First challenge: Run Lillian run (20 Points)

hide.png

as we could guess from the looking of this image, we can solve it using stegsolve



Easy one right **©** 

Second challenge: Hello June Stego (30 Points)

hellofriend.jpg

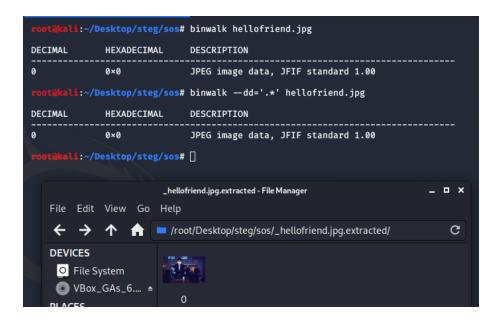
the image is too big!

So for sure there is something in it let's try to extract it's content

Using binwalk

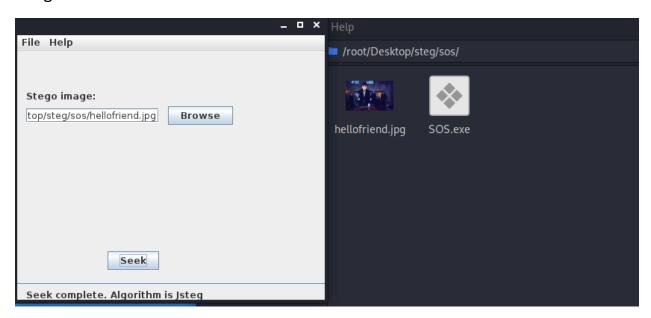
But this is actually doesn't work it (extract it again to the same image)

Emmm...



### As the title June Stego

Jstego tool could be used to extract files



As we see SOS.exe check it

```
rootākali:~/Desktop/steg/sos# file SOS.exe
SOS.exe: Audio file with ID3 version 2.4.0, contains:MPEG ADTS, layer III, v2, 56 kbps, 22.05 kHz, Stereo
rootākali:~/Desktop/steg/sos#
```

Then it's audio file

The first thing will come up to your mind that open it with sonic visualizer as we did and add spectrogram to see if this sound is actually text

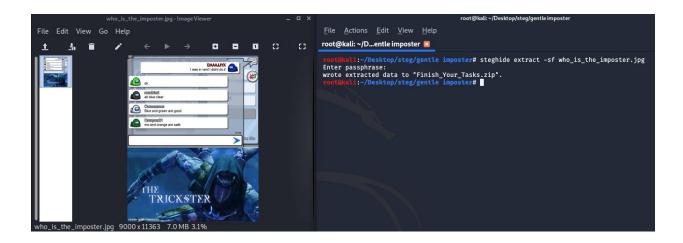


## Walla here it is:)

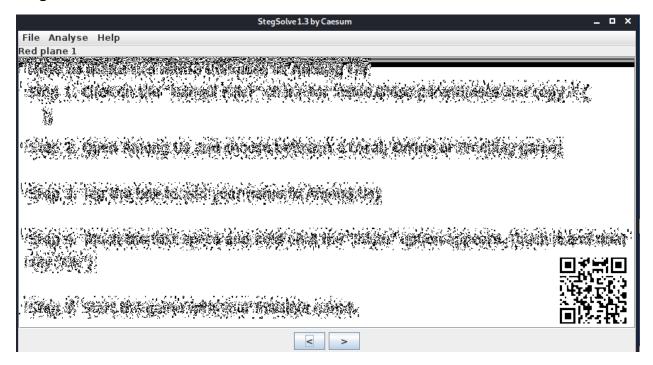
Third challenge: The gentle imposter ^\_^ (100 Points)

who\_is\_the\_imposter.jpg

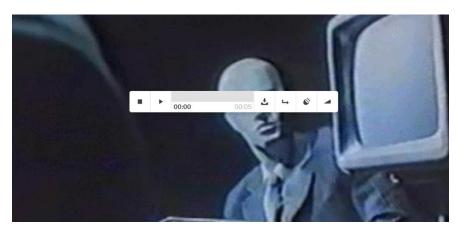
notice that the image is large so there is something in it and we want to extract it so we can use steghide to extract zip file couse we have a password that is the imposter name



So unzip the zip file, you will have two images one is useless the second put it into stegsolve



Here we will find QR if you scan it it will direct you to web page



Analyze the sound if you didn't recognize it look at the source code you will find a hint

Download any Hellschreiber tool on your phone or laptop



HU\_CTF{EASY\_YA\_AZIZI}

Fourth challenge: cartoon cartoon (75 Points)

1.jpeg

Using steghide to extract the zip file but this time without passwords



Now we have to xor (two opposite series the\_jetsons & flintstones)the two images together you could write script to do that

<sup>\*</sup>I will put the script with this document

# That's gonna give us another image actually it's the\_jetsons.jpeg Put it into stegsolve



### Rot 47! Put it in your mind

What is the the cipher?

#### We could use exif tool to check

```
root@kali:~/Desktop/steg4# exif the_jetsons.jpeg
EXIF tags in 'the_jetsons.jpeg' ('Intel' byte order):
Tag
                        |Value
X-Resolution
                         300
Y-Resolution
                         300
Resolution Unit
                         Inch
Software
                         GIMP 2.10.12
                        w&0r%uL4@@{0A_5rcD%N (Photographer) - [None] (Editor)
256
Date and Time
Copyright
Image Width
Image Length
                         170
                        8, 8, 8
JPEG compression
Bits per Sample
Compression
Photometric Interpre YCbCr
Samples per Pixel
X-Resolution
Y-Resolution
                         72
Resolution Unit
                         Inch
User Comment
Exif Version
                         Exif Version 2.1
FlashPixVersion
                         FlashPix Version 1.0
Color Space
                        Internal error (unknown value 65535)
EXIF data contains a thumbnail (13623 bytes).
         .i:~/Desktop/steg4#
```

You could notice the copyright something weird" w0r%uL4@@0A\_5rcD%N" so why we don't try to decrypted using rot 47

HU\_CTF{cooL\_p0dC4sT}

Yah this is the title for cool podcast for cartoon if you're interested you could check their series by visiting this website 😉

https://www.mstdfr.com/shows/kartoon/