

Task 01: What is wrong with challenge.png. Hint Cyberchef

Ans: The problem with challenge.png was that it's magic bits said that it was a zip file, but it's extension was png, changing it to .zip solved the issue.

Task 02: Can you check Image.jpg and recover the file. Flag format FLAG{text_in_image}.

Hint: Check for magic bytes in hexed and match them with jpg magic bytes on Gary Kessler's site.

Ans: FLAG{stronk}

Task 03: Does changing the extension change magic bytes of the file. Try and add screenshots with explanation.

Ans: No, it does not. The extension and the magic bits are both different.

```
-Untitled- x Image.jpg x Image.png x
00000000 EF 56 21 56 00 10 4A 46 49 46 00 01 01 00 00 01 hV!V..JFIF.....
00000010 00 01 00 00 FF DB 00 84 00 09 06 07 08 07 06 09 .... ä.....
00000020 08 07 08 0A 0A 09 0B 0D 16 0F 0D 0C 0C 0D 1B 14 .....
00000030 15 10 16 20 1D 22 22 20 1D 1F 1F 24 28 34 2C 24 ... ." ...$(4,$
00000040 26 31 27 1F 1F 2D 3D 2D 31 35 37 3A 3A 3A 23 2B &1'..-=-157::#+
00000050 3F 44 3F 38 43 34 39 3A 37 01 0A 0A 0A 0D 0C 0D ?D?8C49:7.....
00000060 1A 0F 0F 1A 37 25 1F 25 37 37 37 37 37 37 37 37 ....7%.%77777777
00000070 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 7777777777777777
00000080 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 7777777777777777
00000090 37 37 37 37 37 37 37 37 37 37 FF C0 00 11 08 00 777777777 L....
000000A0 77 00 A4 03 01 22 00 02 11 01 03 11 01 FF C4 00 w.ñ.."..... -
000000B0 1C 00 00 03 00 03 01 01 01 00 00 00 00 00 00 00 .....
```

```
-Untitled- x Image.jpg x Image.png x
00000000 EF 56 21 56 00 10 4A 46 49 46 00 01 01 00 00 01 hV!V..JFIF.....
00000010 00 01 00 00 FF DB 00 84 00 09 06 07 08 07 06 09 .... ä.....
00000020 08 07 08 0A 0A 09 0B 0D 16 0F 0D 0C 0C 0D 1B 14 .....
00000030 15 10 16 20 1D 22 22 20 1D 1F 1F 24 28 34 2C 24 ... ." ...$(4,$
00000040 26 31 27 1F 1F 2D 3D 2D 31 35 37 3A 3A 3A 23 2B &1'..-=-157::#+
00000050 3F 44 3F 38 43 34 39 3A 37 01 0A 0A 0A 0D 0C 0D ?D?8C49:7.....
00000060 1A 0F 0F 1A 37 25 1F 25 37 37 37 37 37 37 37 37 ....7%.%77777777
00000070 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 7777777777777777
00000080 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 37 7777777777777777
00000090 37 37 37 37 37 37 37 37 37 37 FF C0 00 11 08 00 777777777 L....
000000A0 77 00 A4 03 01 22 00 02 11 01 03 11 01 FF C4 00 w.ñ.."..... -
000000B0 1C 00 00 03 00 03 01 01 01 00 00 00 00 00 00 00 .....
```

Task 04: Can you recover the challenge.png file. Flag format flag{}

Ans: flag{d1g1tal_f0r3ns1cs_101}

Task 05: What if magic bytes are totally out of place, how can we check for file type? Hint:

"I have wheels, yet I'm not a car.

I am big, but I'm not a star.

Pull me along, I'll carry your load.

Inside me, stories are often showed."

Ans: trailer bytes, the bytes at the end.

Task 06 [Bonus]: Can you recover Boss.png?

Ans:



C0rupted Dimension



Panik

YOU FIXED IT



Kalm

Swapped chunks

RmxhZ3tOMFRfMG5MeV9EMW0zbn
Mxb05zX2J1N19DaHVuSzVfVDBPfQ==



Panik

