CTF c4ptur3th3fl4g

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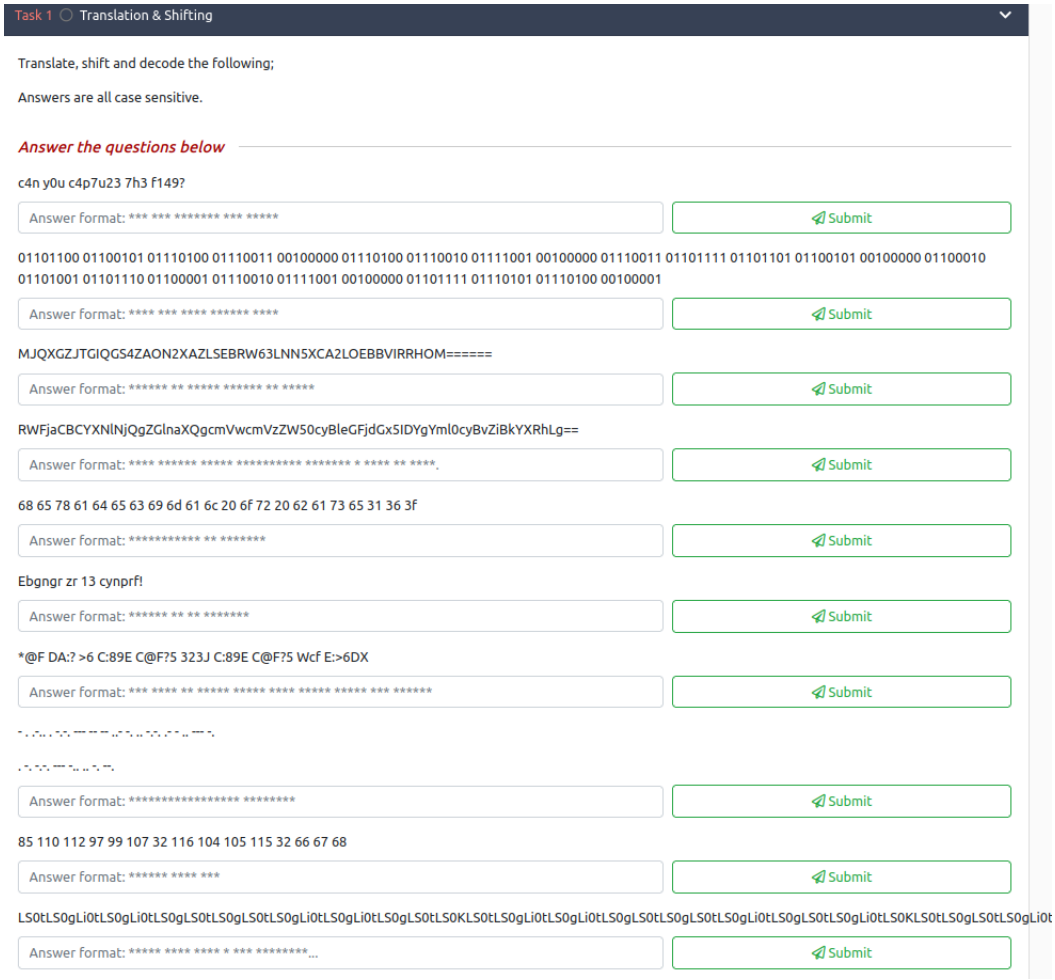
December 2023

Those are the tasks i have to do, I am using the ubuntu machine with openvpn connection to tryhackme network.

1 Questions



Task 1 Translation & Shifting

Translate, shift and decode the following;

Answers are all case sensitive.

Answer the questions below

c4n y0u c4p7u23 7h3 f149?

Answer format: *** *** ******* *** *****

Submit

01101100 01100101 01110100 01110011 00100000 01110100 01110010 01111001 00100000 01110011 01101111 01101101 01100101 00100000 01100010 01101001 01101110 01100001 01110010 01111001 00100000 01101111 01110101 01110100 00100001

Answer format: **** *** **** ****** ****

Submit

MJQXGZJTGIQGS4ZAON2XAZLSEBRW63LNN5XCA2LOEBBVIRRHOM======

Answer format: ****** ** ***** ****** ** *****

Submit

RWFjaCBCYXNlNjQgZGlnaXQgcmVwcmVzZW50cyBleGFjdGx5IDYgYml0cyBvZiBkYXRhLg==

Answer format: **** ****** ***** ********** ******* * **** ** ****.

Submit

68 65 78 61 64 65 63 69 6d 61 6c 20 6f 72 20 62 61 73 65 31 36 3f

Answer format: *********** ** *******

Submit

Ebgngr zr 13 cynprf!

Answer format: ****** ** ** *******

Submit

*@F DA:? >6 C:89E C@F?5 323J C:89E C@F?5 Wcf E:>6DX

Answer format: *** **** ** ***** ***** **** ***** ***** *** ******

Submit

- . .-.. . -.-. --- -- -- ..- - . .. -.-. .- - .. --- -.

. -. -.-. --- -.. .. -. --.

Answer format: ***************** ********

Submit

85 110 112 97 99 107 32 116 104 105 115 32 66 67 68

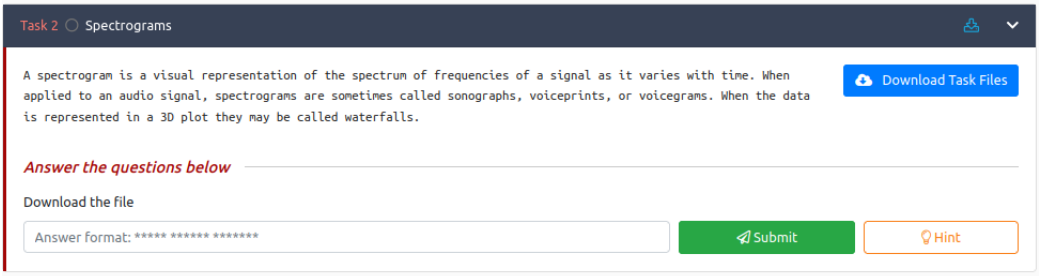
Answer format: ****** **** ***

Submit

LS0tLS0gLi0tLS0gLi0tLS0gLS0tLS0gLS0tLS0gLi0tLS0gLi0tLS0gLS0tLS0KLS0tLS0gLi0tLS0gLi0tLS0gLS0tLS0gLS0tLS0gLi0tLS0gLS0tLS0gLi0tLS0KLS0tLS0gLS0tLS0gLi0t

Answer format: ***** **** **** * *** ********...

Submit



Task 2 Spectrograms

A spectrogram is a visual representation of the spectrum of frequencies of a signal as it varies with time. When applied to an audio signal, spectrograms are sometimes called sonographs, voiceprints, or voicegrams. When the data is represented in a 3D plot they may be called waterfalls.

Download Task Files

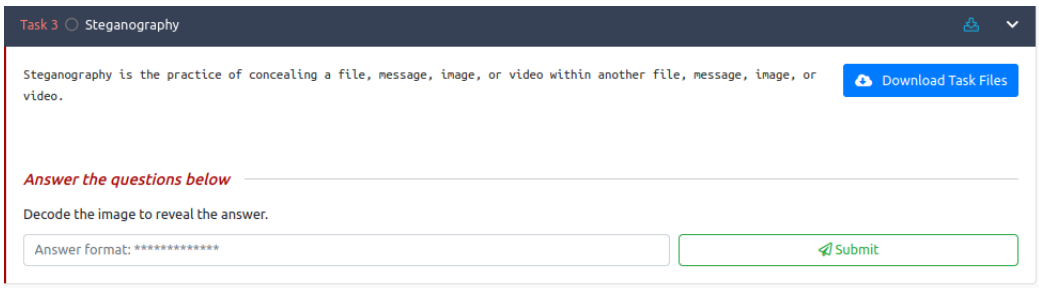
Answer the questions below

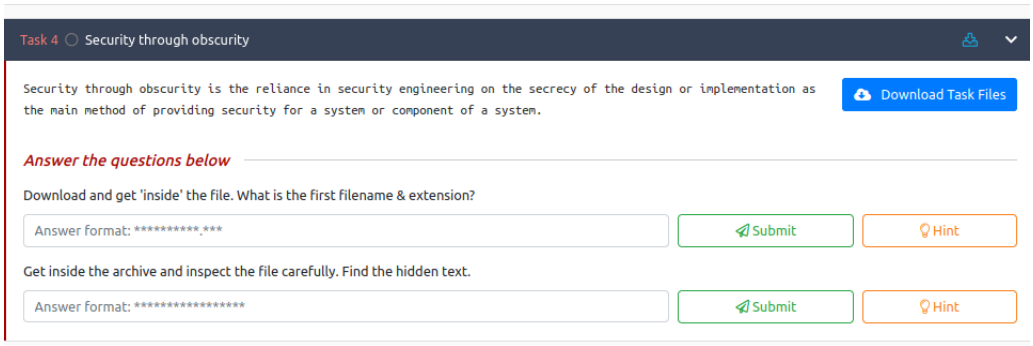
Download the file

Answer format: ***** ****** *******

Submit

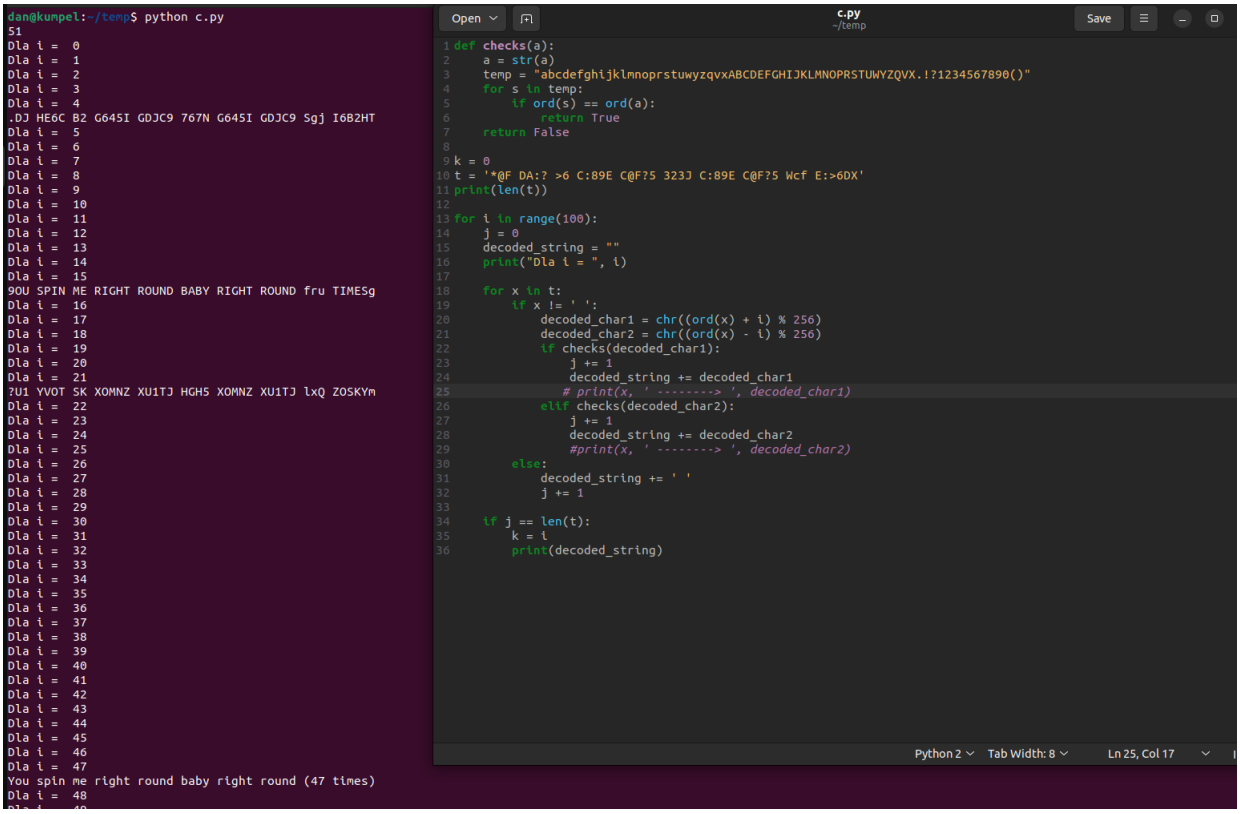
Hint





1st question is easy: Can you capture the flag? The second is in binary, so each octet gives one letter: "let's try some binary out!" is the answer. The 3rd one is in base32. That was a guess because of the equal signs – they make the whole sequence be divisible by 8 (56/8=7). The next one is base64 (Each Base64 digit represents exactly 6 bits of data. – this is the answer). The next one is hex – "hexadecimal or base16?"? The next one is ceasar cipher with the key equal to 13, so the solution is " Rotate me 13 places!"

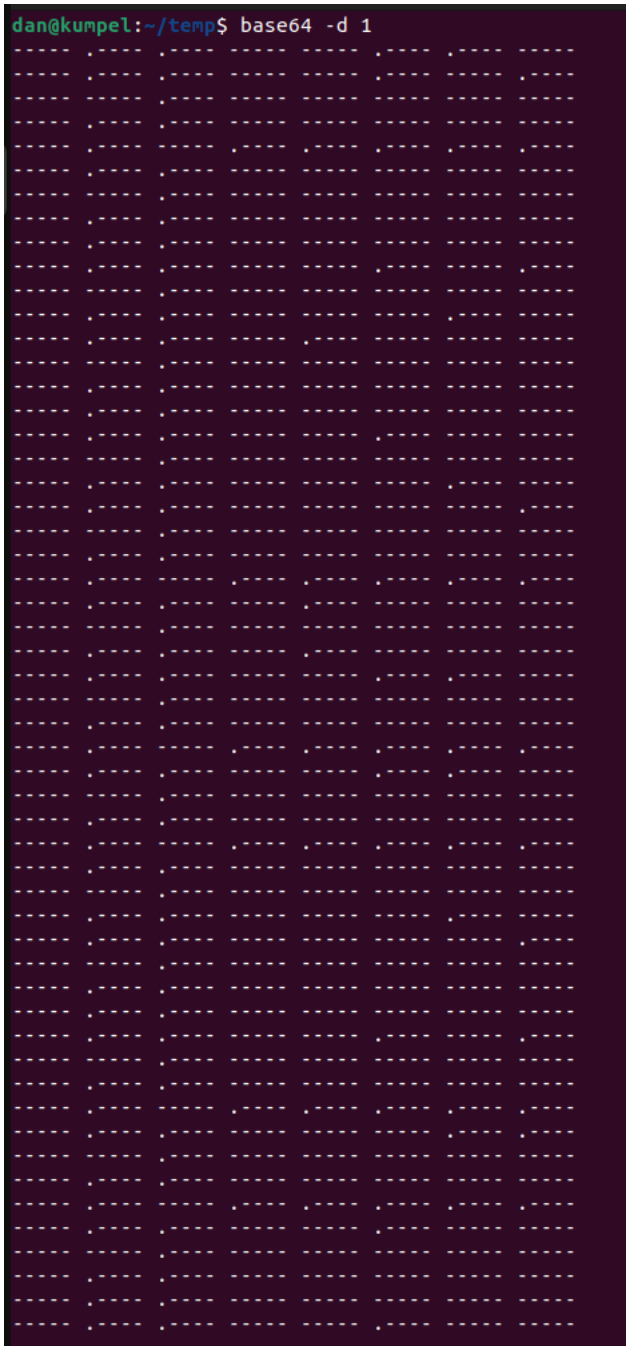
The next one was tough, as I had to write my own script to see it. This is like a ceasar cipher but in the whole ASCII region. Look at the answer:



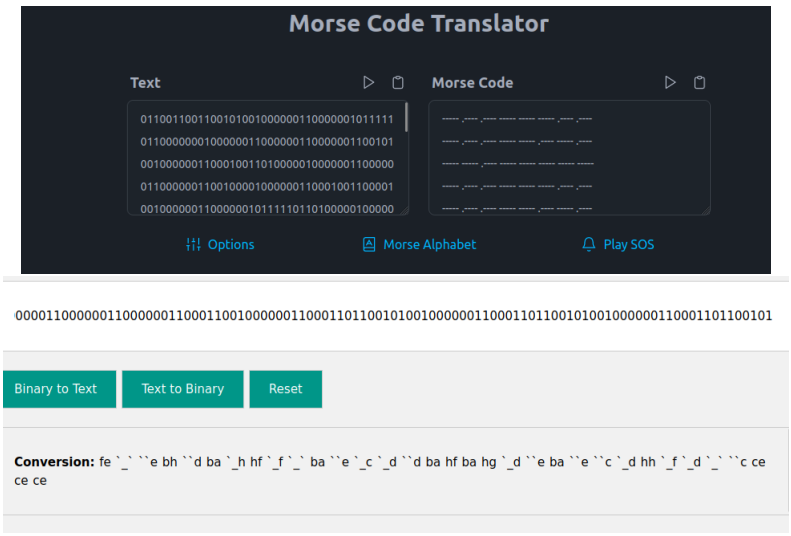
Screenshot 1: Using bruteforce i managed to solve this one

Now the next one is just morse code. TELECOMMUNICATION ENCODING is the solution. The next one is just ASCII code for "Unpack this BCD".

THe last one looks tough, but is not. If we decode it in base64, we see that it is a morse code.



Screenshot 2: now just copy it and decode



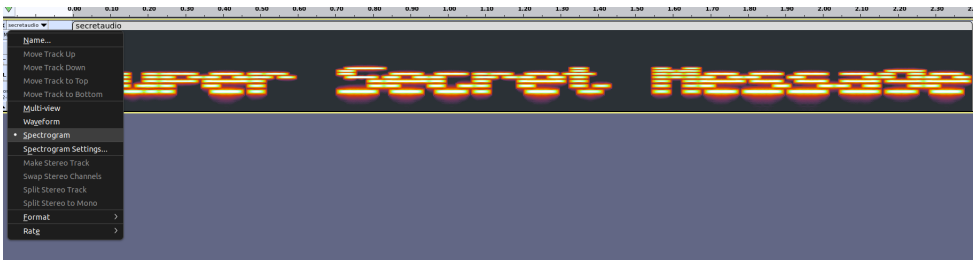
Screenshot 3: Not the end yet :)

Now we have 2 or 3 symbols, that might suggest that we will encounter the numbers from 10 to 256, so I will modify my script c.py to seek for such combinations:

Screenshot 4: now just copy it and decode... again :). The answer: "Let's make this a bit trickier..."

2 Task 2

To solve it, one needs to use audacity and open the file in the spectogram view.



3 Task 3

To solve it i used a tool online. This one I think is the best, as it just runs all the checks. Answer is in steghide.7z file. https://www.aperisolve.com/735f86f28e424dc6a376b546be938633 (Spaghettisteg)

4 Task 4

To solve this task I will use binwalk to extract files encoded inside the .jpg file. Then, we will upload the hackerchat.png onto Aperi'Solve site. We will find our answer there.