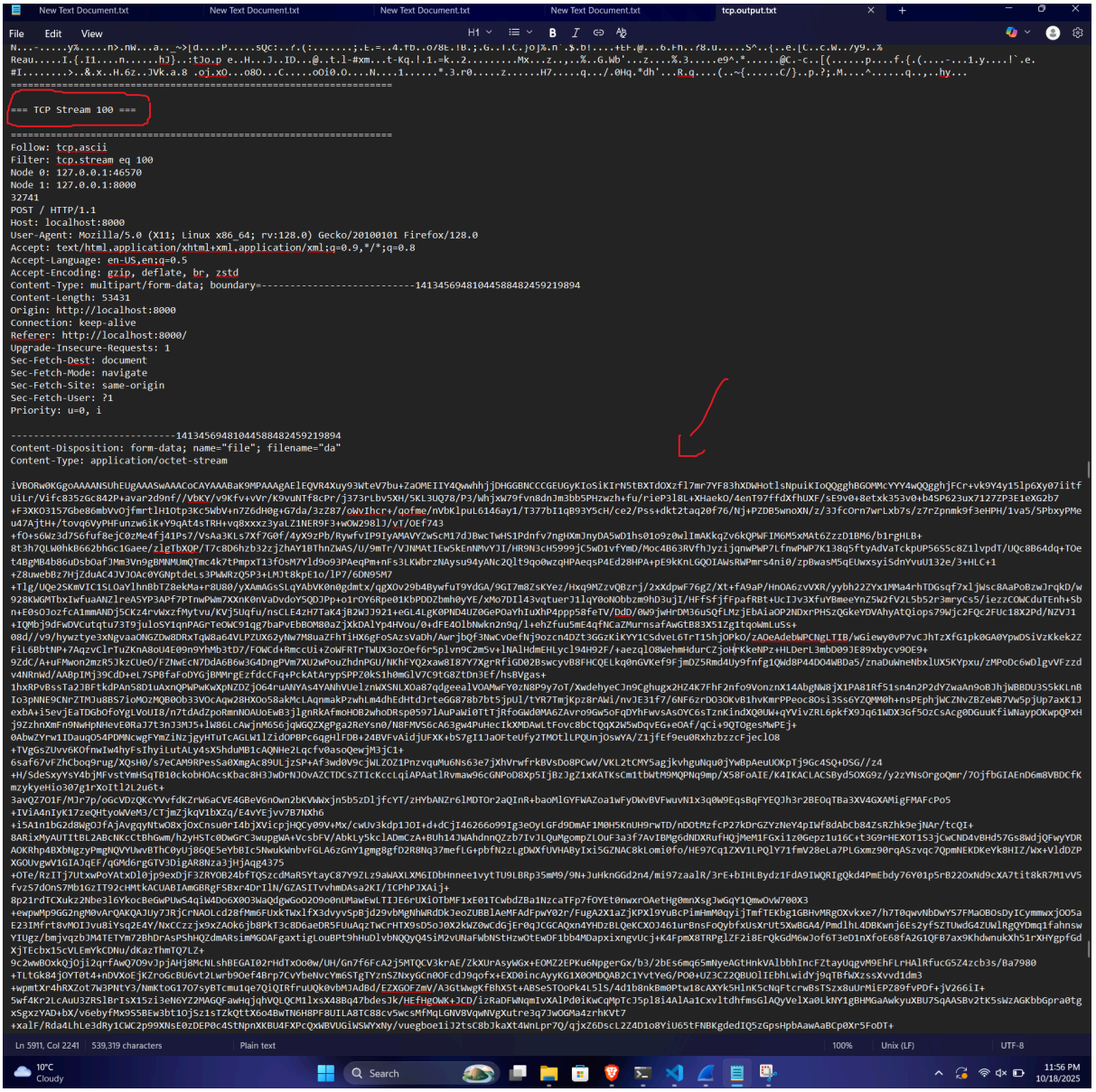
We have a PCAPNG file. When I saw there were 111 TCP Streams (Statistics -> Conversations) I ran the following shall code to reassemble all the TCP Streams and write them in a text file to read them better :

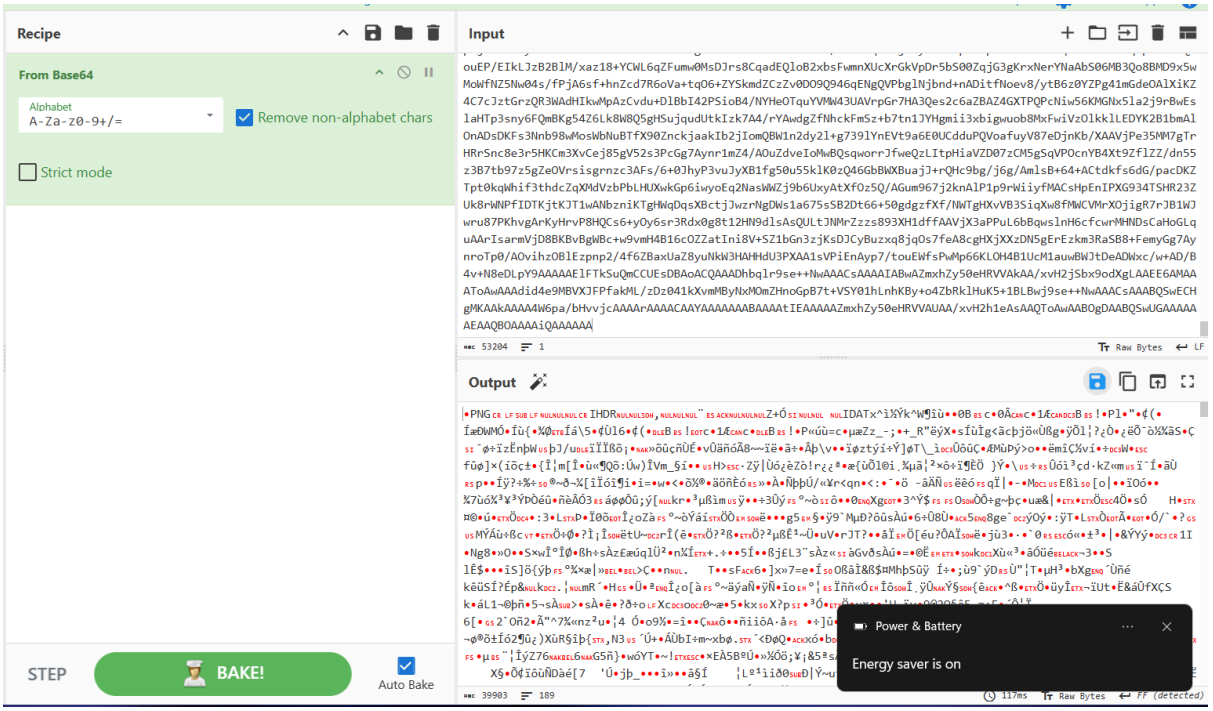
```
for stream in $(tshark -r TheOldDaysIntercepted.pcapng -Y "tcp.stream" -T fields -e tcp.stream | sort -n | uniq); do
  echo "=== TCP Stream $stream ==="
  tshark -r TheOldDaysIntercepted.pcapng -q -z follow,tcp,ascii,$stream
  echo
done
```

chmod +x run.sh
./run.sh file.txt

Analyzing **file.txt,** at the end of streams, I noticed a big big file at stream 100 :



So I went to WireShark, to tcp.stream eq 100, I copied the text and I uploaded it on CyberChef. I got a PNG image :



Save the file. It should look like this :

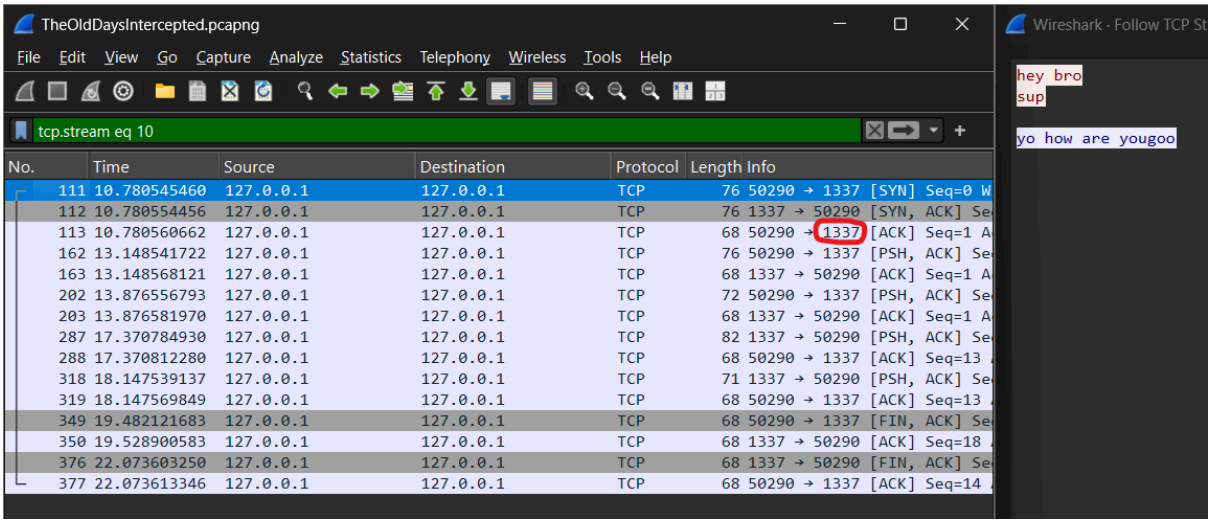
Because we have an image, it’s stegano. I ran zsteg and I found this archive :

```
z4que@z4que /m/c/U/z/Desktop> zsteg download.png
[?] 237 bytes of extra data after image end (IEND), offset = 0x9af2
extradata:0         .. file: Zip archive data, made by v3.0 UNIX, extract using at least v1.0, last modified May 10 2025
 11:25:48, uncompressed size 43, method=store
    00000000: 50 4b 03 04 0a 00 09 00  00 00 38 5b aa 5a fd b1  |PK........8[.Z..|
    00000010: ef be 37 00 00 00 2b 00  00 00 08 00 1c 00 66 6c  |..7...+.......fl|
    00000020: 61 67 2e 74 78 74 55 54  09 00 03 fc 6f 1f 68 d2  |ag.txtUT....o.h.|
    00000030: 6f 1f 68 75 78 0b 00 01  04 e8 03 00 00 04 e8 03  |o.hux...........|
    00000040: 00 00 01 d8 9d e1 ef 4c  05 55 c9 14 f7 da 90 c2  |.......L.U......|
    00000050: ff cc 3c f4 e3 59 17 be  63 01 c8 dc 4c 3a 66 47  |..<..Y..c...L:fG|
    00000060: 9e 81 a9 07 bb 7e 55 26  34 d6 12 e7 84 a0 72 fa  |.....~U&4.....r.|
    00000070: 8e 19 6d 19 25 1e e2 b9  fb 50 4b 07 08 fd b1 ef  |..m.%....PK.....|
    00000080: be 37 00 00 00 2b 00 00  00 50 4b 01 02 1e 03 0a  |.7...+...PK.....|
    00000090: 00 09 00 00 00 38 5b aa  5a fd b1 ef be 37 00 00  |.....8[.Z....7..|
    000000a0: 00 2b 00 00 00 08 00 18  00 00 00 00 00 01 00 00  |.+..............|
    000000b0: 00 b4 81 00 00 00 00 66  6c 61 67 2e 74 78 74 55  |.......flag.txtU|
    000000c0: 54 05 00 03 fc 6f 1f 68  75 78 0b 00 01 04 e8 03  |T....o.hux......|
    000000d0: 00 00 04 e8 03 00 00 50  4b 05 06 00 00 00 00 01  |.......PK.......|
    000000e0: 00 01 00 4e 00 00 00 89  00 00 00 00 00           |...N.........   |
b1,g,lsb,xy         .. file: OpenPGP Public Key
b1,g,msb,xy         .. file: OpenPGP Public Key
b1,rgb,lsb,xy       .. text: "Definetly do not check this -> aHR0cHM6Ly93d3cueW91dHViZS5jb20vd2F0Y2g/dj14dkZaam81UGdHMA=
="
```

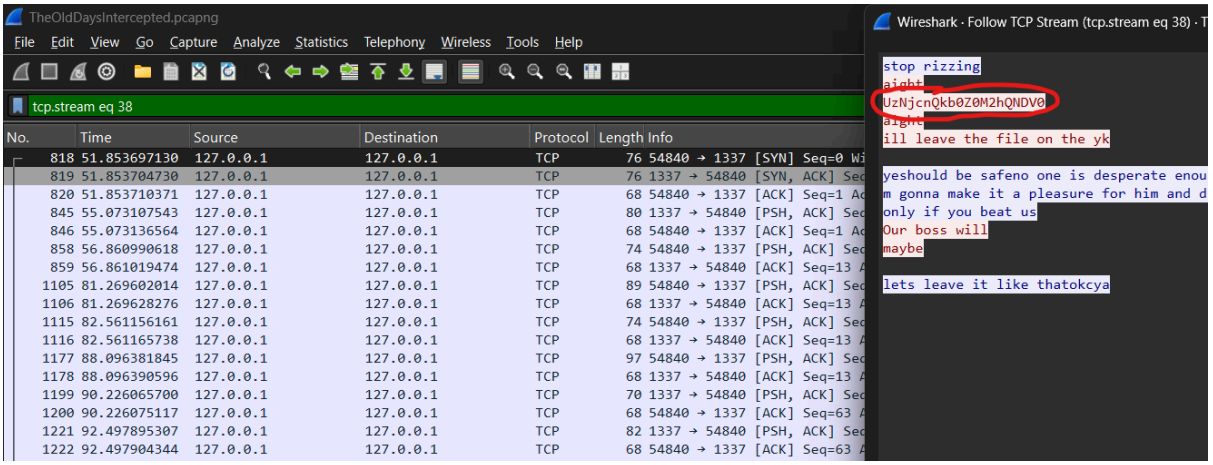
Command :

zsteg -E "extradata:0" download.png > flag.zip

The archive is password protected. I tried John, Hashcat…nothing. The text of the problem said about 2 ppl communicating, so I continued looking in **file.txt** (TCPs). At **tcp.stream eq 10**, we can see a basic communication + I noticed the 1337 dstport :



I filtered the TCP Streams by destination port (tcp.dstport == 1337), I followed some streams and I found this interesting message in the third followed TCP stream with destination port eq to 1337 (**tcp.stream eq 38** apparently):



This is a Base64. Decoded, is **S3crt$oFt3hP45t** and also the archive password

THE FLAG : ctf{S3ems_Y0U_N3V3R_L3aRn_YeLeuRe_La3ka3r}
~Z4que