

root@localhost:~\$ echo "b477l3 Of l337"



BATTLE OF 1337 OFFICIAL WRITEUP

Writeup By : asylumdx

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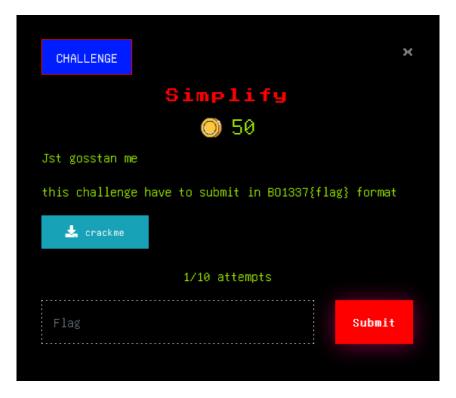
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SOLVES

Solves			
Challenge	Category	Value	Time
Back To The Future	Osint		July 16th, 10:12:10 PM
1Gram	Osint	100	July 16th, 10:18:12 PM
Break The Storage	Web		July 16th, 10:33:45 PM
Cat-Dalmantion	Web	50	July 16th, 11:01:21 PM
Rayquaza			July 17th, 12:49:40 AM
GunTher	Misc	100	July 17th, 1:52:58 AM
Olaval I for			
Simplify	Reverse Engineering	50	July 17th, 4:27:57 AM
Simplify Semerah Padi	Reverse Engineering	100	July 17th, 4:27:57 AM July 17th, 6:39:42 AM
Semerah Padi	Net	100	July 17th, 6:39:42 AM
Semerah Padi Streamline	Net	100 176	July 17th, 6:39:42 AM July 17th, 7:24:09 AM
Semerah Padi Streamline	Net Net	100 176 100	July 17th, 6:39:42 AM July 17th, 7:24:09 AM July 17th, 7:49:27 AM
Semerah Padi Streamline Snap Sheng Xiao	Net Osint Misc	100 176 100	July 17th, 6:39:42 AM July 17th, 7:24:09 AM July 17th, 7:49:27 AM July 17th, 5:27:41 PM

REVERSE ENGINEERING

SIMPLIFY

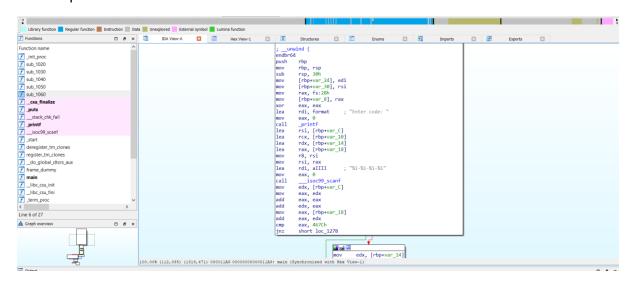


First, I checked the filetype and it turn out to be elf64 binary. Tried running and it ask for code.

```
root@ kali)-[/home/kali/Downloads]
if file crackme
crackme: ELF 64-bit LSB pie executable, x86-64, version 1 (SYSV), dynamically linked, interpreter /lib64/ld-linux-x
86-64.so.2, BuildID[sha1]=f75eeac944f72065eacfdcc28ebfdcba4d02d639, for GNU/Linux 3.2.0, not stripped

(root@ kali)-[/home/kali/Downloads]
if ./crackme
Enter code: 313131
Wrong code..
```

Then I open it in IDA to see the main function.



Decompile the function using hex ray by pressing f5.

```
1 int __cdecl main(int argc, const char **argv, const char **envp)
         unsigned int v4; // [rsp+18h] [rbp-18h] BYREF
        unsigned int v5; // [rsp+1Ch] [rbp-14h] BYREF unsigned int v6; // [rsp+20h] [rbp-10h] BYREF unsigned int v7; // [rsp+24h] [rbp-Ch] BYREF
    4
        unsigned __int64 v8; // [rsp+28h] [rbp-8h]
   9
                  _readfsqword(0x28u);
       printf("Enter code: ");

_isoc99_scanf("%i-%i-%i-%i", &v4, &v5, &v6, &v7);

if ( 3 * v7 + v4 == 18044 && 3 * v6 * v5 == 5174190 && v4 == 1010 && v7 + 49363 * v6 == 63683948 )
10
• 11
          printf("Correct code! The flag is %i-%i-%i-%i\n", v4, v5, v6, v7);
  14
15
          puts("Wrong code..");
16
        return 0;
17 }
```

From here we can see how four variable that is being used for checking the code.

```
3 * v7 + v4 == 18044 && 3 * v6 * v5 == 5174190 && v4 == 1010 && v7 + 49363 * v6 == 63683948
```

Since we have v4 value, we can just calculate other value using math.

V4=1010

V5=1337

V6=1290

V7=5678

```
(root@kali)-[/home/kali/Downloads]
# ./crackme
Enter|code: 1010-1337-1290-5678
Correct code! The flag is 1010-1337-1290-5678
```

BO1337{1010-1337-1290-5678}

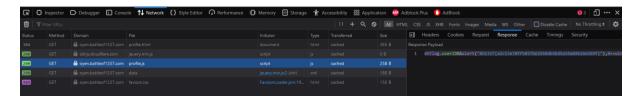


First, login using the given credentials.

Username: BattleOf1337

Password: BattleOf1337





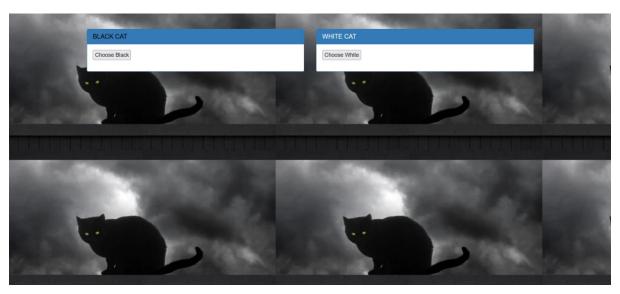
Then, I checked the response request for one of the file loaded in the page and among them is profile.js, inside the file, we can see the flag.

BO1337{a2c13e70ff50376e259ddb5bd5e54a69b16e569f}

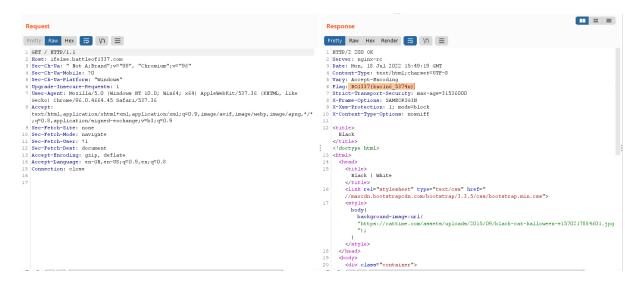
CAT-DALMANTION



https://ifelse.battleof1337.com/



Opening the site, I didn't notice anything at first. Pressing the buttons only changes the background of the site. I proceed to see the request in burp to inspect it further.

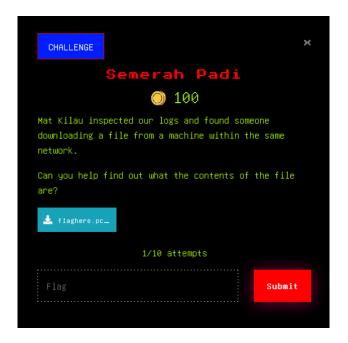


We can see a Flag parameter in the response.

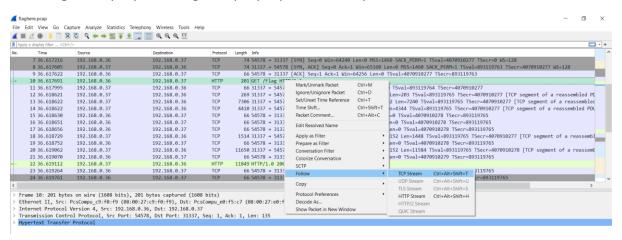
BO1337{kuc1n6_5374n}

NET

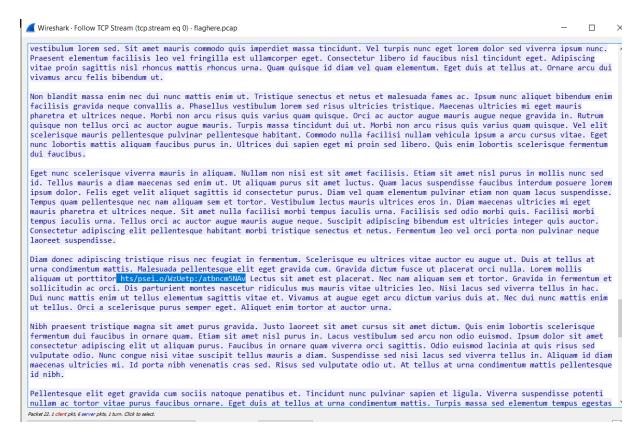
SEMERAH PADI



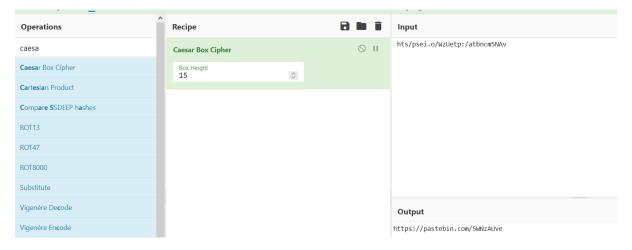
We are given a pcap file "flaghere.pcap", proceed to open in Wireshark.



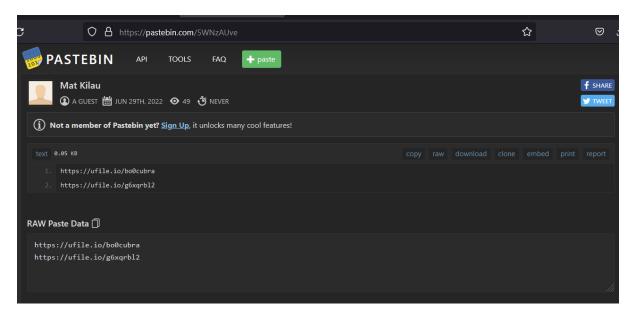
Follow the HTTP/TCP stream of the packets to see the file downloaded by the user.



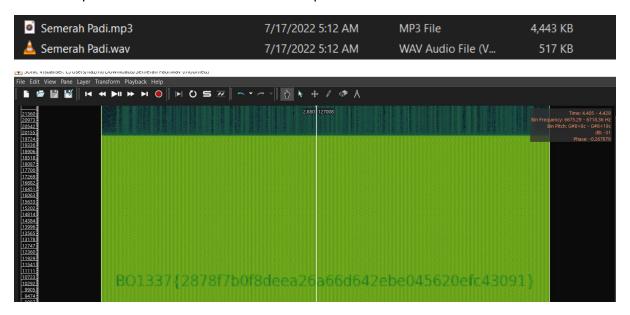
We can see the file contains a lot of dummy text in latin, however among the text we can see one line of text that isn't latin with "/" which usually comes from url.



Trying some Caesar decoding tool, I finally get an output using CyberChef Caesar Box Cipher at the 15 height. The decoded text is a pastebin url: https://pastebin.com/5WNzAUve.

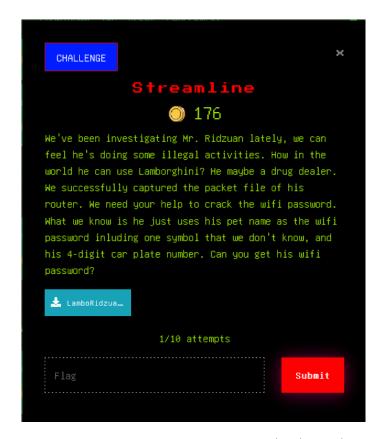


Inside the pastebin is two ufile.io file which kept two audio file.



Using sonic visualizer, we can see the spectrogram of the audio. The .wav file spectrogram contains the flag.

BO1337{2878f7b0f8deea26a66d642ebe045620efc43091}



Downloading the image, we can see a picture containing a lambo and an orange cat

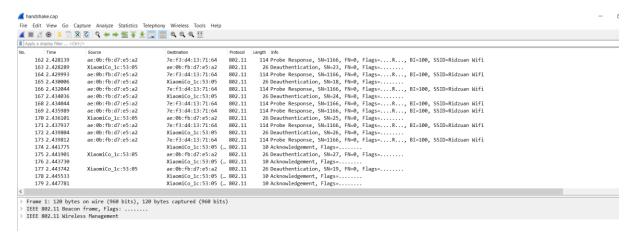


Proceed to use some steganography tools including steghide.

```
(root@ kali)-[/home/kali/Downloads]

# steghide --extract -sf LamboRidzuan.jpg
Enter passphrase:
the file "handshake.cap" does already exist. overwrite ? (y/n) y
wrote extracted data to "handshake.cap".
```

Managed to extract a .cap file from the image.



Opening the file in Wireshark, we can see it contains packet from a wifi network. From the challenge description, we have to crack the wifi password from the packets using the hint give. We can use aircrack-ng to crack the wpa handshake, however we need to have a wordlist. The description given of the wifi password is:

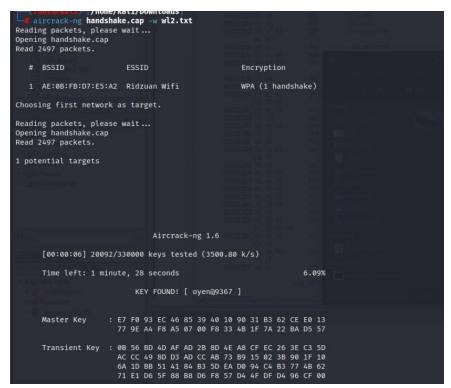
- pet name
- one symbol
- 4 digit car plate number

From this description, we can conclude and guess the password. Since the pet is an orange cat, we Malaysian often call them oyen. I proceed to generate a wordlist using crunch with the details:

- -8 characters
- -start with oyen
- -^= all symbols
- -%=number from 0-9

Crunch will generate the wordlist for us.

```
Crunch ending at cat?1585
(root@kali)-[/home/kali/Downloads]
# crunch 8 8 -t cat^%%%% -o wll.txt
Crunch will now generate the following amount of data: 2970000 bytes
0 TB
0 PB
Crunch will now generate the following number of lines: 330000
crunch: 100% completed generating output
(root@kali)-[/home/kali/Downloads]
# crunch 11 11 -t oyen^%%%% -o wl2.txt
The maximum and minimum length should be the same size as the pattern you specified.
min = 11 max = 11 strlen(oyen^%%%%)=9
root@kali)-[/home/kali/Downloads]
# crunch 9 9 -t oyen^%%%% -o wl2.txt
Crunch will now generate the following amount of data: 3300000 bytes
0 GB
0 TB
                                                                                                           0 PB
Crunch will now generate the following number of lines: 330000
                                                                                                           A
crunch: 100% completed generating output
```



Using the wordlist, we can start cracking the password, and finally get the password which is oyen@9367.

BO1337{oyen@9367}

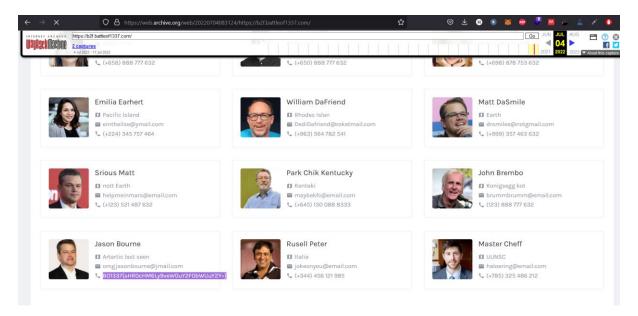
OSINT

BACK TO THE FUTURE



From challenge name we can guess that we have to see the website from previous date. Using wayback machine we can see the the site has been indexed on 4 July. Opening the site present is with flag.

HTTPS://ARCHIVE.ORG/WEB/

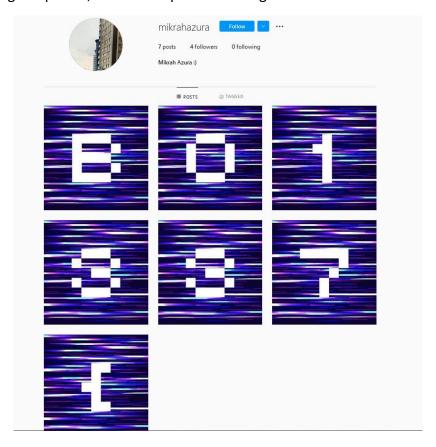


BO1337{aHR0cHM6Ly9veW0uY2F0bWUuY2Y=}

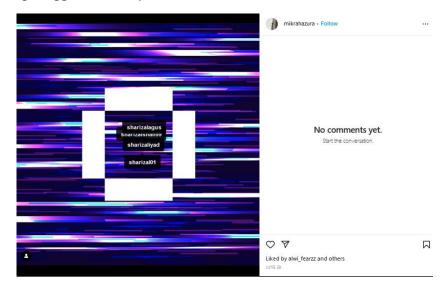


We can search for any Instagram @ from the website and found one @mikrahazura.

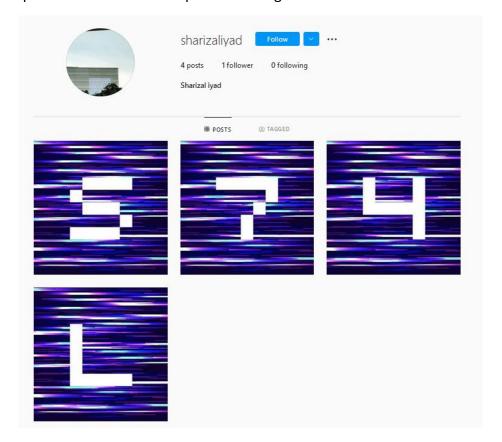
Going to instagram profile, we can see part of the flag.



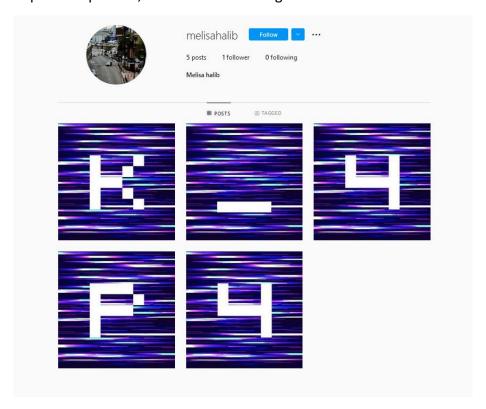
One of the image tagged several profile.

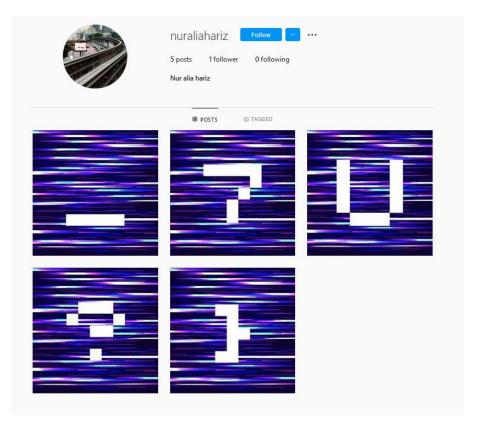


One of the profile contains the next part of the flag.



Proceed to repeat the process, and combine the flag.



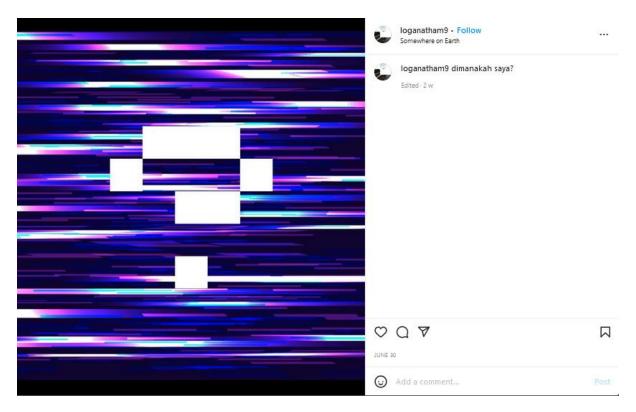


BO1337{S74LK_4P4_7U?}.

SNAP



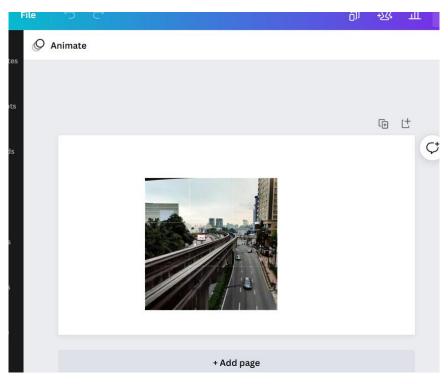
From the previous challenge, we can see another profile



Caption says "dimanakah saya". I noticed that the profile image on this profile wasn't completed.



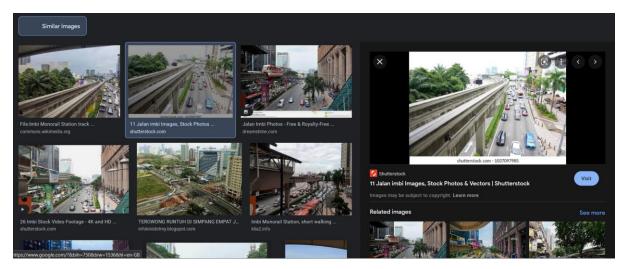
I proceed to download all the profile pictures and used canva to combine the image.



From the grid on the picture, we can guess that we need to use profile picture of other profiles to get the full image.



After getting the full image, I started using reverse image search on Google to find any similar image.

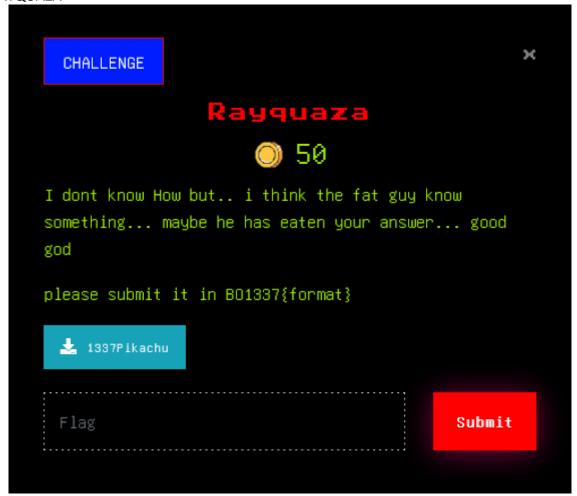


From here we know that the image came from Imbi MRT. I was confused on where the flag was and opened a ticket on whether we need to fill the BO1337{flag} format ourself in order to submit and the admin answered yes. It's pretty confusing to be honest since no declaration in description.

BO1337{Imbi}

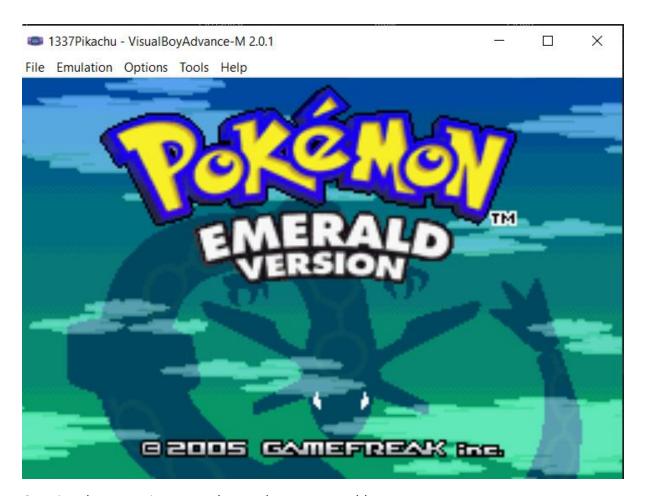
MISC

RAYQUAZA

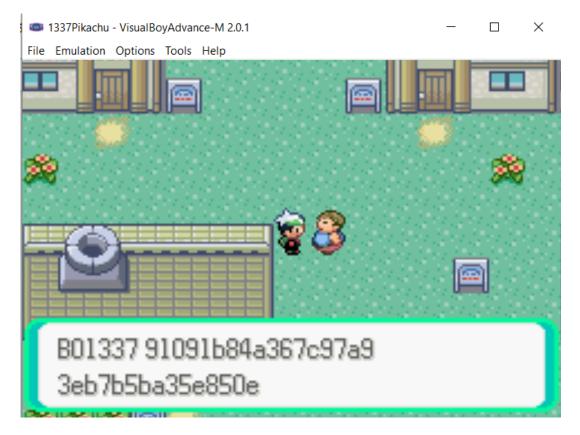


First we can check the file type, it turns out to be a GBA rom. To run the rom, we can use any GBA emulator such as VBA, but first we must rename the file to 1337Pikachu.gba.

```
root@kali)-[/home/kali/Downloads]
# file 1337Pikachu
1337Pikachu: Game Boy Advance ROM image: "POKEMON EMER" (BPEE01, Rev.00)
```



Opening the game, it turns to be a pokemon emerald rom.



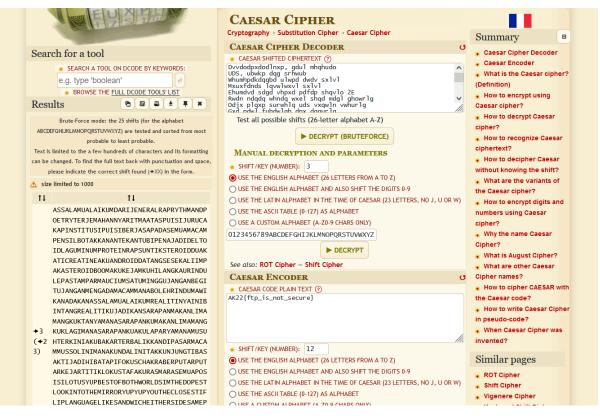
After talking with the mom and stuff we proceed to go out and find the fat man from the description and he gave us the flag.

BO1337{91091b84a367c97a93eb7b5ba35e850e}

HEIHAWRU



Opening the .txt file, we can see encoded text and numbers with ?:?:? format, I proceed to decode it using DCODE.FR Caesar cipher tool.



sajak_ali-1.txt - Notepad

sajak,ali-l.tx-Notepad

File Edit Format View Help
Lqxh hxkxk qbhxk qryf mbkx gxaf abiqlfa
Lxdr jfkrj molqbfk oxm prkqfh pqbolfa
Arx hxqf zobxqfkb xhr xkaolfa
Axqxkd pbphxif fjmxh xpqbolfa (yllj)
Xhr hbgxj hrefixkd hxr ofkar
Ibmxp qxjmxo jxr zfrj pxqr jfkddr
Gxkdxk ybdfqr gxkdxk jbkdxax
Jxxy jxkx yllbe ofkar Jxtf hxk xax hxk?
(Xppxixjrxifhrj)
Obxifqfkvx fkf 083
Yfkqxkd obxifqf hrgxafhxk pxoxmxk
Jxhxk ifjx jxkdhrh qxkvx, jxkx pxoxmxkhr?
Jxhxk ifjx jxkdhrh txdf, jxkx pxoxmxkhr?
Jxhxk ifjx jykdhrh ixdf, jxkx pxoxmxkhr?
Jxhx hrizmxo, vx jxkx jrpre qbohfkf?
Xhr jxmxo, vx jxkx jrpre qbohfkf?
Xhr yxhxo qboyxifhhxk af mxpxo jxzxj jrpplifkf
Jxkx hrkaxiff? qxh hrkgrkd qfyx
Pxhqf gxaf efyx qxmf clhrp
Zexhox ybomrqxo-mrqxo hbgxo qfqfh ilhrp
Qxxhro, xpjxox, pbjrx mlpfpf ilqrp
Vrm, ybq lc ylqe tloiap F'j qeb almbpq
Ilh fkql qeb jfoolo, vrm vrm vl qeb zilpbq
f cifm ixkdrxdb ifhb pxkatfze
Bfqebo pfab pxjb mexq pefq ifhb dlaaxjk fq
Xka fc vlr dlq x molyibj tfqe jb ybfkd jxixv arab
Ibqp qxbh fq yxxh ql 1511
Vx, vx 1511
Glj yboqfhxj ifaxe abkxk exjyx axixj xhr
Xhr mxkqxkdh hxize, yxkdrk yfix gxqre lodp dxno rd yzard di 1511

Glj yboqfhxj ifaxe abkdxk exjyx axixj xhr
Xhr mxkqxkd hxixe, yxkdrk yfix gxqre
Hxixr mxqxe pxvxm yboqlkdhxqhxk mxore (peee)
Hr mrkux qbjxk vxkd mrkvx qbjxk
Vxkd ylibe yrxq bkdhxr efixkd qbjxk
Gxaf axof yrxq ixtxk, yxfh yrxq hxtxk
Axof yxdf gxof, yxfh xkdhxq qxkdxk
Pbmrire gxof hb xqxp jxzxj hbkx qxkdhxm
Hxixr fkdxoh hrmlqlkd qrgre gxaf mbkdxhxm
Fhxk arof, dbixjx, pbklelkd, pfxhxm
Oxmmbo mbkfmr mbjylelkd pbjrx hr mxm mxm
Yrhxk qboexkaxi, yrhxk Tobnrxq
Zrjx qboexkaxi axixj xmx vxkd hr yrxq
Gxaf yfix dbkbox iy borzxm, pxjmxf axoxe drpf
Qlilkd zboxfhxk yrkqrq axof hborpf
Yxkdrk

5:6:2 6:1:1 31:3:1 15:3:3 15:3:3 43:4:1 27:2:1 32:3:1 33:1:1 41:3:1 38:3:4 24:2:2 10:5:4 41:5:3 45:6:3 35:1:1 15:3:3 1:3:3 36:2:2 34:1:1 45:2:3 21:2:2 17:1:2 11:4:2

Assalamuslaikum, dari jeneral
RAP, pothos and poeto;
Terjemahannya ritma atas puisi
Juruckap institusi puisi
Berjasa pada semua macam gepsil, 28
Otak kanan telan tubi pena jadi gelojid,
Lagu minum protein rap sunitik steroid
Dua kati crestiga, eku angfolid,
Datang sesekali impak sateroid (Boogn)
Aku kejam kuhilang kau rindu
Lepas tampar mau cium satu mingu
Jangan begtu jangan mengada
Macam mana boleh rindu Mawi kan ada kan?
(Assalamuslaikum)
Resilitinya ini 083
Bintang realiti kijalgidap, sarapan
Makan lima mangkuk tanya, mana sarapanku?
Makan lima mangkuk tanya, mana sarapanku?
Aku bakar refrailitikan lagi, mana sarapanku?
Aku lapar, ya mana musuh terkini?
Aku bakar refrailitikan di parar macam gussolipi,
Mana jayodalipi? tak kunjung tiba
Sakti jadi hiba tapi fokus
Olakra berouter-putak kejar titik jokus,
Tafakur, samara, semua posis jokus,
Yubu best of bodh sondole Junit de dopest
Look loop the mitror. vue vue vue the closest
I fillu lapanyae tiba sandyach,
Eliber side sama abat shil Jike poddamu it.
And (Livay are a apolibar with me being malay dude
Left take it hagis to 1511
Ya, ya 1511
Jogo bertikan ludah dengan hamba dalam aku
Aku puntang kalah, balab wakawan
Dari bagi jari, baik angkat tangan

 $5:6:2\:6:1:1\:31:3:1\:15:3:3\:15:3:3\:43:4:1\:27:2:1\:f\:32:3:1\:33:1:1\:41:3:1\:38:3:4\:24:2:2s\:10:5:4d\:41:5:3\:45:6:3\:35:1:1\:15:3:33\:1:3:3\:36:2:2\:34:1:1\:45:2:3\:21:2:2\:17:1:2\:11:4:2$

Turns out to be a song lyric. From here, I start to guess the relation between the lyrics and the number and realize how to decode it. Taking 5:6:2 as an example:

5=Number of lines.

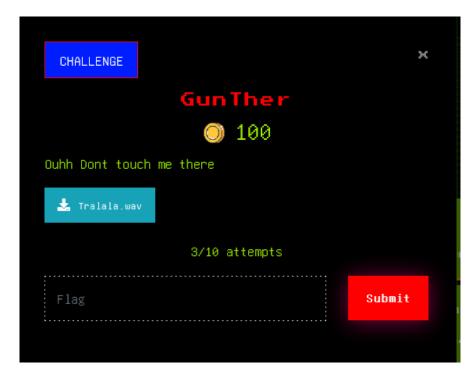
6=Number of words.

2= Number of characters.

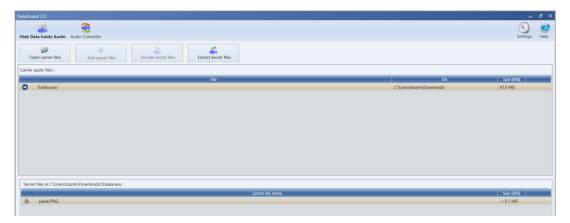
Proceed to do the same using other number and we will get flAgisdarK3noKluai.

BO1337{darK3noKluai}

GunTher



Treating the challenge as steganography, I proceed to use all the audio stega tools such as spectrogram, steghide, binwalk etc.

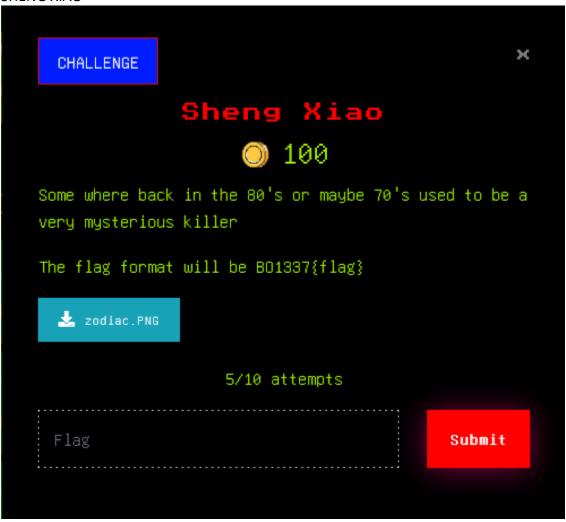


Finally using Deepsound, I manage to extract an image containing the flag.



BO1337{9d6382bf597a3014a8472762fedce888}

SHENG XIAO



Downloading the image, we can see encoded text, from description we can guess it uses the same cipher from zodiac killer.



Searching for some online tools, finally found one that was able to decode the text.

HTTP://ZODIACKILLERCIPHERS.COM/TYPEWRITER/

BO1337{f4ec90216d2d7d5edb7c201919fce008e8}

DARCHROW



The image contains text.

To extract the text, we can use OCR tools such as: https://www.imagetotext.info/ however we still need to correct the extracted type. From the challenge name darchrow, we can google and know that it is the hero used in Dota which is now known as enigma in Dota 2.

ACZQQOKLHUALHPTXGXKEPWTLDJUCEORHRKTQRTVKXOWRBYACB UKRUPCEAQRAKMZRJHCEHZJWJKSGTLTMOXTEJHLPPEHXJBQQW KXYQNKFTOKBJUVFRUFCSQMTXHTTDJSOFWHYNSOHVEZGQVURJF JALJEXQWWYWIZBJLMOYDMGNXOMRMLQRSYWZHJGBLCSHNMYFXE SJNFBBITRXHKZYQGYIPEUYTNFXSSPCXIZJMRCTLHUUHBFEXIVBM EURYMPAZATXUVNVQRSLPFVWWBBUHOEMXYRPMLTYZXLHSAPMMM

QOEHXKQCDWBSWDMTFMSMFBNCQGMQHHJPQYKJPZNMYYDKZYZX UHOOHAIAFGMDBMYAEQPRSUVQKGEZSA

I knew about the enigma cipher that was used during the word war and proceed to use the tools from dcode.fr to decode it.

https://www.dcode.fr/cipher-identifier



ISTOPENQUIRESTOPFORYOUSTOPTOREADANDDECRPYTTHISSTOPFORALANTURINGSTOPFORHIS SUCCESSSTOPOFDECRYPTINGSTOPALLTHEGERMANSTOPMESSAGESTOPTHEFLAGISBOBRACESE NIGMAFORALANTURINGBRACESONLYTHOSEWHOAREASLEEPDONTMAKEMISTAKESGETNOCRITI QUESEEMSEVERYBODYSWORRIEDBOUTTHINGSTHATWEARETHINKINGANDWHENTHEREMEDYS THEENEMYYOUHIDESELFDEPRECATIONUPYOURSLEEVEANDSELFSERVINGFRIENDSWHOLEAVEW HENYOUARESINKING

BO1337{ENIGMAFORALANTURING}

REDPOINT



Probably one of the most ridiculous challenges. I spend hours trying to extract flag from the image and the file name. When I saw some people started getting the answer, I realize I was overthinking it. Basically, the flag is just what the arrow is pointing at which is the screwdriver.



BO1337{screwdriver}