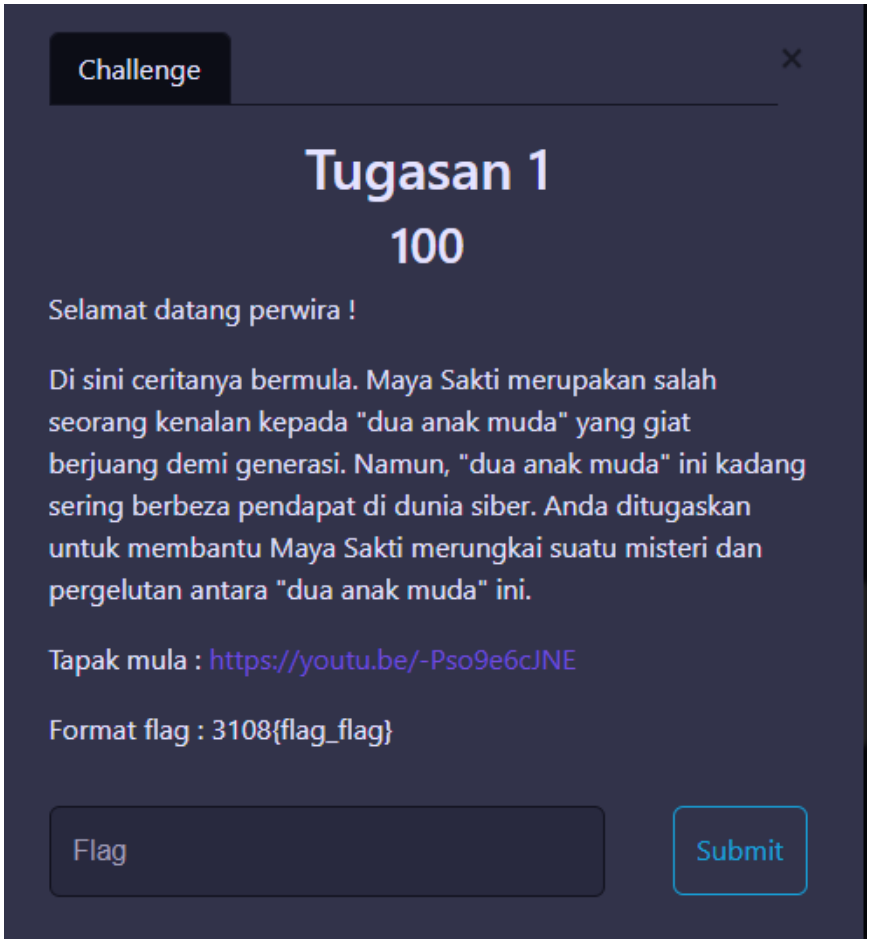
3108CTF: BANGKIT DARI DASAR

3108CTF is a first Cybersecurity event held by “Bahtera Siber MY”. This CTF is a local based CTF event with storyline of the Theme of “Kemerdekaan” Malaysia. It is not only challenge for the Cybersecurity skills, but also the knowledge of our country, Malaysia. Thus, this event is only open for Malaysian and it is a single player.

▼ Tugasan 1

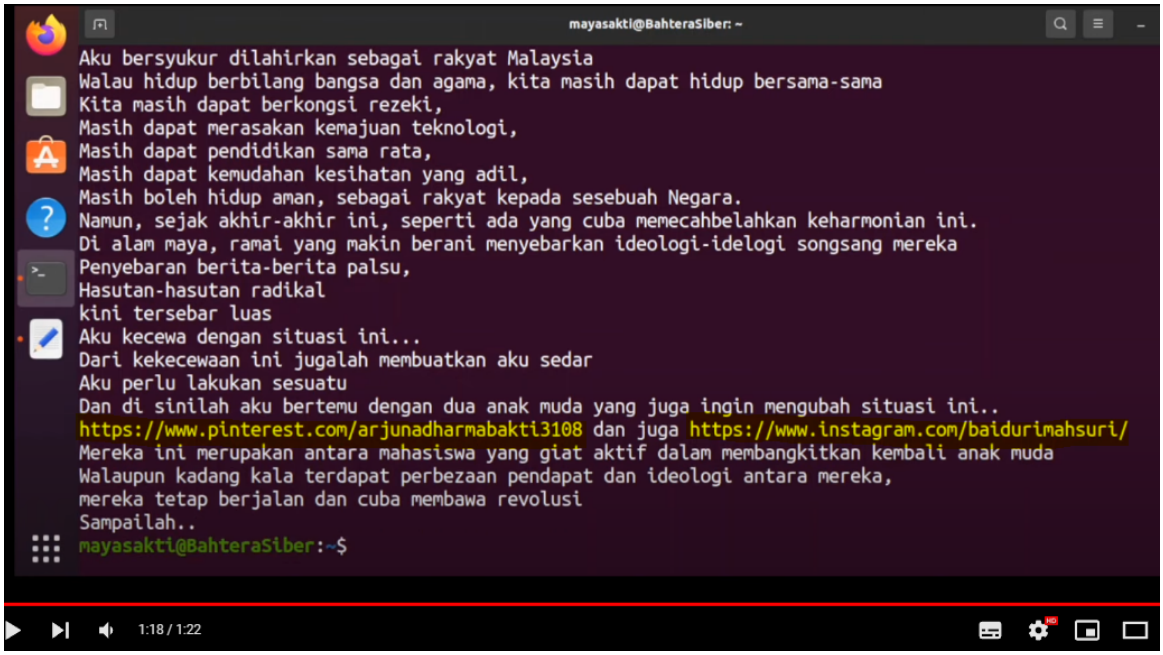


In this challenge, we are given a YouTube Link - https://youtu.be/-Pso9e6cJNE .

Navigate to the link given, play the video and it give us two information link.

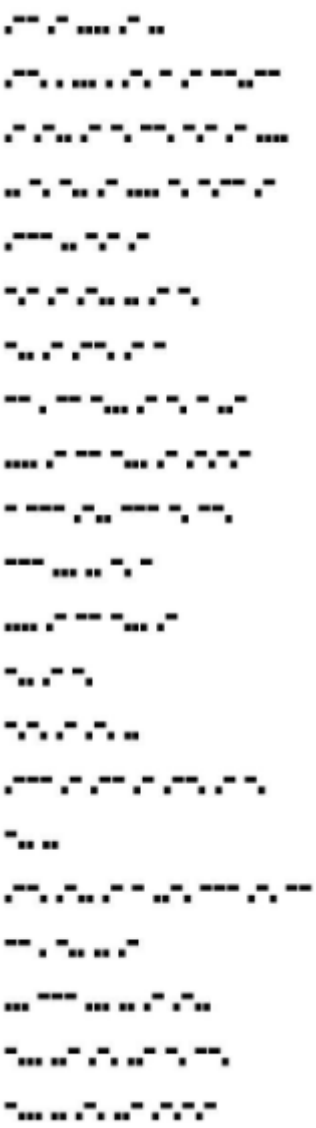
1st link - https://www.pinterest.com/arjunadharmabakti3108/

2nd link - https://www.instagram.com/baidurimahsuri/



At the first link, we are navigate to Arjuna Dharmabakti pinterest user profile.

I noticed that Arjuna posted a morse code image.



Decoded the morse code above and I got the message:

> WAHAI PESERTA, ALANGKAH INDAHNYA JIKA KALIAN DAPAT MEMBANTU HAMBA. TOLONG OSINT HAMBA DAN CARI JAWAPAN DI PLATFORM MEDIA SOSIAL BURUNG BIRU.

The hint that show on the above morse code message is we need to find the information from a social media platform that consist blue color bird, which is

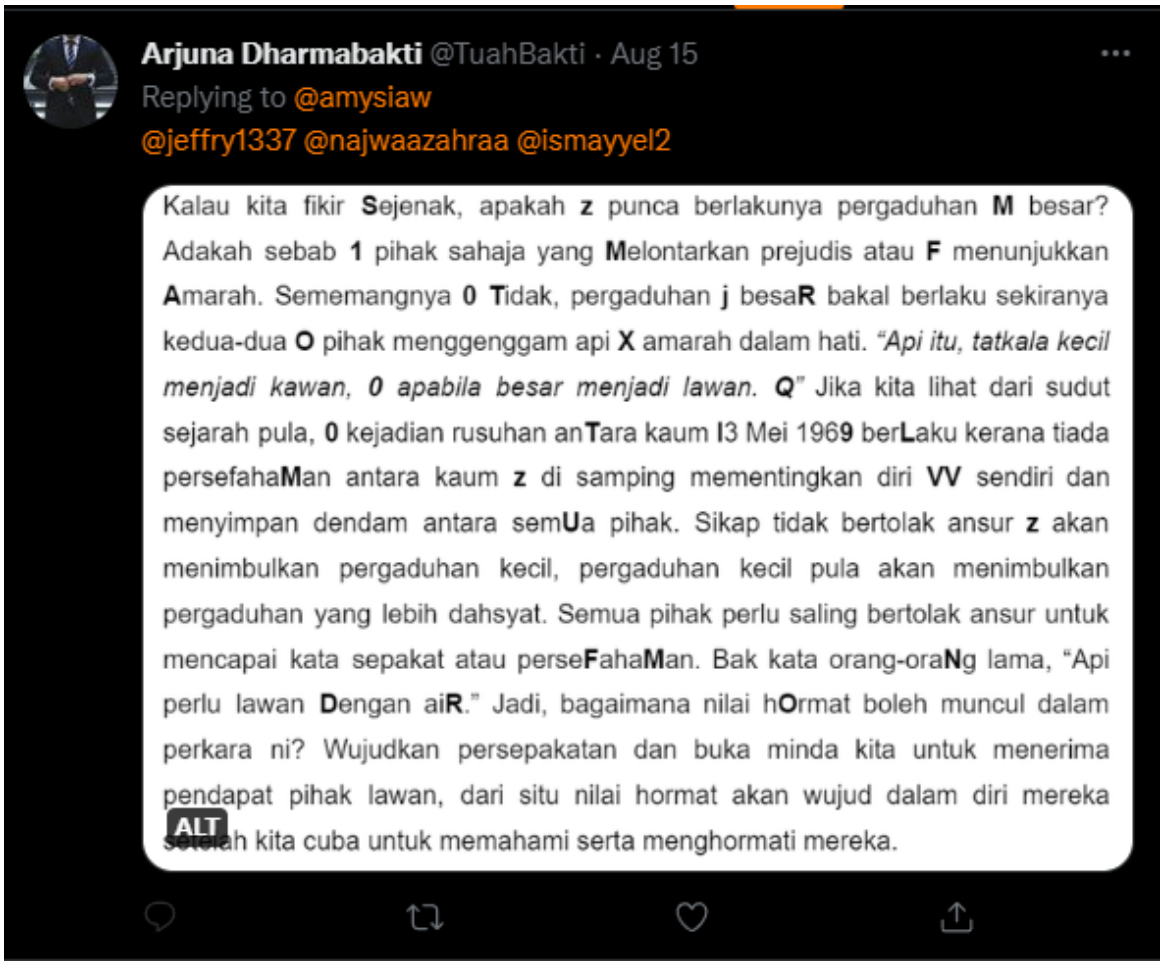
called “Twitter”.

Lets type the same username as pinterest we got above, we can search for Arjuna Twitter account.

Twitter Account - https://twitter.com/TuahBakti

Lets start reconnaissance on Arjuna’s Twitter profile.

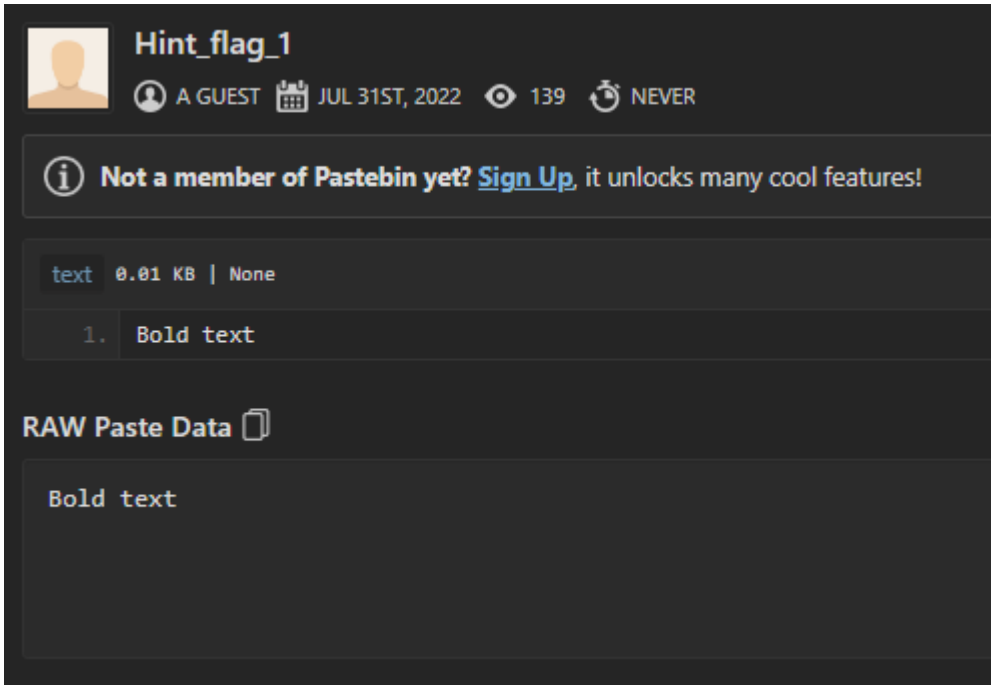
I noticed that there is a weird tweet post from Arjuna. The image contains a lot of words with Bold Text.



He also retweeted a tweet post from another user. I sus to the link inside the tweet post.

Lets navigate to the link that show inside the tweet post, I got the hint flag 1.

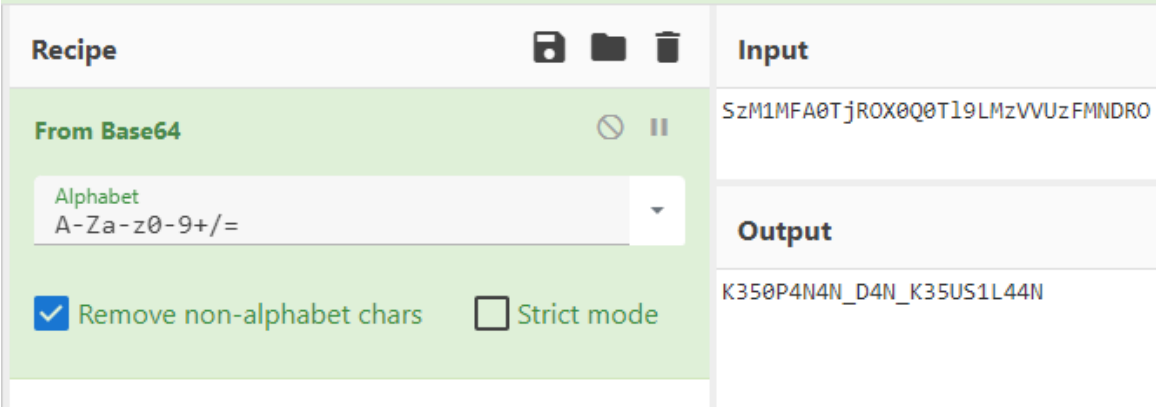
Link - https://pastebin.com/bFfyT8fQ



Then, lets combine all the Bold Text together and we got this.

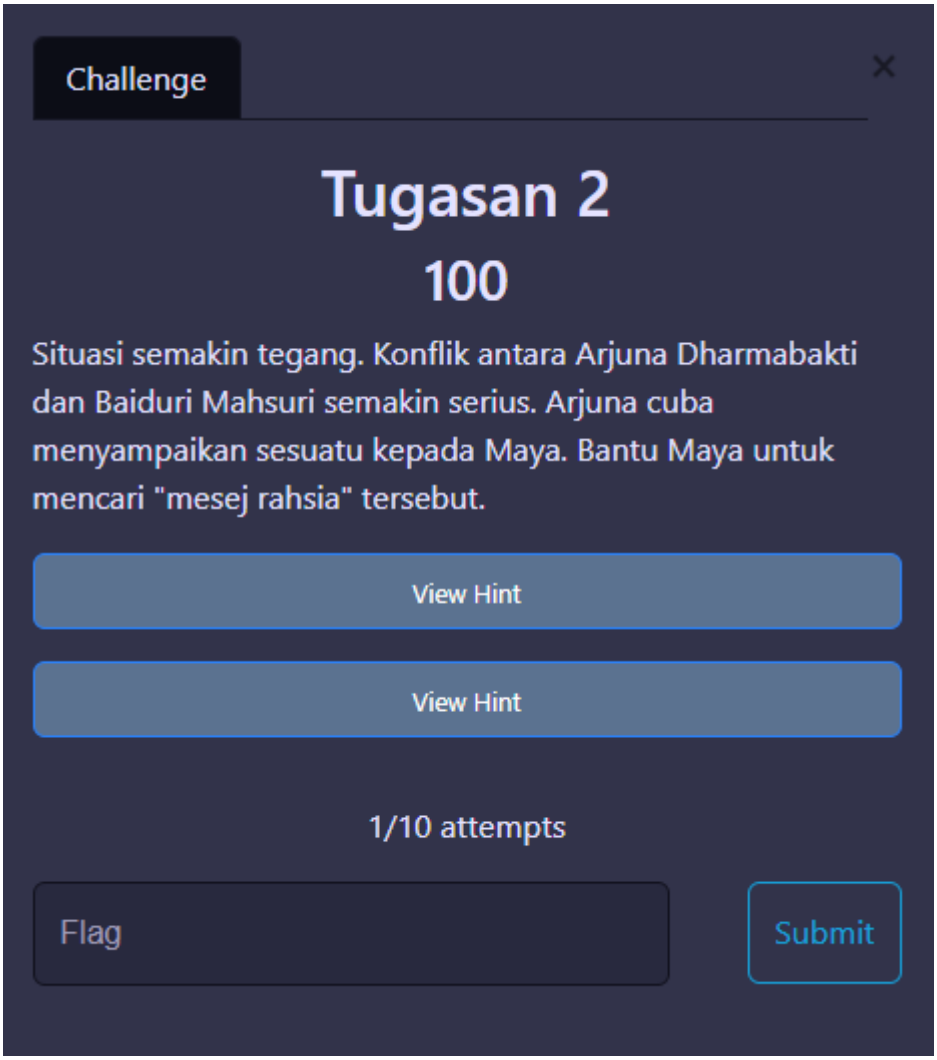
Bold Text - **SzM1MFA0TjROX0Q0Tl9LMzVVUzFMNDRO**

It seems like a Base64 encoded message. Let decode it using CyberChef and there the flag 1 !



Flag 1: 3108{K350P4N4N_D4N_K35US1L44N}

▼ Tugasan 2



In second challenge, we are asked to find out the “mesej rahsia”, which is a secret message from Arjuna. Since it is a storyline CTF event, lets continue find the information from the Arjuna Twitter profile.

We are given 2 hints:

1st (free) - OSINT > SECRET MESSAGE > DECODE > CHANNEL > FLAG
Got it!

2nd (-50points) - Mungkin dapat membantu 🤔🤔 Pembayang

Reference - https://darthnull.org/poem-codes/

Go to the like tab, I noticed Arjuna liked a weird Tweet with a number of secret code.

There is a poem and a secret code posted by madah4rjuna. I assume it is another account for Arjuna.

According to the hints given, the secret code can be decoded with Poem Code.

To decode the secret code, we need to generate the key based on the poem code and the indicator group from the secret code. The first 5 letters of the secret code was the “GBQDU”.

It means that the key words is “maruah yang tekad dan hujan”.

Thus, we can generate the key and decode the secret code.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	M	A	R	U	A	H	Y	A	N	G	T	E	K	A	D	D	A	N	H	U	J	A	N
2	15	1	19	21	2	11	23	3	16	10	20	9	14	4	7	8	5	17	12	22	13	6	18
3																							
4	S	A	Y	A	M	E	N	G	A	N	D	U	N	G	I	S	E	S	U	A	T	U	I
5	N	G	I	N	T	A	H	U	L	E	B	I	H	L	A	N	J	U	T	S	I	L	A
6	C	A	R	I	S	A	Y	A	D	I	C	H	A	N	N	E	L	T	E	L	E	G	R
7	A	M	Y	G	B	E	R	N	A	M	A	D	A	U	L	A	T	M	A	Y	A	X	X
8																							
9	SAYA	MENGANDUNGI	SESUATU	INGIN	TAHU	LEBIH	LANJUT	SILA	CARI	SAYA	DI	CHANNEL	TELEGRAM	YG	BERNAMA	DAULATMAYAXX							

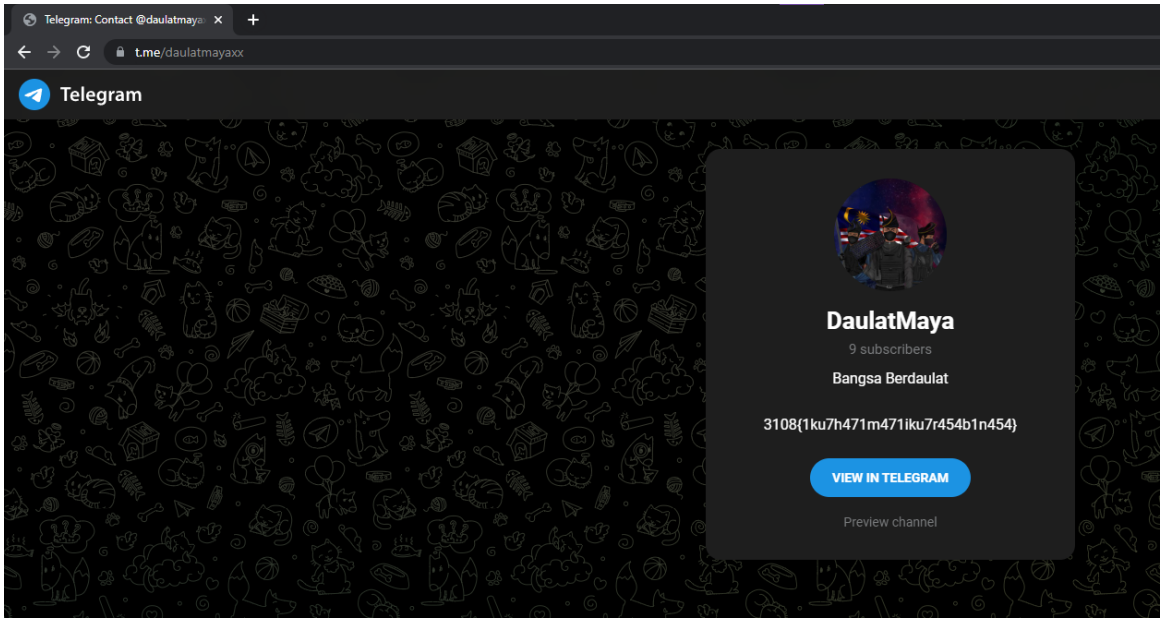
The message I got after decoded is -

> *SAYA MENGANDUNGI SESUATU INGIN TAHU LEBIH LANJUT SILA CARI SAYA DI CHANNEL TELEGRAM YG BERNAMA DAULATMAYAXX*

It means that we can get something from telegram with the username “DAULATMAYAXX”.

Telegram Link - https://t.me/daulatmayaxx

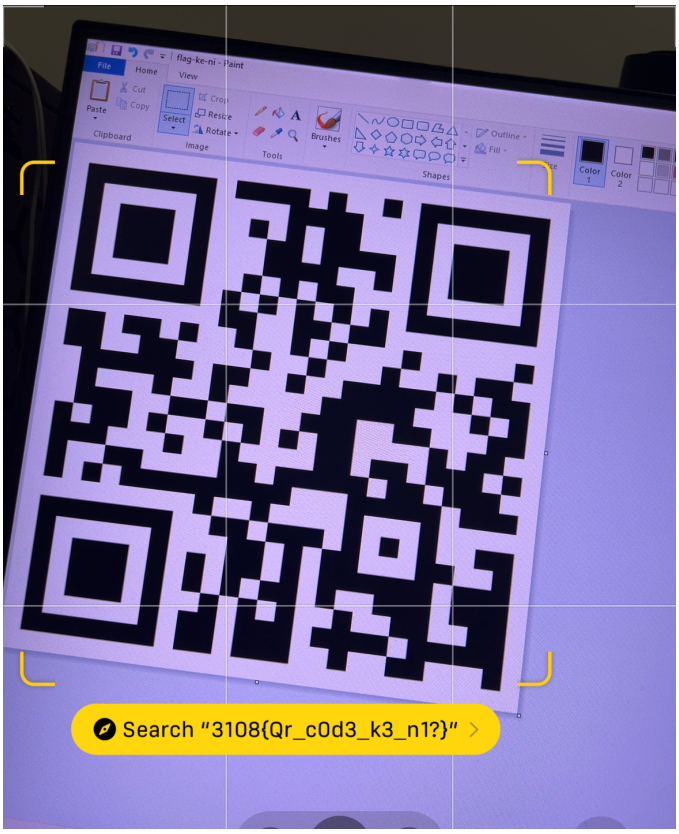
Clink on the link and we got the flag 2 !



Flag 2 : 3108{1ku7h471m471iku7r454b1n454}

▼ Bonus 2

We are given an incomplete QR code. I manually fixed it with replace 2 square on top right and left corner. Then we can get the flag after scan the fixed QR code below.



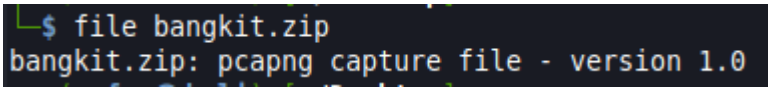
Flag Bonus 2: 3108{Qr_c0d3_k3_n1?}

▼ Bonus 3

We are given a zip file called “bangkit.zip”.

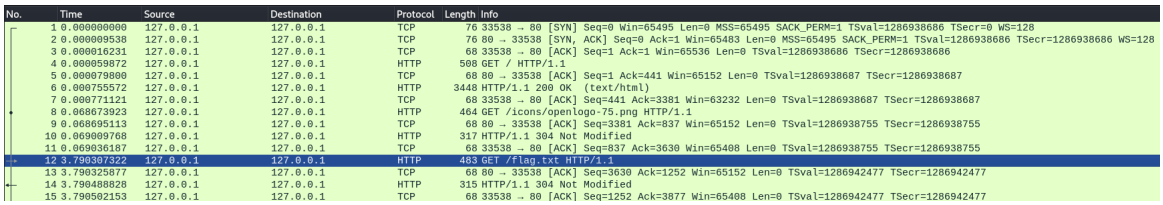
I’ve tried to unzip the file but it only provided me a html source of Apache documents.

Check for file type with the command `file bangkit.zip` and it showed me its not a zip file, but a pcapng capture file.

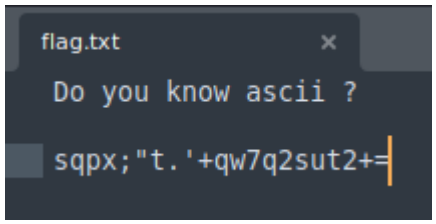


Thus, I renamed it into bangkit.pcap and open it with wireshark software.

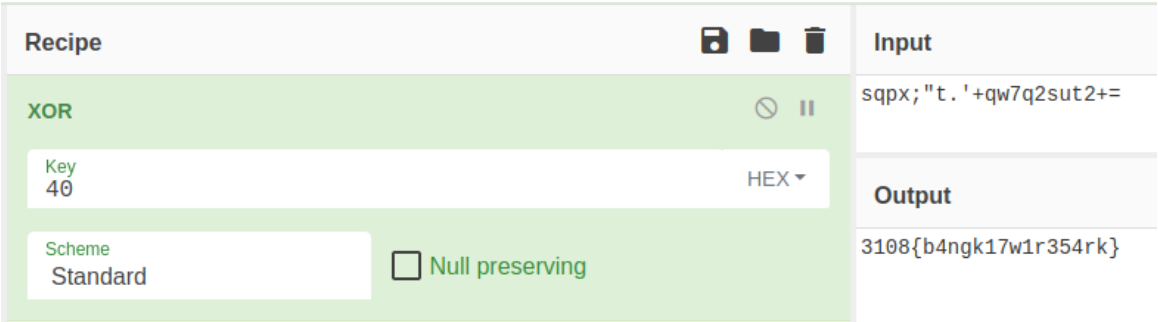
Let observe for the pcap file. I found a message showed `GET method` is called for the `flag.txt` file.



Then, I tried to export the content from Wireshark, and it actually provided me a flag.txt file.



XOR the message at CyberChef and I got the Flag !



Flag Bonus 3: 3108{b4ngk17w1r354rk}

▼ Bonus 5

In this bonus challenge, we are given an audio file.

I assumed it is a Dual Tone Multi-Frequency (DTMF) generated audio file.

We can decode the audio file from this link - https://unframework.github.io/dtmf-detect/

Then get the message from the audio.

Message - 2288664277729992

I think that it is a message for us to type in 10key numpad.

Type two time in 2 is B

Type two time in 8 is U

…

until I finish the number from the Message and that's the flag !

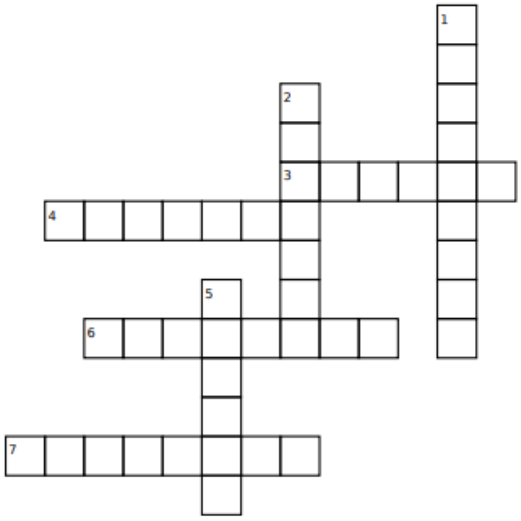
bungaraya

Flag Bonus 5: *3108{bungaraya}*

▼ Bonus 6

Bonus 6 challenge is provided us a pdf file. We need to complete all the answer to get the first letter for each of the answer and that's the flag.

Kemerdekaan yang ke-65



Down:

1. Warna Biru pada Jalur Gemilang melambangkan? _____
2. Di manakah tempat pengisytiharan kemerdekaan? Stadium _____
5. Siapakah yang mencipta Bendera Malaysia? Mohamed _____

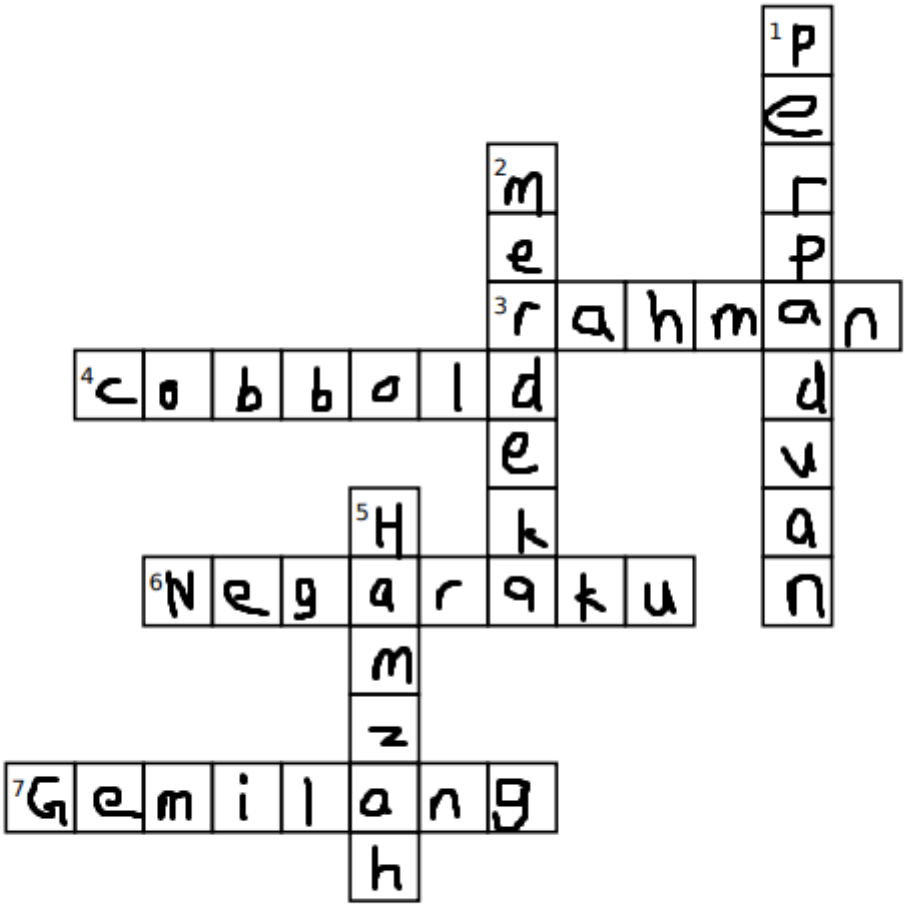
Across:

3. Siapakah bapa kemerdekaan negara? Tunku Abdul _____
4. Apakah suruhanjaya yang meninjau pandangan penduduk negeri-negeri di Borneo Utara dan Sarawak tentang gagasan Malaysia? Suruhanjaya _____
6. Apakah nama lagu kebangsaan Malaysia? Lagu _____
7. Apakah nama lain bagi bendera Malaysia? Jalur _____

Flag untuk soalan ini ialah huruf depan bagi setiap jawapan dalam huruf besar.

Contoh: 3108{ABCDEFG}

Completed Answer:



Flag Bonus 6: 3108{PMRCHNG}

Conclusion

Its a fun and different type of experience while playing this CTF event with the Theme of “Kemerdekaan” Malaysia. Even though I didn’t completed all the challenge, but most importantly I’ve learn something new especially for the Poem Code. LOL