#ret #hw #incomplete

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1 | **Forensics!**

forensics.

stegsolve, try at home. tried janky implimentation of lsb, outputs nonsense.

```
from PIL import Image
import base64
im = Image.open('./fc13_images_pkg1/IMG_0447.png')
pixels = list(im.getdata())
bs = ''

def bits2a(b):
    # return ''.join(chr(int(''.join(x), 2)) for x in zip(*[iter(b)]*8))
    return str(base64.b16decode(hex(int(b, base=2))[2:],casefold=True))[2:-1]


for i in pixels:
    for j in i[:3]:
        bs += bin(j)[-1]

print(bits2a(bs))
```

perhaps look at solutions, or look for help from other people. #review

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stegsolve! bit planes!

seperating out the bit planes to bit plane zero for each color gives us something fishy.

as we decrease the bit planes, the image gets less legible. makes sense, because the significance of the bit is decreasing. now we just gotta find the hidden message.

size of image:

480 x 343

we can seperate it out, the message starts at the 191th pixel on the image multiplying this by our width we get 91680, the pixel where the encoded message starts.

2 | **Forensics! :: pt. 2.**

```
By working on this, for many hours, I have learned that forensics is hard. When it comes to forensics,
```

2.1 | **The Problem**

I chose to solve this problem from the Honeynet Project essentially at random. Next time, I think I will put more effort into choosing a problem.

Along with a `.zip` file containing three packs of images, this is all the information we get about the problem.

```
title: Problem Information
Communication using hidden channels ==(steganography)== is one way to protect that communication from th

When analyzing these images, develop tools that take advantage of the full spectrum of steganalysis -
statistical methods, visual attacks, machine learning, visualization - and make them available as open-s

Note that we received a tip from a mole that ==none of the images utilize encryption== in addition to st
```

Looking at the images with the naked eye, all I saw were dogs.

$IMG_{0549.png}$

After fumbling for many hours,