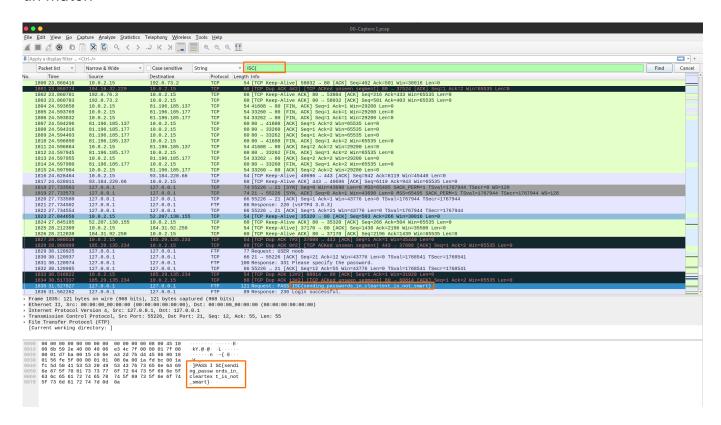
## **00 - Capture 1**

Dupa ce am deschis captura in Wireshark si am cautat stringul **ISC**{ in packete, am gasit un match



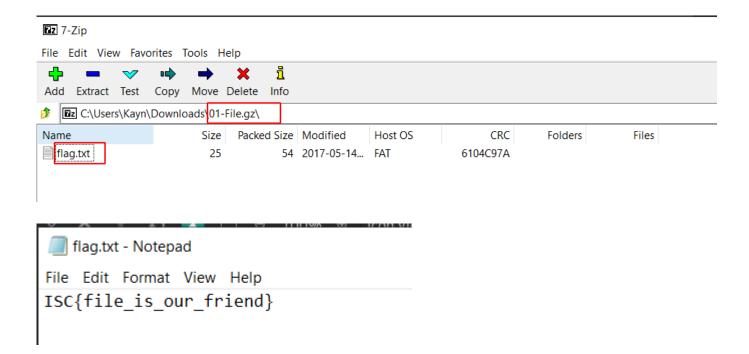
#### **Flag**

ISC{sending\_passwords\_in\_cleartext\_is\_not\_smart}

#### 01 - File

```
$\frac{1}{2} \text{$file 01-File} \\
01-File: gzip compressed data, was "flag.txt", last modified: Sun May 14 \\
01:09:57 2017, max compression, from FAT filesystem (MS-DOS, OS/2, NT), \\
original size modulo 2^32 25
```

Astfel, am redenumit fisierul pentru a adauga extensia **gz** si l-am uploadat pe un host de Windows pentru a vedea flagul.



ISC{file\_is\_our\_friend}

### **02 - Hidden 1**

```
$\frac{\llowertimes 02-Hidden\ 1.png | grep ISC \\
%tEXtdate:ISC{we_all_love_grep}59:18+02:00
```

#### **Flag**

ISC{we\_all\_love\_grep}

## 03 - Corrupted.jpg

Trebuie sa reconstruim headerul fisierului cu extensia JPEG pentru a fi unul valid.

EO/EXIL IS the most common image rormat used by digital cameras and other image capture devices.

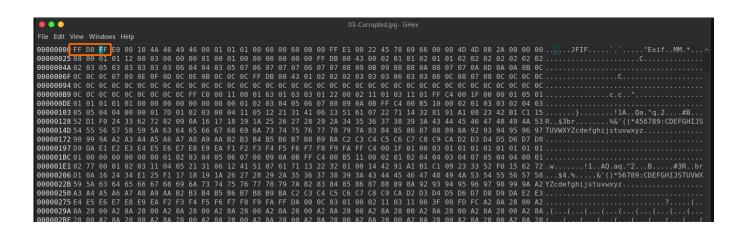
JPEG/JFIF, it is the most common format for storing and transmitting photographic images on the Internet

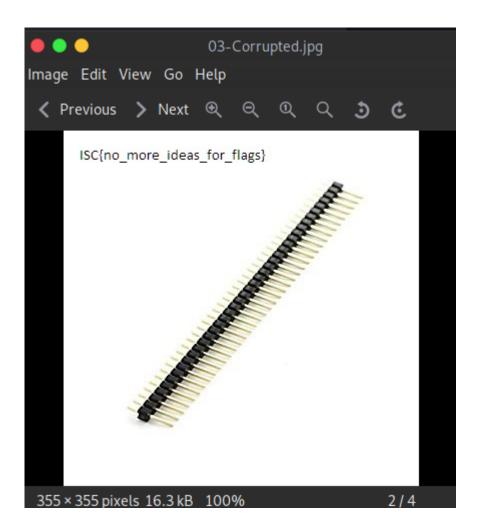
JPEG files (compressed images) start with an image marker which always contains the marker code hex values FF D8 FF. It does not have a length of the file embedded, thus we need to find JPEG trailer, which is FF D9.

#### Let's examine the example

When inspecting example.jpg file's binary data using any Hex Viewer, like Active@ Disk Editor we can see it starts with a signature FF D8 FF:

Offset	0	1	2	3	4	5	6	7	-	8	9	A	В	С	D	E	F	ASCII
00000000	FF	D8	FF	ΕO	00	10	4A	46		49	46	00	01	01	01	00	48	яШяаЈГІГН
00000010	00	48	00	00	FF	DB	00	43		00	01	01	01	01	01	01	01	.няы.С
00000020	01	01	01	01	01	01	01	01		01	01	01	01	01	01	01	01	
00000030	01	01	01	01	01	01	01	01		01	01	01	01	01	01	01	01	
00000040	01	01	01	01	01	01	01	01		01	01	01	01	01	01	01	01	
00000050	01	01	01	01	01	01	01	01		01	FF	DB	00	43	01	01	01	яы.С
00000060	01	01	01	01	01	01	01	01		01	01	01	01	01	01	01	01	
00000070	01	01	01	01	01	01	01	01		01	01	01	01	01	01	01	01	
00000080	01	01	01	01	01	01	01	01		01	01	01	01	01	01	01	01	

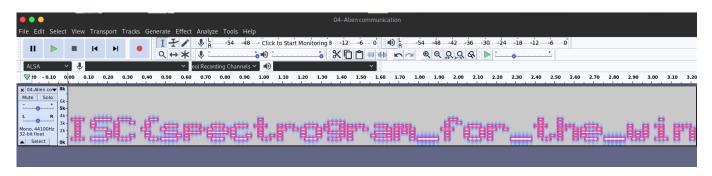




 $ISC \{ no\_more\_ideas\_for\_flags \}$ 

## **04 - Alien communication**

Trebuie sa analizam spectograma aferenta fisierului .wav folosind Audacity.



#### **Flag**

ISC{spectogram\_for\_the\_win}

#### 05 - Idea

```
Less the second of the se
```

```
DECIMAL HEXADECIMAL DESCRIPTION

0 0x0 JPEG image data, JFIF standard 1.01
33519 0x82EF 7-zip archive data, version 0.4

[kayn@parrot]=[~/Documents/ISC/lab09]

3 $\frac{1}{2} \text{ '00-Capture 1.pcap' 01-File '02-Hidden 1.png' 03-Corrupted.jpg '04-Alien communication.wav' 05-Idea.jpg _05-Idea.jpg.extracted 06-Letter.pdf 07-Dumb.gif '08-Capture 2.pcap' output

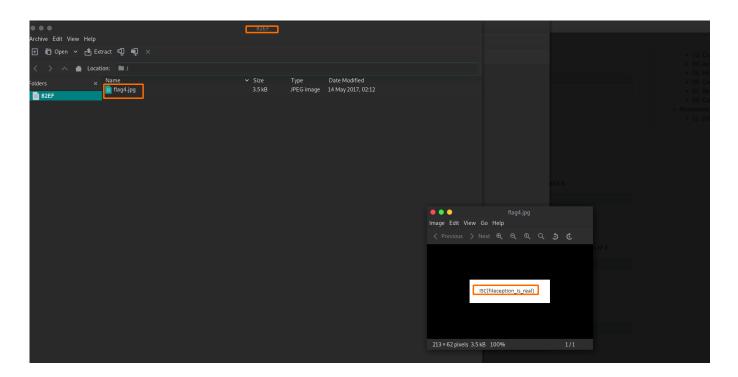
[kayn@parrot]=[~/Documents/ISC/lab09]

3 $\text{ $\text{capture 2.pcap' output} }

$\text{ $\text{ $\text{capture 2.pcap' output} } }

$\text{ $\text{ $\text{ $\text{ $\text{capture 2.pcap' output} } } }

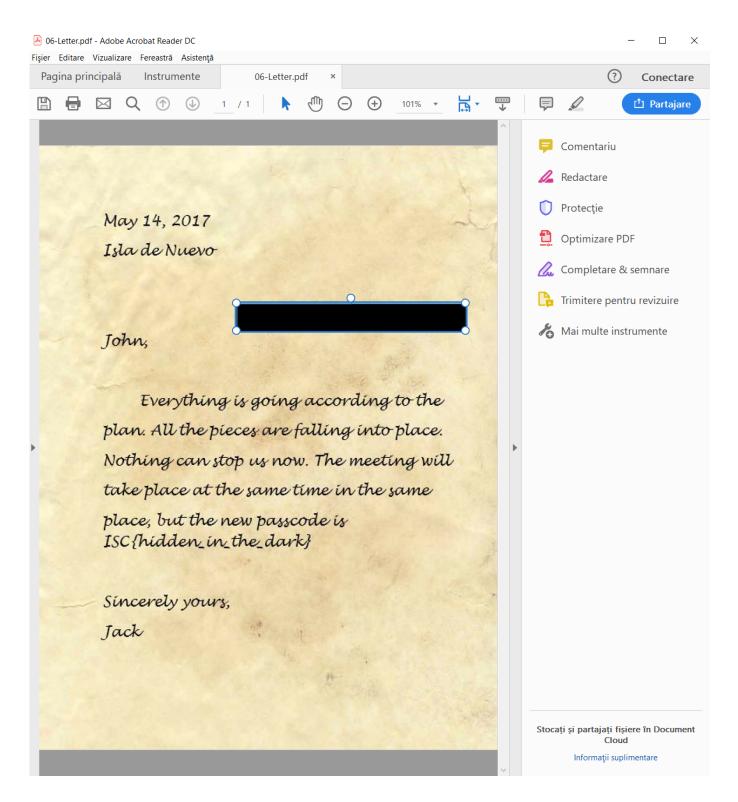
$\text{ $\text
```



ISC{fileception\_is\_real}

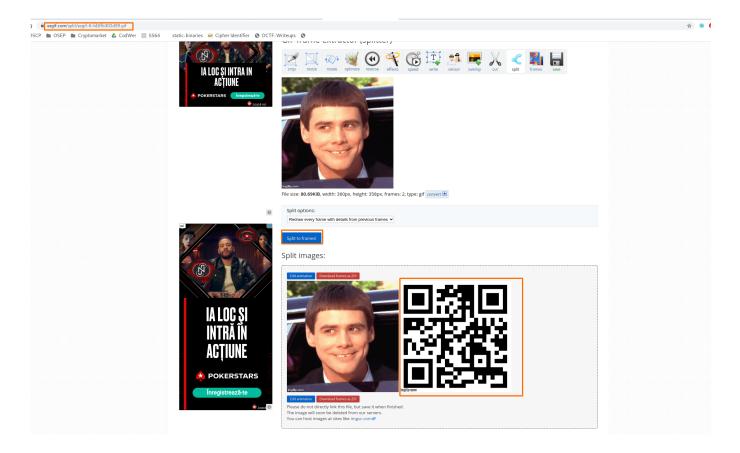
## 06 - Censored

Folosind un program precum Adobe Acrobat Reader, putem muta chenarul negru.



ISC{hidden\_in\_the\_dark}

#### **07 - Dumb**

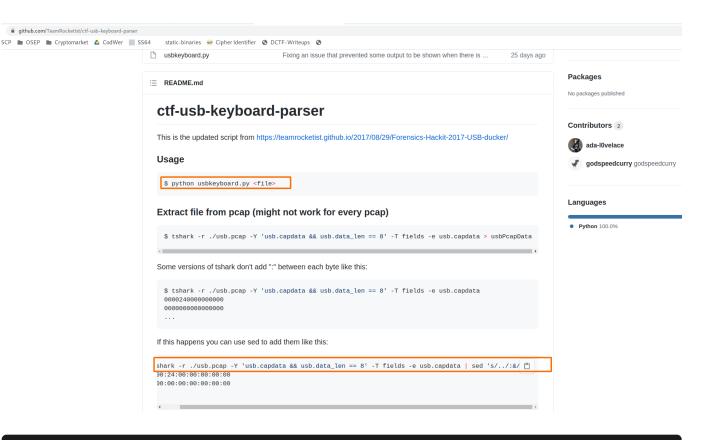


Daca scanam codul QR, primim automat flagul.

## Flag

ISC{what\_were\_you\_waiting\_for}

# **08 - Capture 2**



```
[kayn@parrot] - [~/Documents/ISC/lab09/ctf-usb-keyboard-parser]
  -<del>-</del> $tshark -r ../08-Capture\ 2.pcap -Y 'usb.capdata && usb.data_len == 8' -T
fields -e usb.capdata | sed 's/../:&/g2' > usbPcapData
[mayn@parrot] = [~/Documents/ISC/lab09/ctf-usb-keyboard-parser]
   - $cat usbPcapData
20:00:00:00:00:00:00:00
20:00:0c:00:00:00:00:00
20:00:00:00:00:00:00:00
00:00:00:00:00:00:00:00
20:00:00:00:00:00:00:00
20:00:16:00:00:00:00:00
20:00:00:00:00:00:00:00
00:00:00:00:00:00:00:00
20:00:00:00:00:00:00:00
20:00:06:00:00:00:00:00
20:00:00:00:00:00:00:00
00:00:00:00:00:00:00:00
20:00:00:00:00:00:00:00
20:00:2f:00:00:00:00:00
20:00:00:00:00:00:00:00
00:00:00:00:00:00:00:00
00:00:0e:00:00:00:00:00
00:00:00:00:00:00:00:00
```

```
00:00:08:00:00:00:00
00:00:00:00:00:00:00:00
00:00:1c:00:00:00:00:00
00:00:00:00:00:00:00
00:00:06:00:00:00:00:00
00:00:00:00:00:00:00:00
00:00:04:00:00:00:00:00
00:00:00:00:00:00:00
00:00:13:00:00:00:00:00
00:00:00:00:00:00:00:00
20:00:00:00:00:00:00
20:00:30:00:00:00:00:00
20:00:00:00:00:00:00
00:00:00:00:00:00:00
[kayn@parrot] - [~/Documents/ISC/lab09/ctf-usb-keyboard-parser]
   - $python2 usbkeyboard.py usb
usbkeyboard.py usbPcapData
[kayn@parrot] - [~/Documents/ISC/lab09/ctf-usb-keyboard-parser]
$python2 usbkeyboard.py usb
usbkeyboard.py usbPcapData
[kayn@parrot] - [~/Documents/ISC/lab09/ctf-usb-keyboard-parser]
   - $python2 usbkeyboard.py usbPcapData
ISC{keycap} rection [-[~/Documents/ISC/lab09/ctf-usb-keyboard-parser]
```

ISC{keycap}