Organized by Sunway Cybersecurity Club

🗓️ 30th August 2025 (Sat)
⏱️ 8:00 AM – 5:00 PM
📍 Sir Jeffrey Cheah Hall, Sunway College

Write-Up SunCTF 2025

Presented by

CarryOrKari

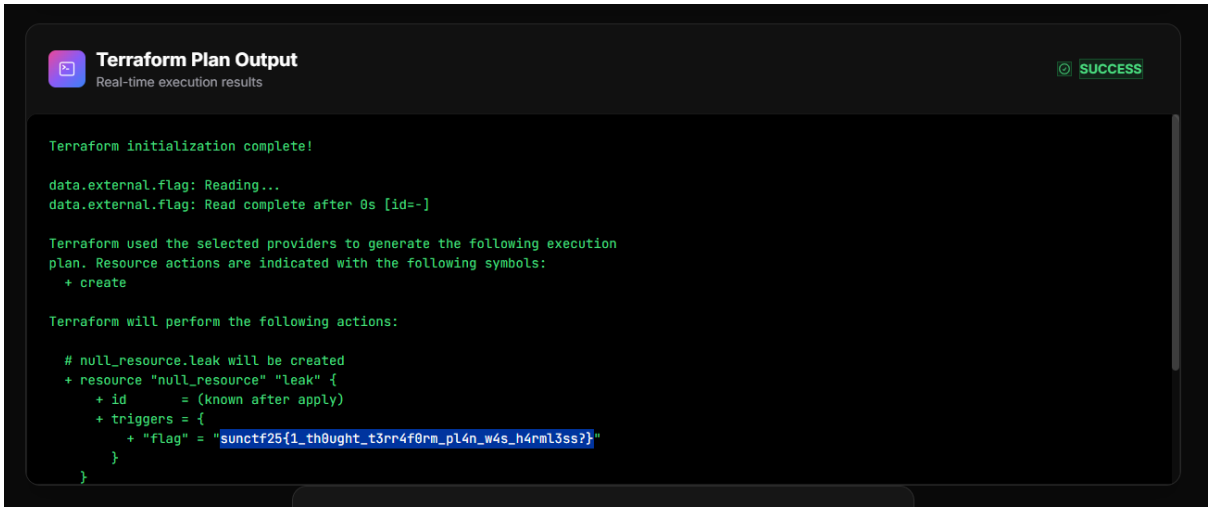
Team members:

1. **AIDA SAKINAH BINTI KAHIROL**
2. **HANI HAMIZAH BINTI HAMZAN**
3. **MUHAMMAD EUSOFF AMINURRASHID BIN SHUKRI**

Table of Contents

Web

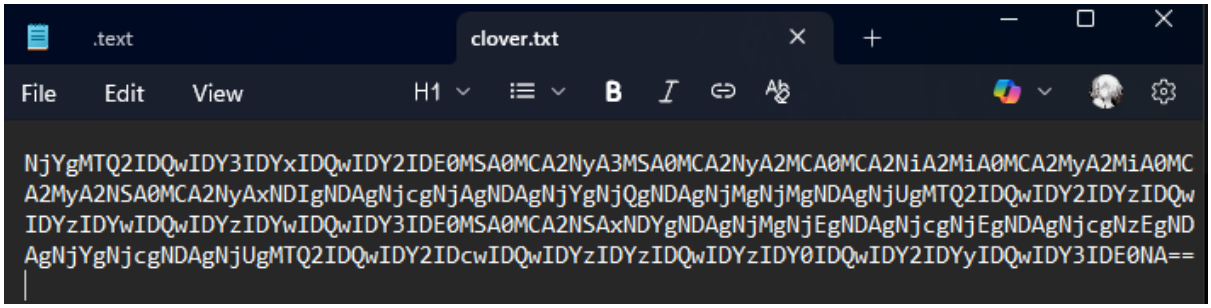
Terraform Playground



Flag: sunctf25{1_th0ught_t3rr4f0rm_pl4n_w4s_h4rml3ss?}

Crypto

Leaf It To Luck



Decode Base64, we'll get space-separated numbers.

From base-8 (all uses digits 0 – 7) to text, we'll get string of hex bytes.

From hex (base-16) to ASCII, we will get oqjypb25{pd3_c00z_1qyg_h34b}. But as you know the flag format is sunctf25{xx}.

Use Caesar cipher rot-4 to get the correct flag.

Flag: sunctf25{th3_g00d_1uck_l34f}

Vigenereverse

```
zuenbn25{v0zE4Cu_bBa_0pgZ5qBu}
key: dontreverseme
```

Plaintext key dontreverseme decrypts to wgrukj25{a0vN4Kq_pXx_0btG5zXz}. But the prompt is encrypt the key before you decrypt.

K = dontreverseme

Reverse(K) = emesrevertnod

Enc_key = vigenere_encrypt(K, reverse(K)) = harliiqiilrah.

Decrypt the ciphertext with harliiqiilrah.

```
cipher: zuenbn25{v0zE4Cu_bBa_0pgZ5qBu}
key:    harliiqiilrah
```

Flag: sunctf25{f0rW4Rd_bUt_0ppO5iTe}

Resemblance

“Sir Cha-Cha never liked reusing stuff” ⇒ they reused the **same key & nonce** for two encryptions:

- enc_msg = ChaCha20(key, nonce, message)
- enc_flag = ChaCha20(key, nonce, flag)

For stream ciphers: C = P ⊕ K.
Same key+nonce ⇒ same keystream K.
So:

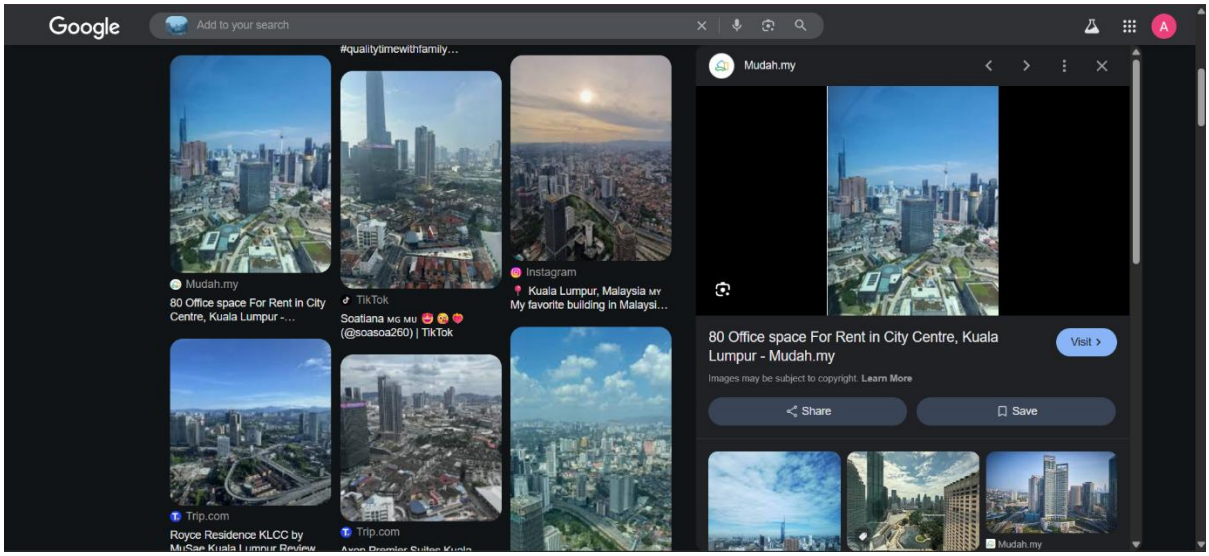
- K = enc_msg ⊕ message (you know the plaintext story)
- flag = enc_flag ⊕ K = enc_flag ⊕ enc_msg ⊕ message

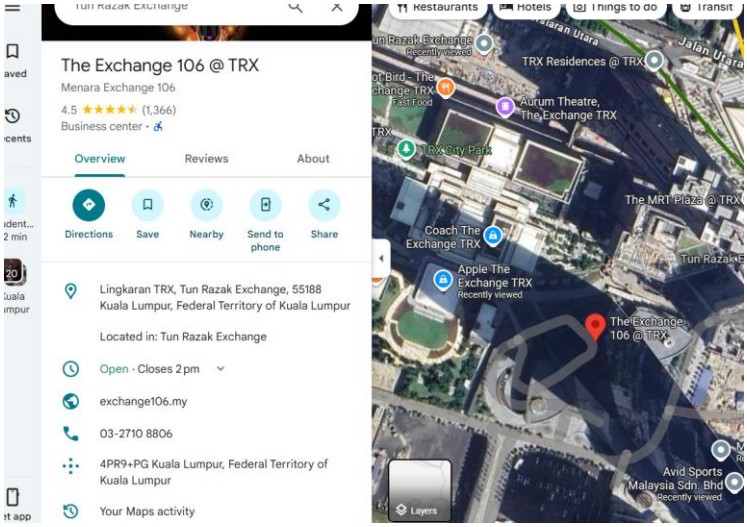
Apply to out.txt:

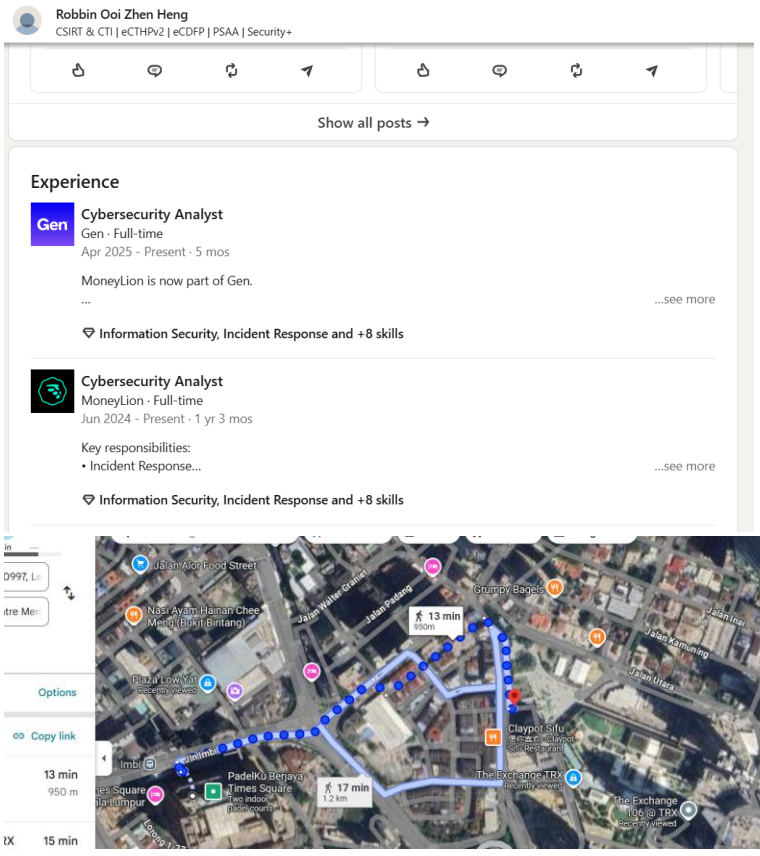
Flag : sunctf25{m4yb3_s0m3_k3y_d1ff3r3nc3_1snt_s0_b4d_4ft3r4LL}

OSINT

BabyOSINT







Flag: sunctf25{4PR9}

Misc

Packet Palette

Palette means colour.

```
.paragraph1 { color: #73aaee; }\n .paragraph2 { color: #75aaee; }\n
.paragraph3 { color: #6eaaee; }\n .paragraph4 { color: #63aaee; }\n
.paragraph5 { color: #74bb12; }\n .paragraph6 { color: #66bb12; }\n
.paragraph7 { color: #32bb12; }\n .paragraph8 { color: #35bb12; }\n
.paragraph9 { color: #7bbb12; }\n .paragraph10 { color: #75ddaa; }\n
.paragraph11 { color: #36ddaa; }\n .paragraph12 { color: #6cddaa; }\n
.paragraph13 { color: #79ddaa; }\n .paragraph14 { color: #5fddaa; }\n
.paragraph15 { color: #63ddff; }\n .paragraph16 { color: #35ddff; }\n
.paragraph17 { color: #35ddff; }\n .paragraph18 { color: #5fddff; }\n
.paragraph19 { color: #63ddff; }\n .paragraph20 { color: #30ddff; }\n
.paragraph21 { color: #6cddff; }\n .paragraph22 { color: #30ddff; }\n
.paragraph23 { color: #72ddff; }\n .paragraph24 { color: #35ddff; }\n
.paragraph25 { color: #7dddff; }\n do these colour means anything
```

If you read the pcap file, there are a lot of colours used.

Each #xxxxxx is a hexadecimal color code.

First two hex digits are red, next two are green, and last two are blue. E.g. #73aaee -> 115, 170, 238 in RGB.

Paragraph 1-4 are all shades of blue, 5-9 green, 10-14 aqua/teal, and 15-25 cyan/light blue. It totally is structured rather than random.

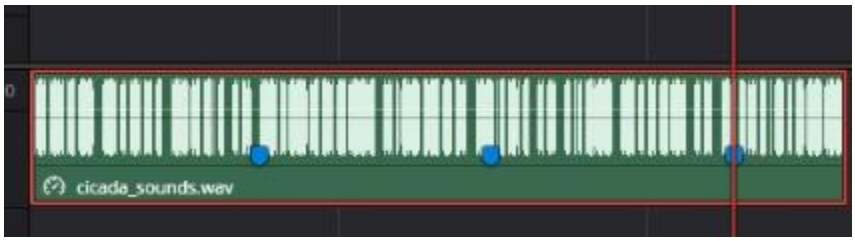
Go ahead and create a simple script.

```
codes = ["73aaee","75aaee","6eaaee","63aaee","74bb12","66bb12","32bb12","35bb12","7bbb12",
    "75ddaa","36ddaa","6cddaa","79ddaa","5fddaa","63ddff","35ddff","35ddff","5fddff",
    "63ddff","30ddff","6cddff","30ddff","72ddff","35ddff","7dddff"]
print(''.join(chr(int(c[:2],16)) for c in codes))
```

flag: sunctf25{u6ly_c55_c0l0r5}

Cicada

It is an audio format of cicada making their sound.



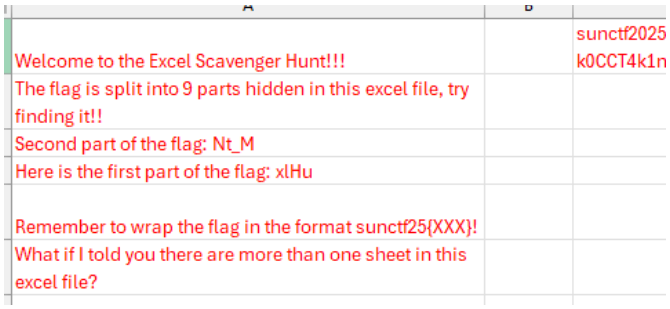
Open your video or audio editor. The audio only have two patterns. Replace the shorter one with a dot and long one with a dash.

Decode each code and you will get the flag.

Flag: sunctf25{CICADA_IS_LISTENING}

Excel Scavenger Hunt

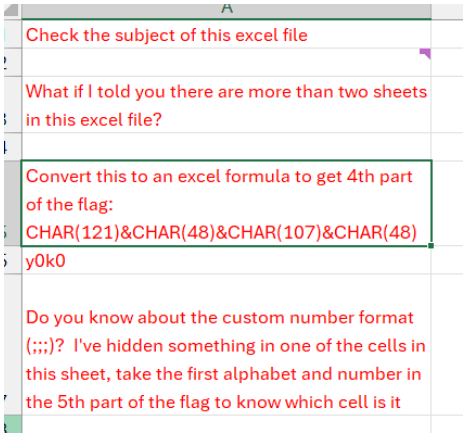
This is where you actually question your own excel skill.



		sunctf2025
Welcome to the Excel Scavenger Hunt!!!		k0CCT4k1n
The flag is split into 9 parts hidden in this excel file, try finding it!!		
Second part of the flag: Nt_M		
Here is the first part of the flag: xlHu		
Remember to wrap the flag in the format sunctf25{XXX}!		
What if I told you there are more than one sheet in this excel file?		

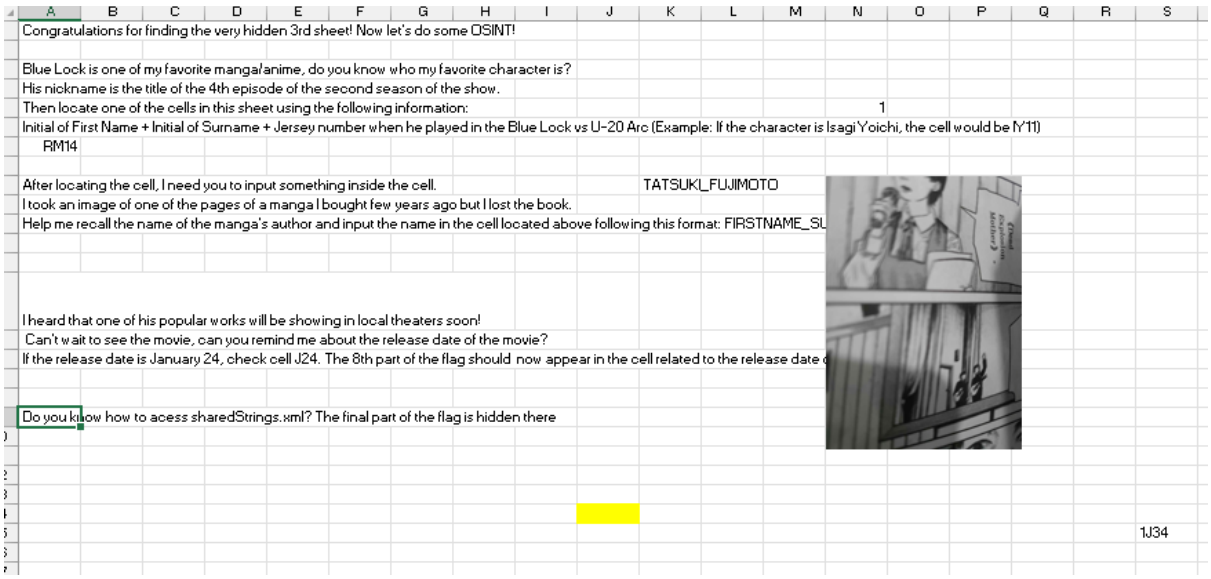
Theres 9 parts inside this question.

First and second flag are given straight.



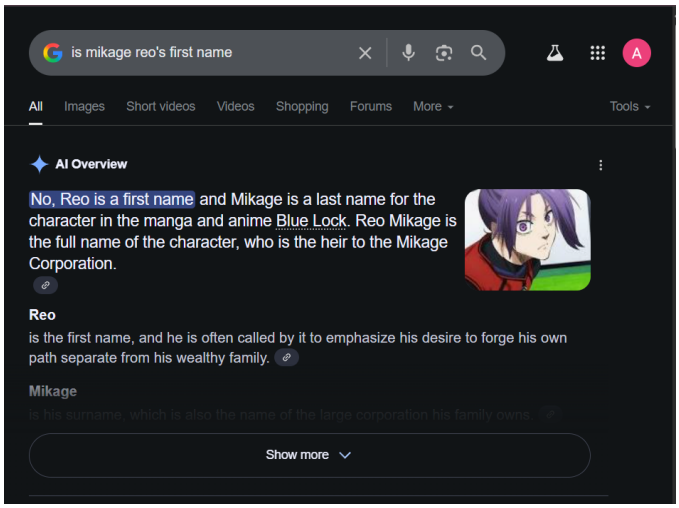
A
Check the subject of this excel file
What if I told you there are more than two sheets in this excel file?
Convert this to an excel formula to get 4th part of the flag: CHAR(121)&CHAR(48)&CHAR(107)&CHAR(48)
y0k0
Do you know about the custom number format (;;;)? I've hidden something in one of the cells in this sheet, take the first alphabet and number in the 5th part of the flag to know which cell is it

Then you have to unlock special power to get the last part.

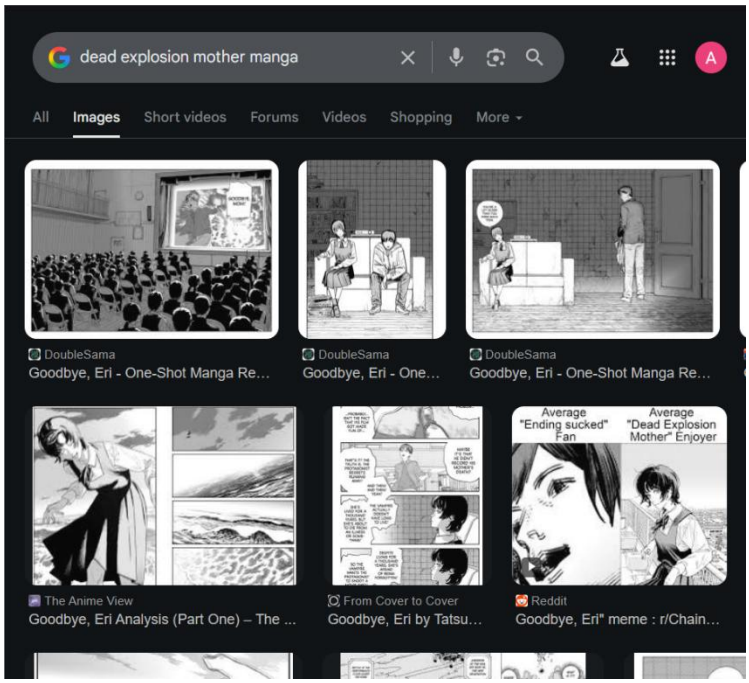


Congratulations for finding the very hidden 3rd sheet! Now let's do some OSINT!																			
Blue Lock is one of my favorite manga/anime, do you know who my favorite character is?																			
His nickname is the title of the 4th episode of the second season of the show.																			
Then locate one of the cells in this sheet using the following information:														1					
Initial of First Name + Initial of Surname + Jersey number when he played in the Blue Lock vs U-20 Arc (Example: If the character is Isagi Yoichi, the cell would be IY11)																			
RM14																			
After locating the cell, I need you to input something inside the cell.											TATSUKI_FUJIMOTO								
I took an image of one of the pages of a manga I bought few years ago but I lost the book.																			
Help me recall the name of the manga's author and input the name in the cell located above following this format: FIRSTNAME_SU																			
I heard that one of his popular works will be showing in local theaters soon!																			
Can't wait to see the movie, can you remind me about the release date of the movie?																			
If the release date is January 24, check cell J24. The 8th part of the flag should now appear in the cell related to the release date																			
Do you know how to acess sharedStrings.xml? The final part of the flag is hidden there																			
																			1J34

Takde angin takde rebut tetiba mikage reo haha



(grrr)



Flag: sunctf25{xlHuNt_M1k5Ky0k0CCT4k1n41n0r1J34nn3}