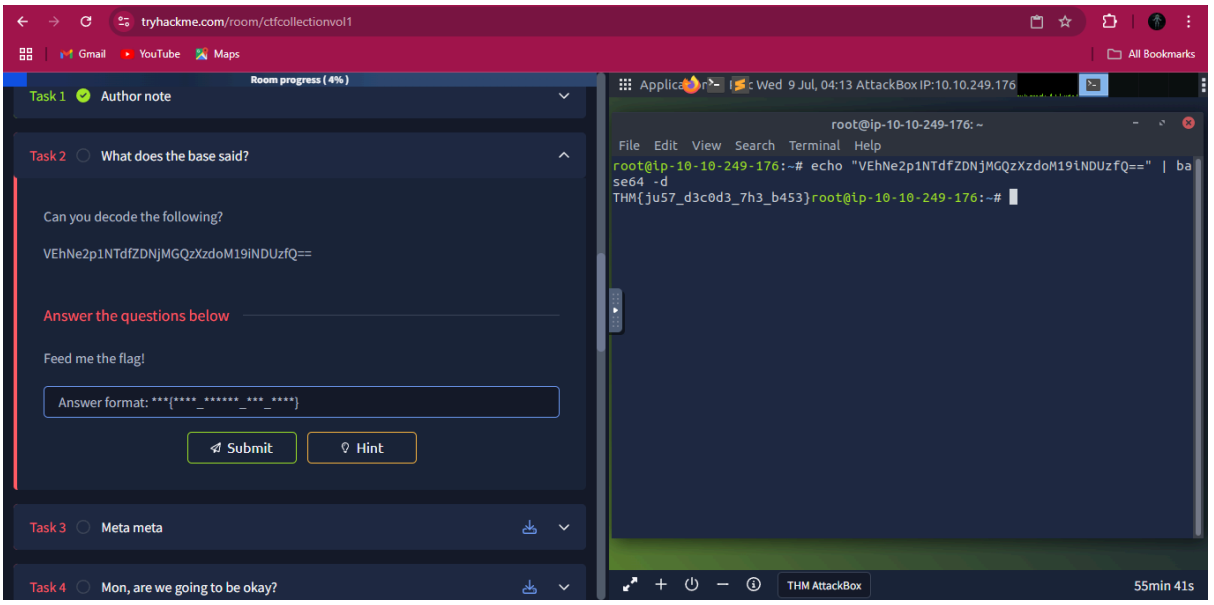
Try Hack Me CTF collection Vol.1 Write Up

About the room:

The CTF collection Vol.1 is designed for beginners and focuses on sharpening up our CTF skill. The room has 20 levels.

Task 1: What does the base said?

- **Challenge**
  Can you decode the following?
  VEhNe2p1NTdfZDNjMGQzXzdoM19iNDUzfQ==
- **Solution**
  This looks like a base64 encoded message. So I decoded it.



Flag: THM{ju57_d3c0d3_7h3_b453}

Task 2: Meta meta

- **Challenge**
  Meta! meta! meta! meta.....
  I'm hungry, I need the flag.
  Download Task Files: Findme.jpg
- **Solution**
  First I downloaded the image. Then to analyse its meta data, I used exiftool.

```
└─$ exiftool Findme.jpg
ExifTool Version Number         : 12.57
File Name                       : Findme.jpg
Directory                       : .
File Size                       : 35 kB
File Modification Date/Time     : 2023:06:17 11:41:01+01:00
File Access Date/Time           : 2023:06:17 11:41:01+01:00
File Inode Change Date/Time     : 2023:06:17 11:42:09+01:00
File Permissions                : -rwxr-xr-x
File Type                       : JPEG
File Type Extension             : jpg
MIME Type                       : image/jpeg
JFIF Version                    : 1.01
X Resolution                    : 96
Y Resolution                    : 96
Exif Byte Order                 : Big-endian (Motorola, MM)
Resolution Unit                 : inches
Y Cb Cr Positioning             : Centered
Exif Version                    : 0231
Components Configuration        : Y, Cb, Cr, -
Flashpix Version                : 0100
Owner Name                      : THM{3x1f_0r_3x17}
Comment                         : CREATOR: gd-jpeg v1.0 (using IJG JPEG
Image Width                     : 800
Image Height                    : 480
Encoding Process                : Progressive DCT, Huffman coding
Bits Per Sample                 : 8
Color Components                : 3
Y Cb Cr Sub Sampling            : YCbCr4:2:0 (2 2)
Image Size                      : 800x480
Megapixels                      : 0.384
```

  Flag: THM{3x1f_0r_3x17}

Task 3: Mon, are we going to be okay?

- **Challenge**
  Something is hiding. That's all you need to know.
  It is sad. Feed me the flag.
  Download Task Files: Extinction.jpg
- **Solution**
  I downloaded the image and used exiftool on it but it revealed nothing. So I used steghide. That revealed an embedded text file named "Final_message.txt". On reading it, it revealed the flag.

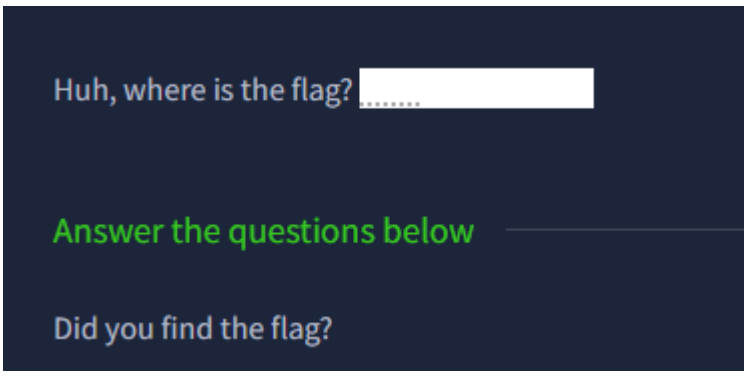
```
$ steghide info Extinction.jpg
"Extinction.jpg":
  format: jpeg
  capacity: 1.3 KB
Try to get information about embedded data ? (y/n) y
Enter passphrase:
  embedded file "Final_message.txt":
    size: 79.0 Byte
    encrypted: rijndael-128, cbc
    compressed: yes
```

```
$ steghide extract -sf Extinction.jpg
Enter passphrase:
wrote extracted data to "Final_message.txt".

$ cat Final_message.txt
It going to be over soon. Sleep my child.

THM{500n3r_0r_l473r_17_15_0ur_7urn}
```

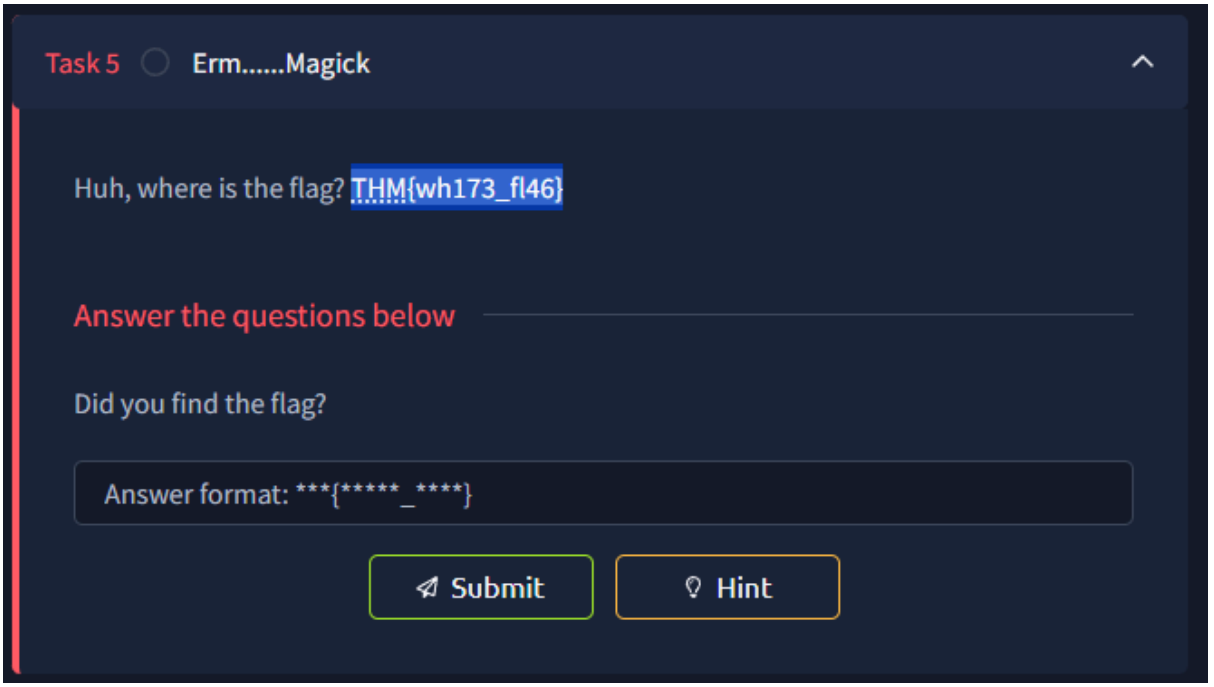
  Flag: THM{500n3r_0r_l473r_17_15_0ur_7urn}

Task 4: Erm.....Magick

- **Challenge**



- **Solution**
  For this challenge, I just highlighted the white space and it revealed the next flag.

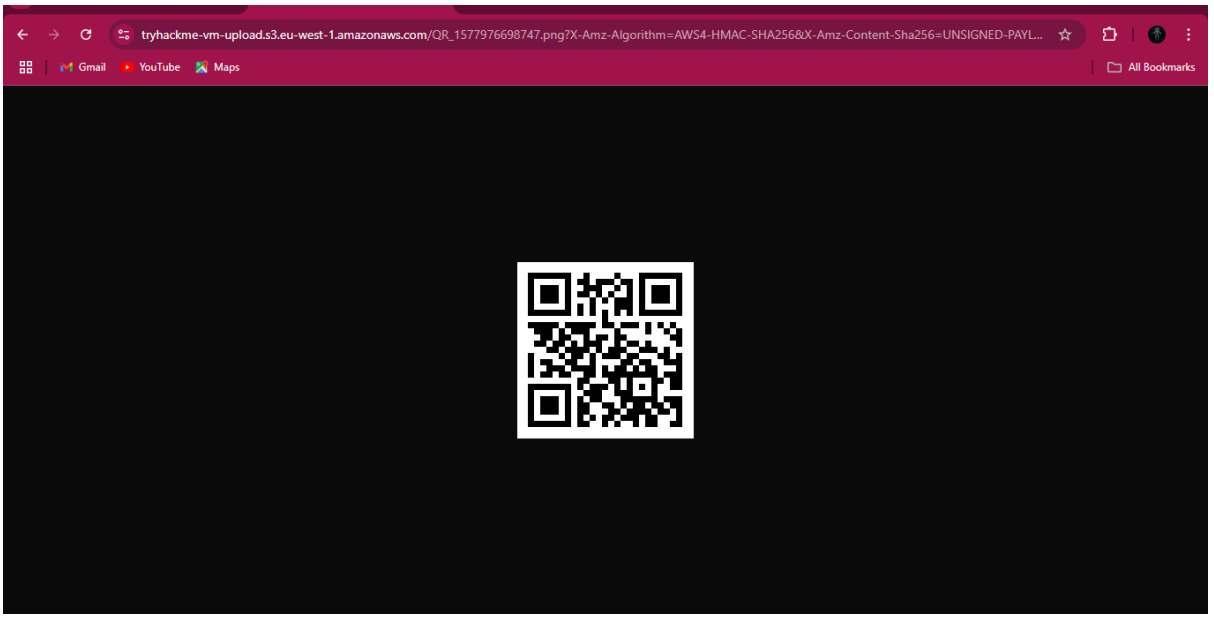


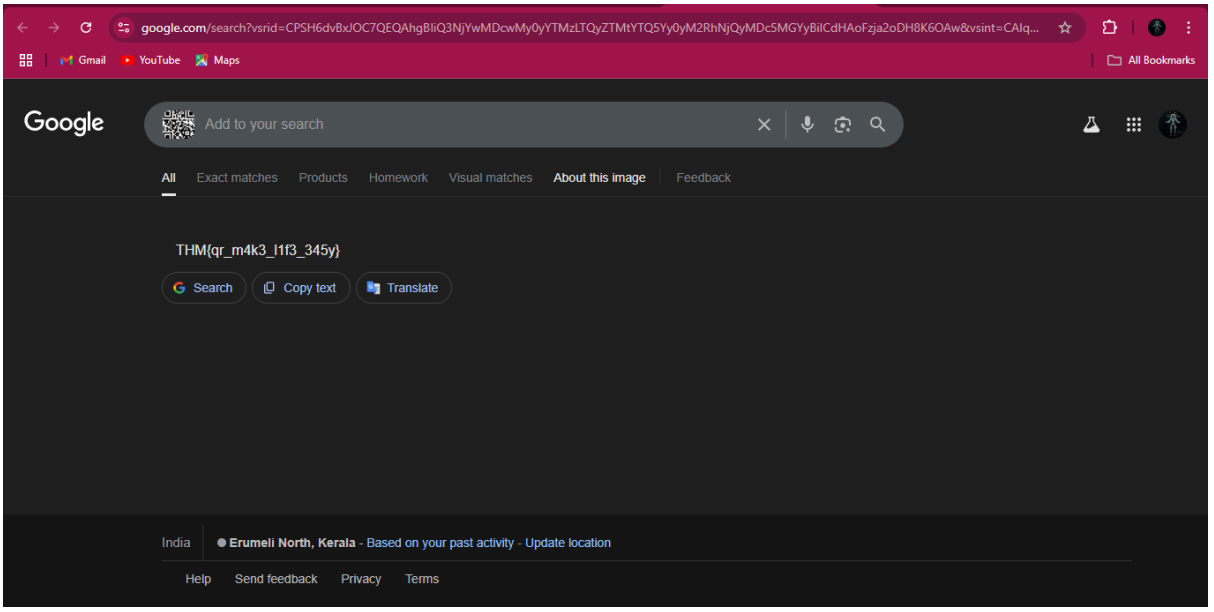
  Flag: THM{wh173_fl46}

Task 5: Qrrrr

- **Challenge**
  Such technology is quite reliable.
  More flag, please!
  Download Task Files: QR.png
- **Solution**

The image in this challenge turned out to be a QR so I scanned it using google lens which revealed the next flag





Flag: THM{qr_m4k3_l1f3_345y}

Task 6: Reverse it or read it?

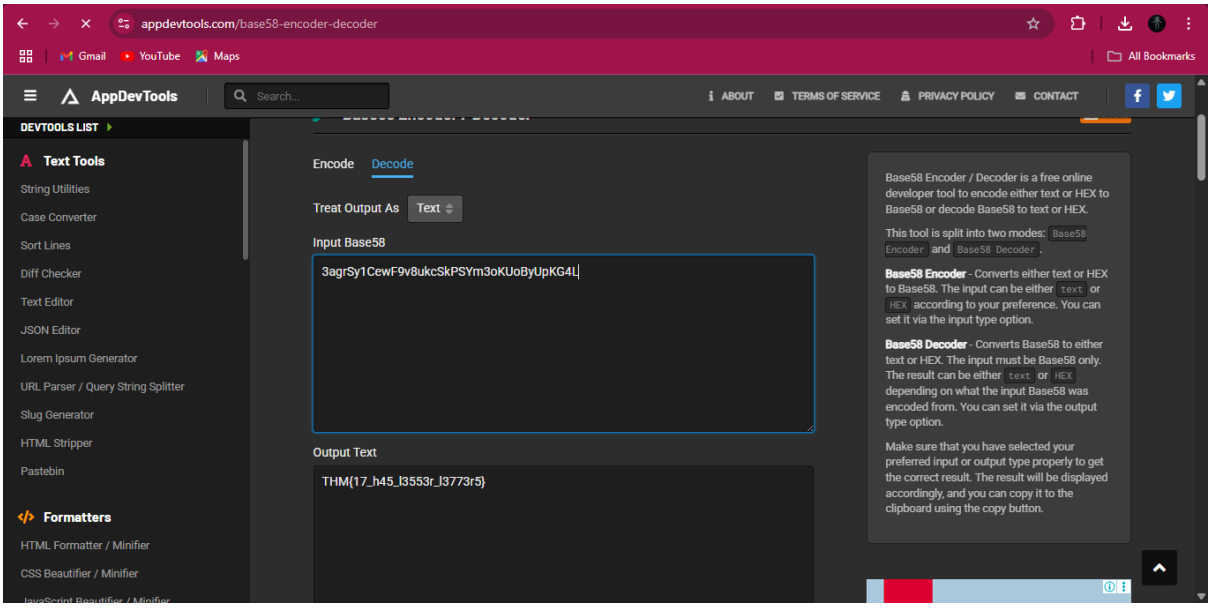
- **Challenge**
  Both work, it's all up to you.
  Found the flag?
  Download Task Files: hello.hello
- **Solution**
  I took the "read" approach here. So I extracted the strings from the file and sorted it for strings that began with THM (case-insensitive) which gave me the flag.

```
$ strings hello.hello  | grep -i thm{
THM{345y_f1nd_345y_60}
```

  Flag: THM{345y_f1nd_345y_60}

Task 7: Another decoding stuff

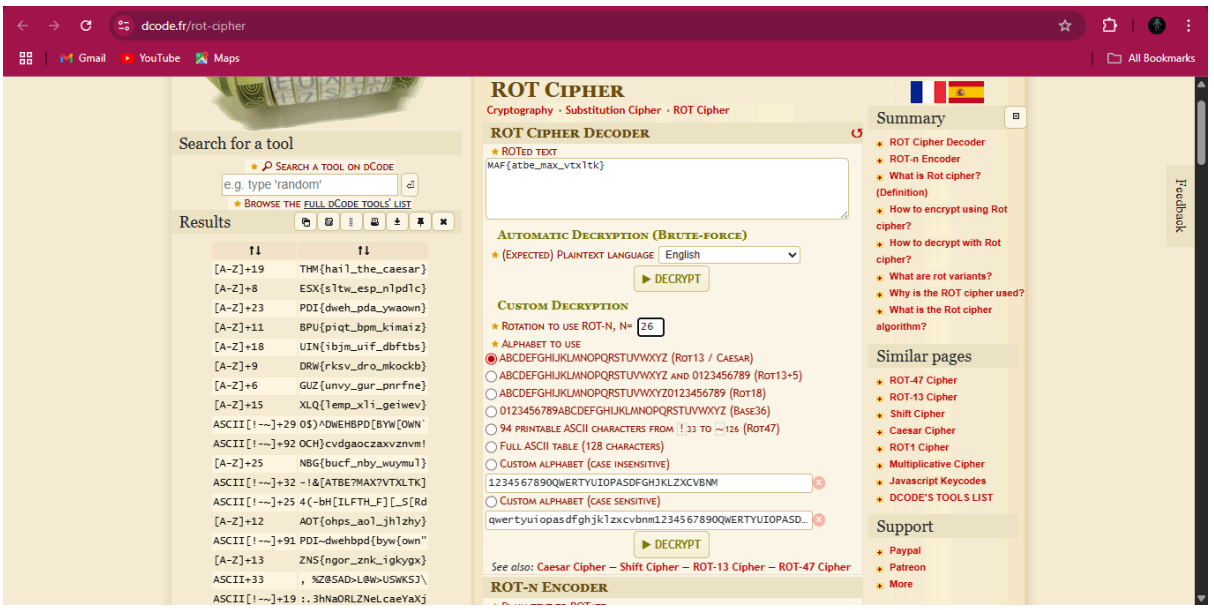
- **Challenge**
  Can you decode it?
  3agrSy1CewF9v8ukcSkPSYm3oKUoByUpKG4L
  Oh, Oh, Did you get it?
- **Solution**
  So at first I thought it was another base64 encoding but it was not. So after using an online base decoder, I discover that it was an base58 encoding and after decoding it I got the flag.



Flag: THM{17_h45_l3553r_l3773r5}

Task 8: Left or right?

- **Challenge**
  Left, right, left, right... Rot 13 is too mainstream. Solve this
  MAF{atbe_max_vtxltk}
  What did you get?
- **Solution**
  For this challenge, I used an online decoder: https://www.dcode.fr/rot-cipher.



Flag: THM{hail_the_caesar}

Task 9: Make a comment

- **Challenge**

  No downloadable file, no ciphered or encoded text. Huh .....

  I'm hungry now... I need the flag

- **Solution**

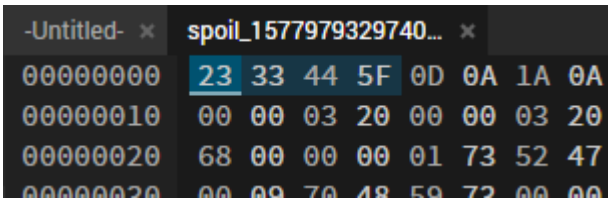
  Since we had nothing to go on, I checked the hint which said to check the html. So I checked source code and found the flag.

```
▼<div class="room-task-desc">  flex
  ▼<div class="room-task-desc-data">
    ▼<p>
       "No downloadable file, no ciphered or encoded text. Huh ....."
       <br>
     </p>
     <p style="display:none;">THM{4lw4y5_ch3ck_7h3_c0m3mn7}</p>
   </div>
```

Flag: THM{4lw4y5_ch3ck_7h3_c0m3mn7}

Task 10: Can you fix it?

- **Challenge**
  I accidentally messed up with this PNG file. Can you help me fix it?
  Thanks, ^^
  What is the content?
  Download Task File: spoil.png
- **Solution**
  When I downloaded it, the image did not open and was giving an error message. Checking its hex, I found the first numbers to be corrupted as for a png it should be 89 50 4e 47.



So I changed it and then tried opening the image.

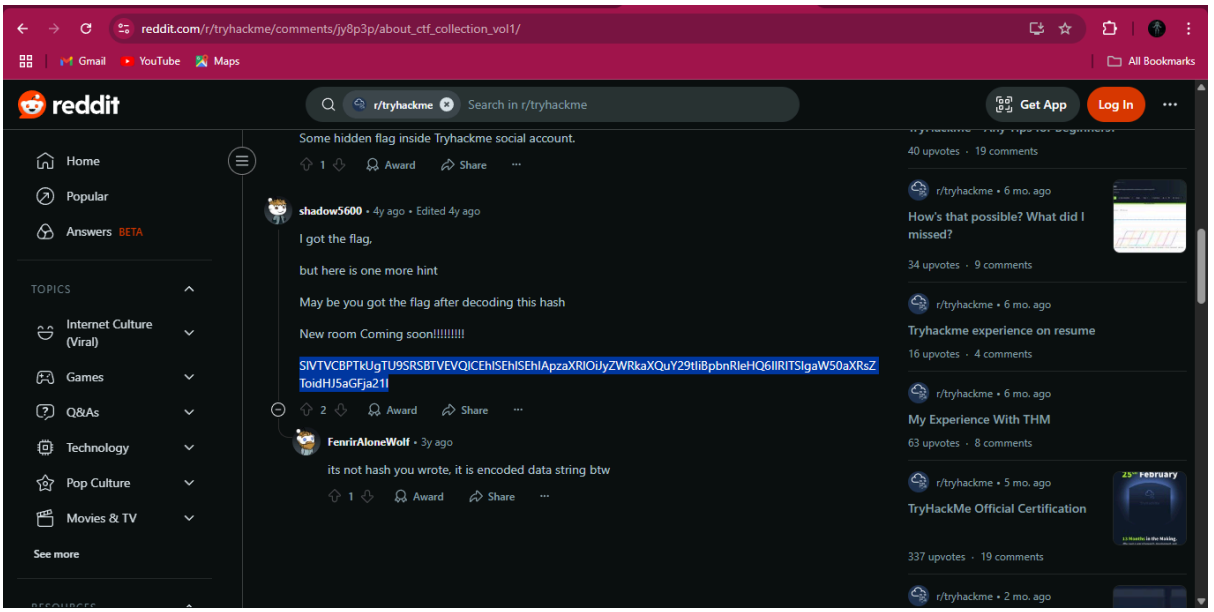
THM{y35_w3_c4n}

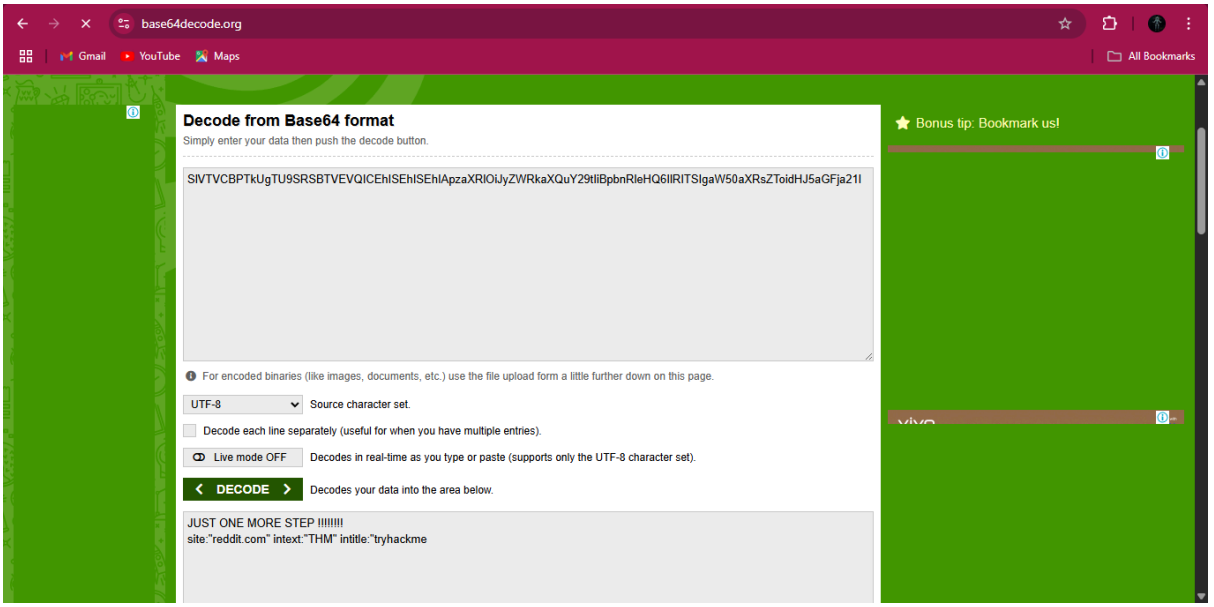
Flag: THM{y35_w3_c4n}

Task 11: Read It

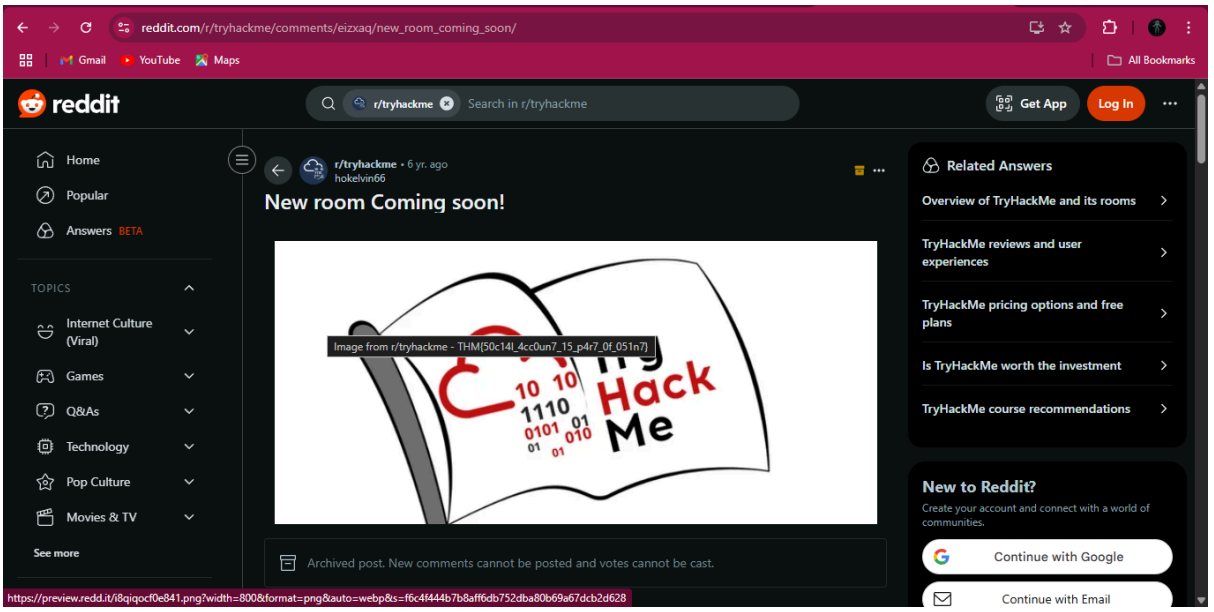
- **Challenge**
  Some hidden flag inside the Tryhackme social account.
  Did you find the hidden flag?
- **Solution**

Here also I used a hint. It said to check reddit. So after checking a lot of reddit posts and subreddit I found a clue in one thread which was a base64 encoded.





After pasting the query in Google, I found another reddit which had the flag in an image.



Flag: THM{50c14l_4cc0un7_15_p4r7_0f_051n7}

Task 12: Spin my head

- **Challenge**

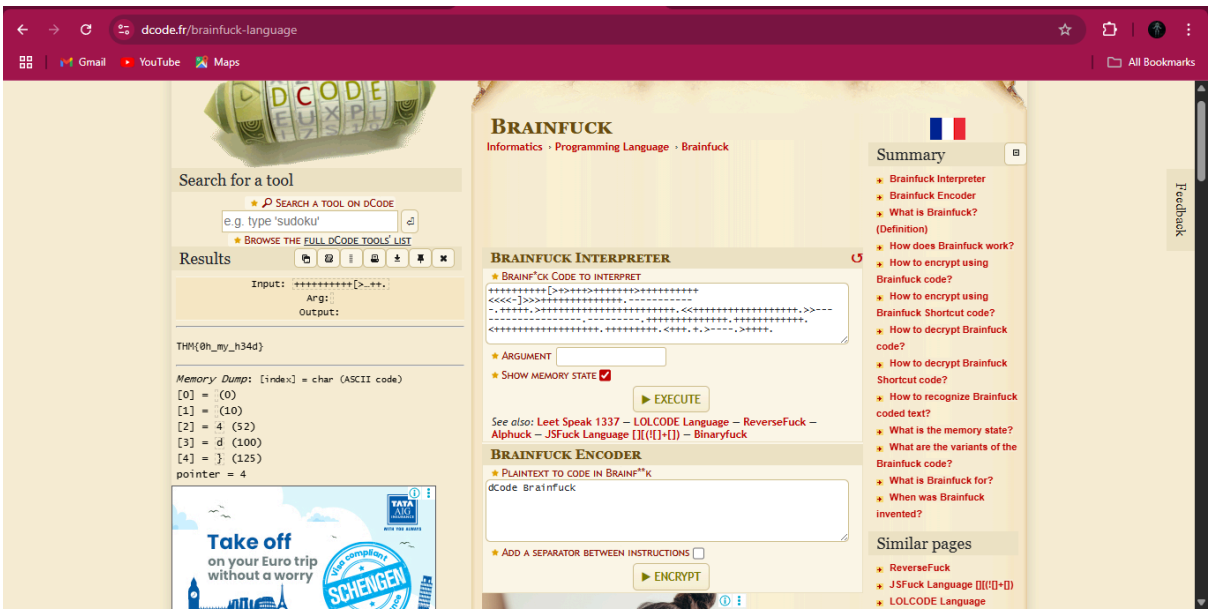
  What is this?

  ++++++++++[>+>+++>+++++++>++++++++++<<<<-]>>>++++
  +++++++++. — — — — — —
  .+++++.>++++++++++++++++++++++++.<<+++++++++++++++
  ++.>> — — — — — — — — — -. — — — —
  -.++++++++++++++.++++++++++++.<+++++++++++++++++++.+
  ++++++++.<+++.+.> — — .>++++.

  Can you decode it?

- **Solution**

  I had to use another clue for this challenge. It said it was a brainfuck encryption. So again using the online decoder I decoded the text.



Flag: THM{0h_my_h34d}

Task 13: An exclusive

- **Challenge**

  Exclusive strings for everyone!

  S1: 44585d6b2368737c65252166234f20626d
  S2: 10101010101010101010101010101010101010

  Did you crack it? Feed me now!

- **Solution**

  Given the name of the challenge and the two strings given, I calculated the XOR of the strings using an online calculator. The result was the reverse of the flag.

  Ascii Result:

  ```
  }r0_3v15ulcx3{MHT
  ```

  The result of XOR operation in Ascii

  Flag: THM{3xclu51v3_0r}

Task 14: Binary walk

- **Challenge**
  Please exfiltrate my file :)
  Flag! Flag! Flag!
  Download Task File: hell.jpg
- **Solution**
  As the name suggested I used binwalk on the file.

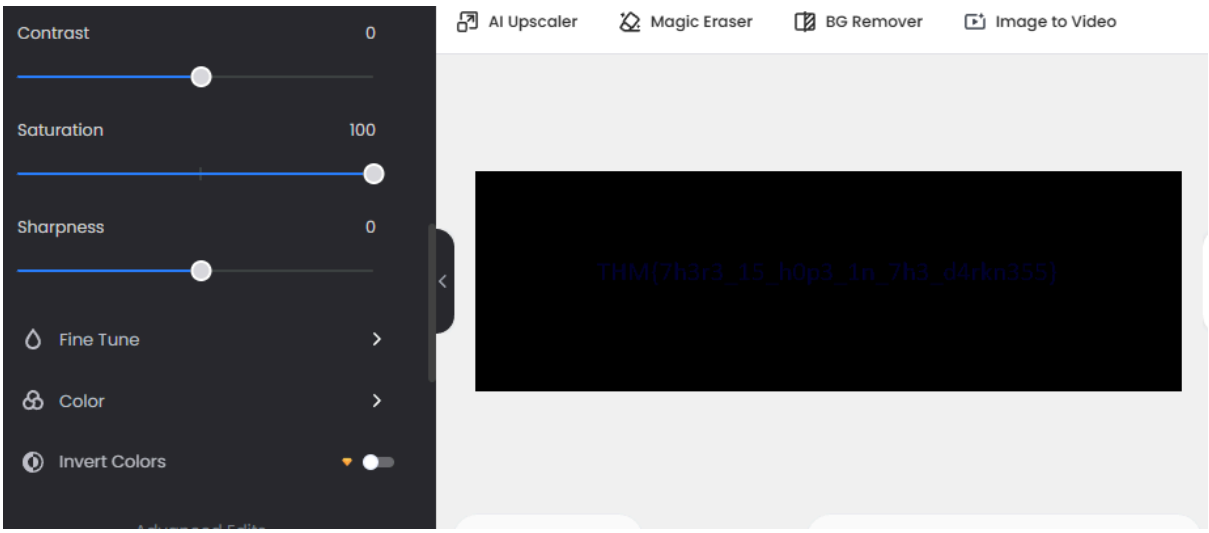
```
DECIMAL       HEXADECIMAL     DESCRIPTION
--------------------------------------------------------------------------------
---
0             0x0             JPEG image data, JFIF standard 1.02
30            0x1E            TIFF image data, big-endian, offset of first im
age directory: 8
265845        0x40E75         Zip archive data, at least v2.0 to extract, unc
ompressed size: 69, name: hello_there.txt
266099        0x40F73         End of Zip archive, footer length: 22
```

  So to extract the “hello_there.txt” I used binwalk -e hell.jpg. This created a directory with the text file which had the flag.

  Flag: THM{y0u_w4lk_m3_0u7}

Task 15: Darkness

- **Challenge**
  There is something lurking in the dark.
  What does the flag said?
  Download Task File: dark.png
- **Solution**
  The image was a black rectangle. After playing with the saturation, color and contrast for a while I found the flag superimposed in it.



Flag: THM{7h3r3_15_h0p3_1n_7h3_d4rkn355}

Task 16: A sounding QR

- **Challenge**
  How good is your listening skill?
  P/S: The flag formatted as THM{Listened Flag}, the flag should be in All CAPS
  Download Task File: QRCTF.png
- **Solution**
  The downloaded image was again a QR. It took me to a soundcloud audio which played the flag.
  Flag: THM{SOUNDINGQR}

Task 17: Dig up the past

- **Challenge**
  Sometimes we need a 'machine' to dig the past.
  Targetted website:
  https://www.embeddedhacker.com/
  Targetted time: 2 January 2020
- **Solution**

As the title suggests we need to go to a previous date of the website. For this I used Internet Archive's WayBack Machine(https://archive.org/web/) and opened the page on 2 Jan 2020. ALong the contents I found the flag

Flag: THM{ch3ck_th3_h4ckb4ck}

Task 18: Uncrackable!

- **Challenge**
  Can you solve the following? By the way, I lost the key. Sorry >.<
  MYKAHODTQ{RVG_YVGGK_FAL_WXF}
  Flag format: TRYHACKME{FLAG IN ALL CAP}
- **Solution**
  After a bit of research, I found out that the given crypt is a Vigenere Cipher. So using an online decoder, I decoded the cipher to give the flag.

Flag: TRYHACKME{YOU_FOUND_THE_KEY}

Task 19: Small bases

- **Challenge**
  Decode the following text.
  5816959690152533650941915915478593876200427360362464863735955155763336 93
- **Solution**
  I had to use a hint for this one. The hint was: dec -> hex -> ascii. So I used a base converter.

RapidTables

Home › Conversion › Number conversion › Decimal to hexadecimal

Decimal to Hexadecimal converter

From: Decimal

To: Hexadecimal

Enter decimal number

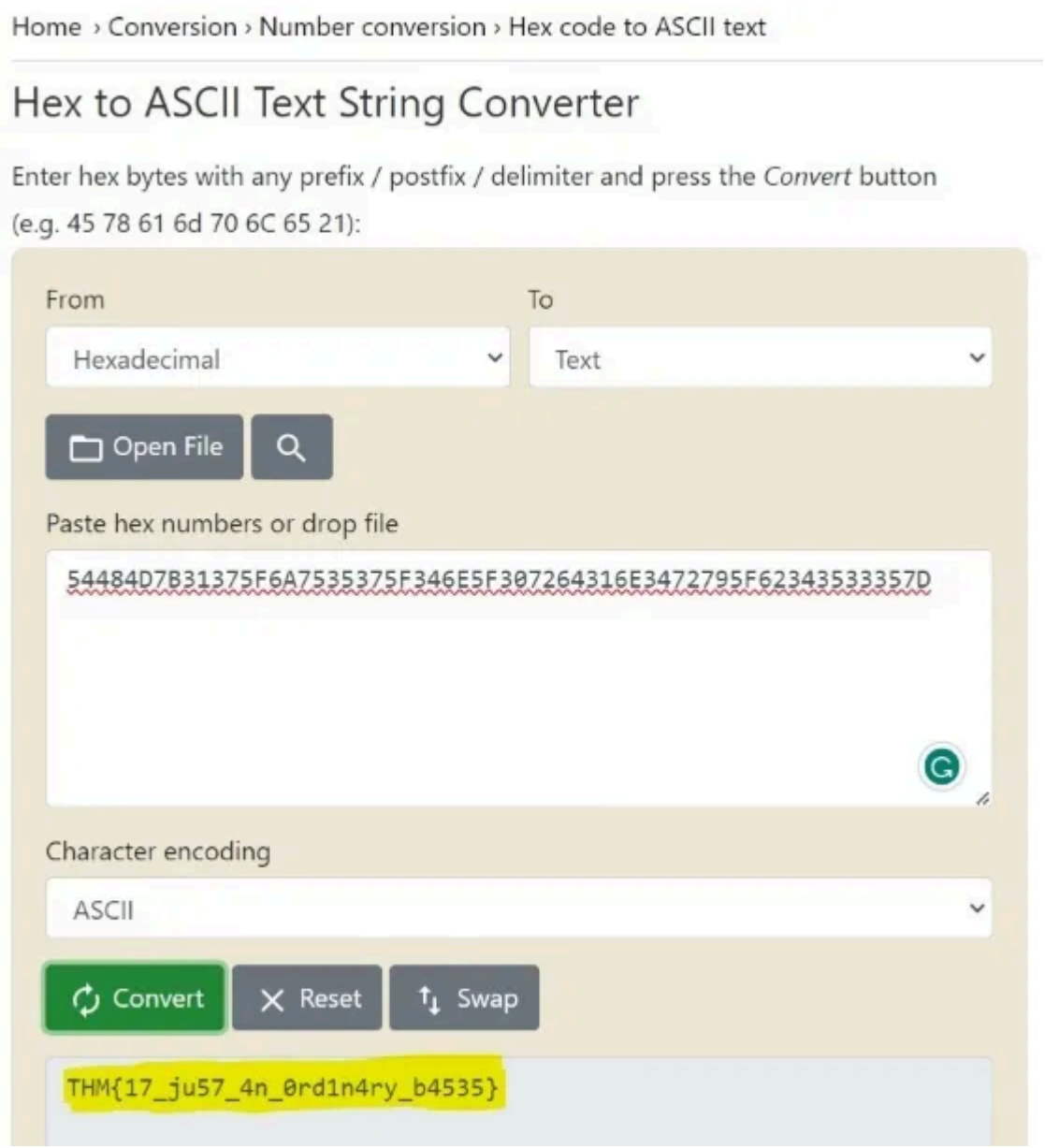
5816959690152533650941915915478593 8 10

= Convert | × Reset | ⇅ Swap

Hex number (60 digits)

54484D7B31375F6A7535375F346E5F30726
4316E3472795F62343533357D

16

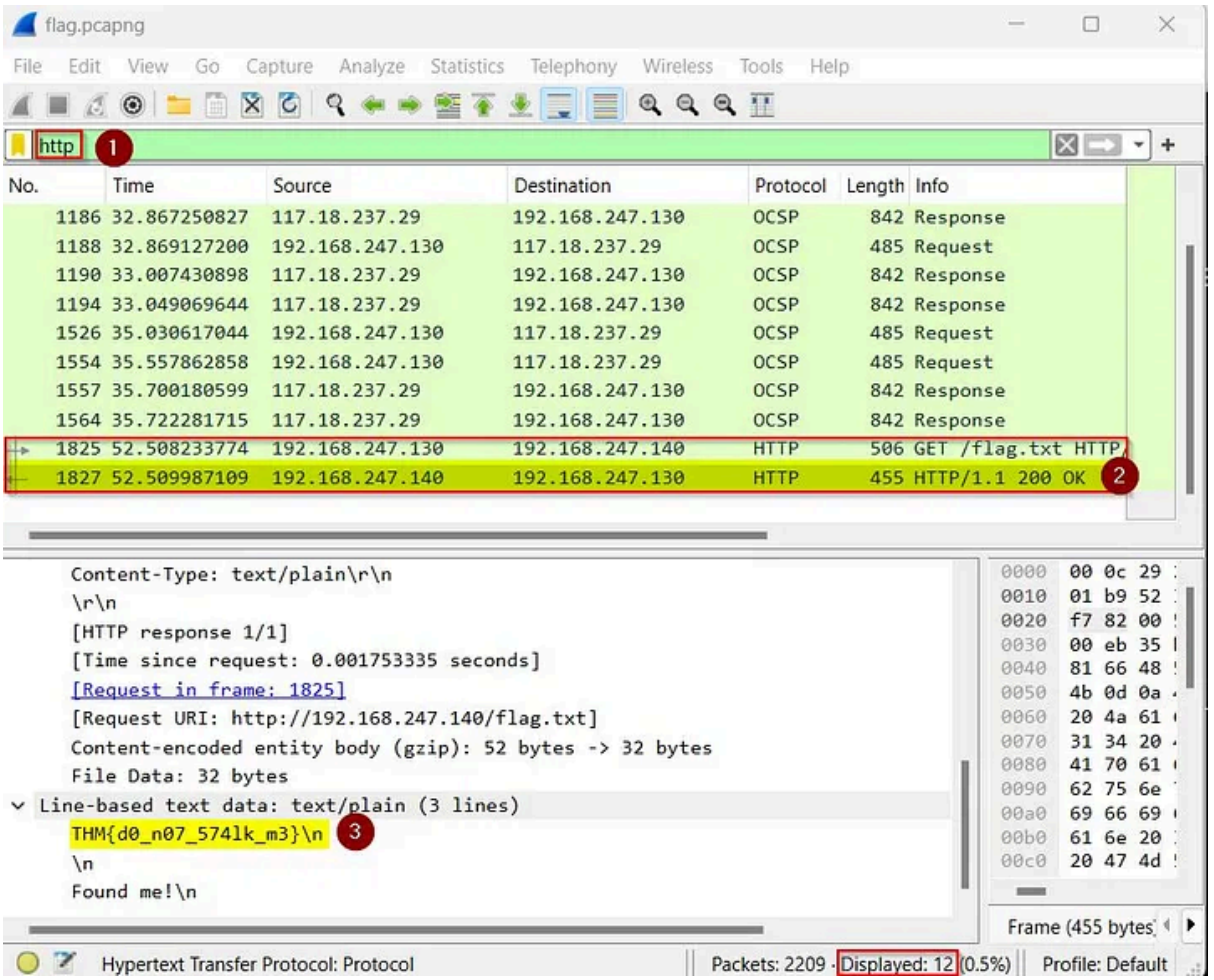


Flag: THM{17_ju57_4n_0rd1n4ry_b4535}

Task 20: Read the packet

- **Challenge**
  I just hacked my neighbor's WiFi and tried to capture some packets.
  He must be up to no good. Help me find it.
  Download Task Files: flag.pcapng
- **Solution**

In this scenario, we look for the common protocols that contain data. An assumption is made that our neighbor will be doing some web browsing so I started my analysis by zooming in on HTTP protocol communications. I found a total of 12 HTTP packets (6 requests and 6 responses).
Ignoring the OCSP packets (Online Certificate Status Protocol), we are left with a single HTTP request for /flag.txt and a response that contains our flag.



Flag: THM{d0_n07_574lk_m3}


tryhackme.com/room/ctfcollectionvol1
Gmail
YouTube
Maps
All Bookmarks
Woop woop! Your answer is correct
Vol. 1
Congratulations on completing CTF collection Vol.1!!!
Points earned
600
Completed tasks
21
Room type
Challenge
Difficulty
Easy
Streak
1
This room counted toward joining the league