glap:~/teaching/ctf/txctf-writeups/coding _ □ ×
File Edit View Search Terminal Help
iwannabetheverybest
likenooneeverwas
tocatchthemismyrealtest
totrainthemismycause
iwilltravelacrosstheand
searchingfarandwide
teachpokemontounderstand
the FLAGwerthat'sinside
pokemon:gottacatch'emall!it'syouandme
iknowit'smydestiny
pokemon!ohyou'remybestfriend
inaworldwemustdefend
pokemon!aheartisot rue
ourcouragewillpullusthrough
youteachmeandi'llteachyou
pok HEREmon!gottacatch'emall
everychallengealongtheway
withcourageiwillface
iwillbattleeveryday
toclaimmyrightfulplace.
comewithme
thetimeisright
there'snobetterteam
arm FINDr armwe'llwinthefight
it'salwaysbeenourdream
```

4) We can notice a pattern in the output. Four letters are capitalized every 8 lines. This give the clue to find the solution.

8: thepFLAGowerthat'sinside

16: pokeHEREmon!gottacatch'emall

24: armiFINDnarmwe'llwinthefight

32: teacPATThpokemontounderstand

40: youtERNEeachmeandi'llteachyou

5) Let's make a python script to read this pattern through the entire file and concatenate the four letters every 8 lines together ...