UJ CyberClub CTF

- **Challenge name** Levi
- **Challenge category** Reverse

There was a file attached so I ran the command file to check for the type

```
┌──(kali㉿kali)-[~/Downloads/Levi]
└─$ file Levi
Levi: ELF 64-bit LSB pie executable, x86-64, version 1 (SYSV), dynamically li
nked, interpreter /lib64/ld-linux-x86-64.so.2, BuildID[sha1]=c8bf1bd70c53551f
78c33b0c01f97898586dd9a6, for GNU/Linux 3.2.0, not stripped
```

It’s an executable file so I ran it then used the command ltrace to check how the program works

```
┌──(kali㉿kali)-[~/Downloads/Levi]
└─$ ltrace ./Levi
puts("[+] Levi: Kenny...what is the pa"...[+] Levi: Kenny...what is the passw
ord you goddamn monster?!:
)    = 62
__isoc99_scanf(0×55bff70387b6, 0×7ffd6e00d2fe, 1, 0×7f5dea9c9190
1
) = 1
strcmp("1", "FZMUV9OQ")                          = -21
+++ exited (status 0) +++
```

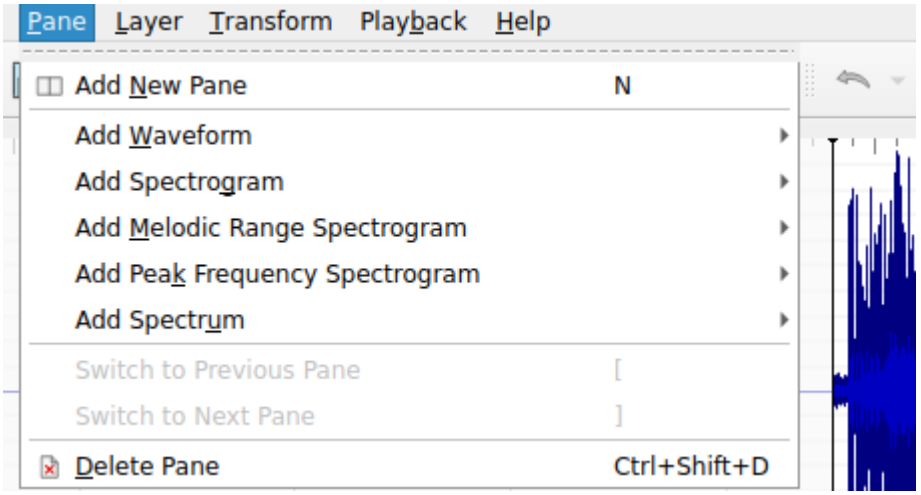
We can see that there is a function that takes the input and compares it with the value FZMUV90Q using strcmp function

```
┌──(kali㉿kali)-[~/Downloads/Levi]
└─$ ./Levi
[+] Levi: Kenny...what is the password you goddamn monster?!:
FZMUV9OQ
UJCyberClub{KEeEeEeEeEeEeEeEny!}
```

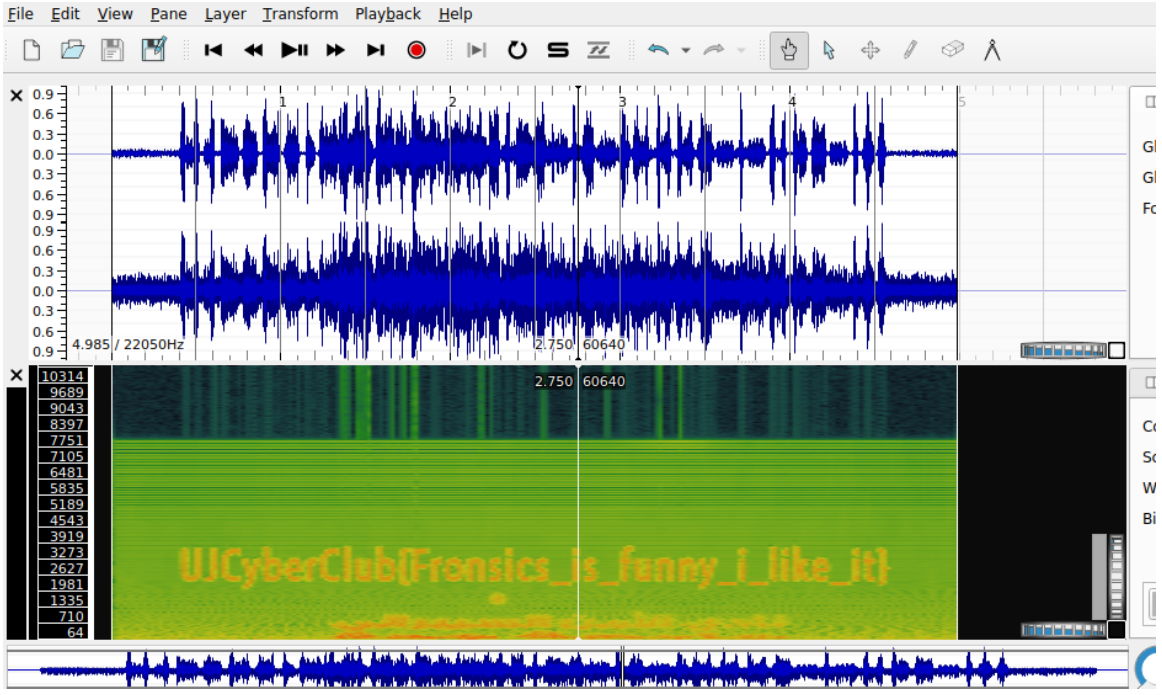
I put the value FZMUV90Q as a password and got the flag

- **Challenge name** CAN U HEAR ME??
- **Challenge category** Stenography

There was an audio file attached and challenge category is stenography I used sonic visualiser

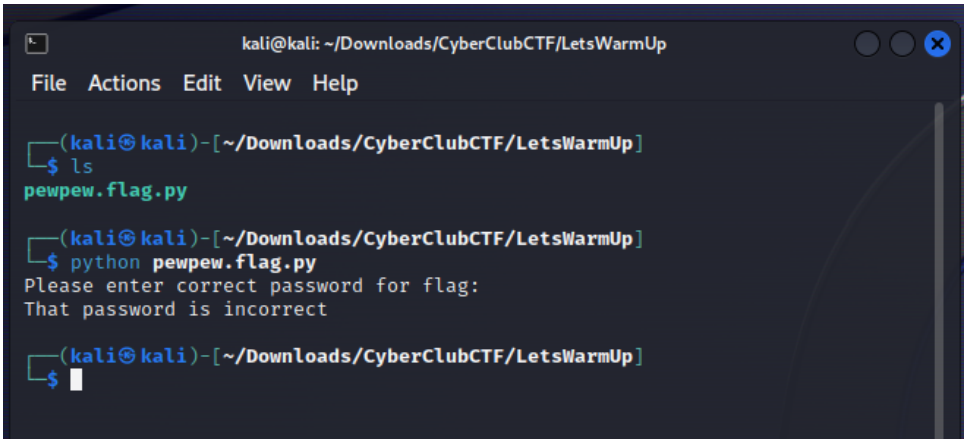


Added spectrogram from the pane menu

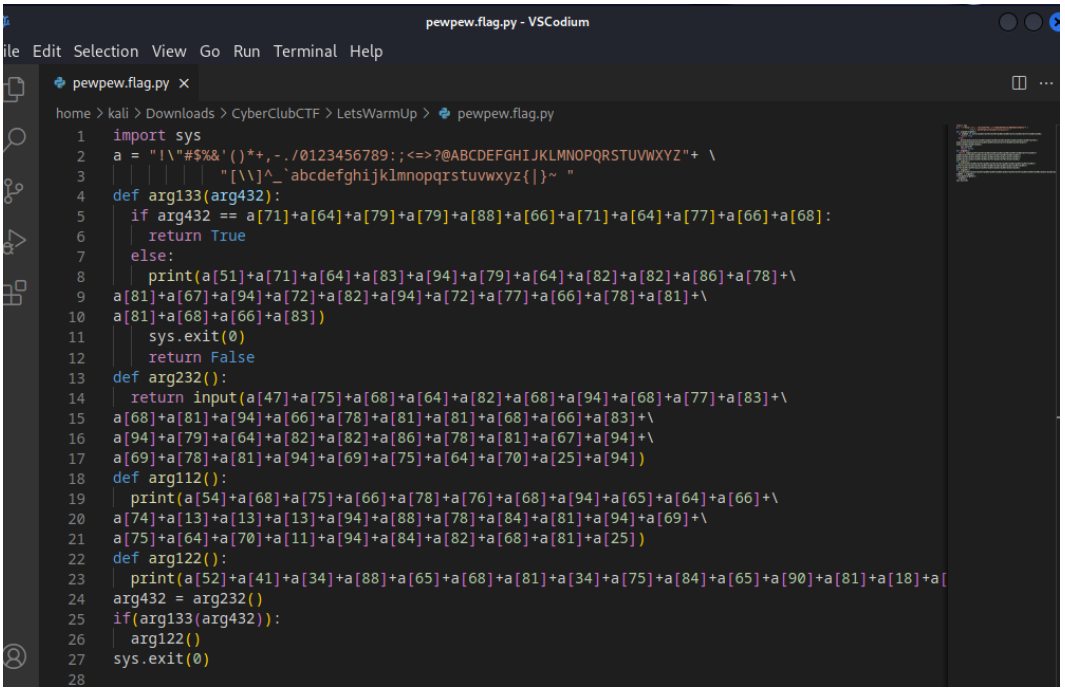


And then flag was visible

- **Challenge name** LetsWarmUp
- **Challenge category** Reverse



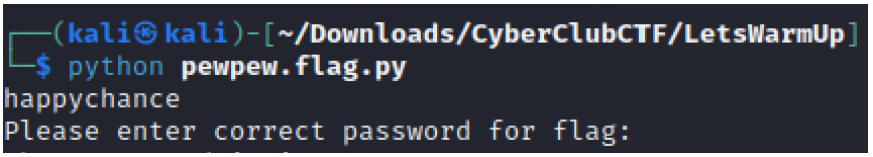
There was a python code attached so I ran it then it asked me for a password



In line 5 we can see that the password might be the value of arg432 so I printed the value before the if condition

```
4   print(a[71]+a[64]+a[79]+a[79]+a[88]+a[66]+a[71]+a[64]+a[77]+a[66]+a[68])
```

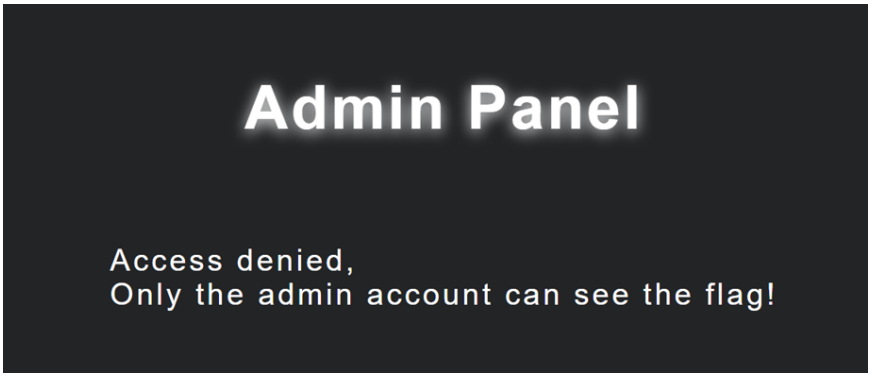
I ran the code again and got the password



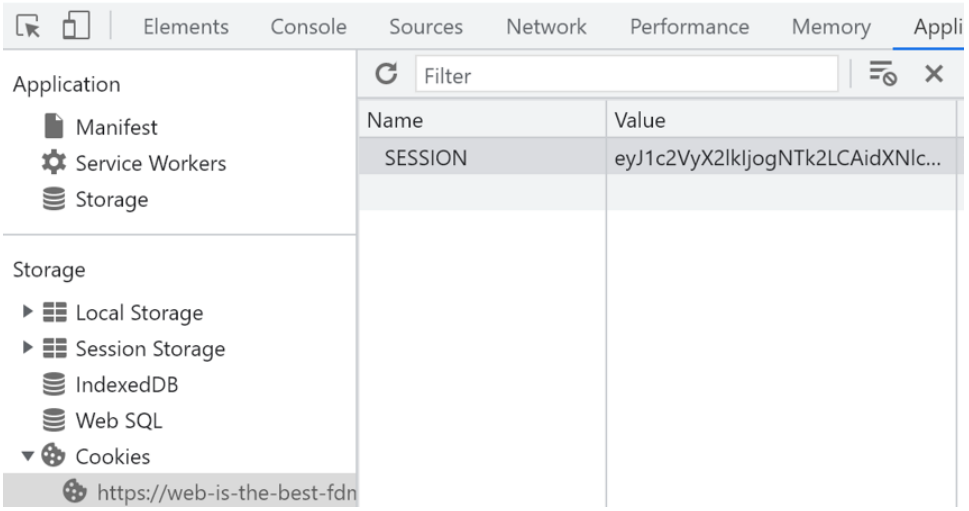
I entered the password and got the flag

- **Challenge name** Cookie
- **Challenge category** Web

The challenge made you go to a link that displayed this panel



From the challenge's name we can see that it has something to do with cookies so we will check the cookies of the website



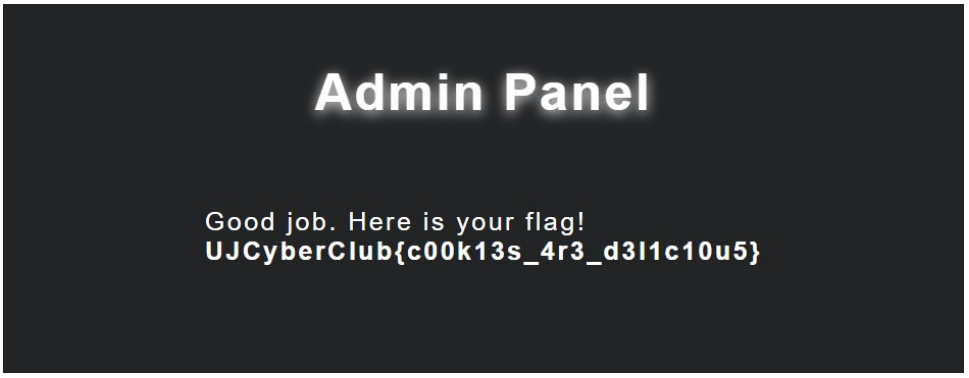
As we can see the value of the cookies is encoded using base64 so we will copy the value and decode it

```
{"user_id": 596, "username": "guest", "admin": false}
```

This is the value after decoding it so i'll try to change "guest" into "admin", set the user_id to 1 and change false to true

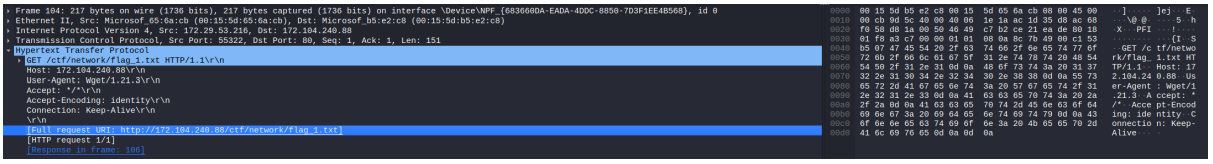
So the value will be **{”user_id”: 1, “username”: “guest”, “admin”: true}**

After encoding it to base64 and changing the cookie value the flag appeared

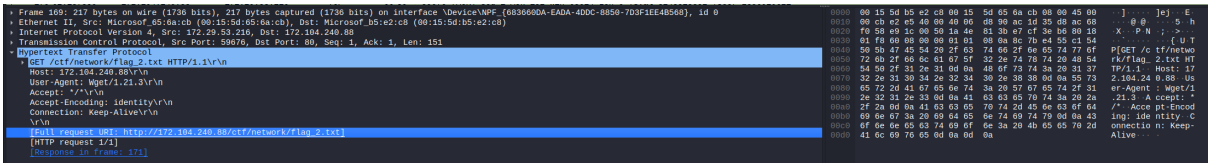


- **Challenge name** Flag leak
- **Challenge category** Network

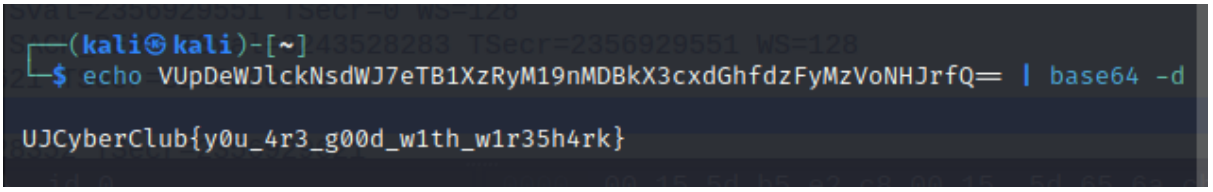
There was a pcap file attached so I opened it using wireshark and searched for the word flag



When I opened the txt file it had a text encoded using base64 but wasn’t the correct flag so I kept looking and found another txt file



After decoding the text in the file I got the correct flag


(kali㉿kali)-[~]
$ echo VUpDeWJlckNsdWJ7eTB1XzRyM19nMDBkX3cxdGhfdzFyMzVoNHJrfQ== | base64 -d
UJCyberClub{y0u_4r3_g00d_w1th_w1r35h4rk}