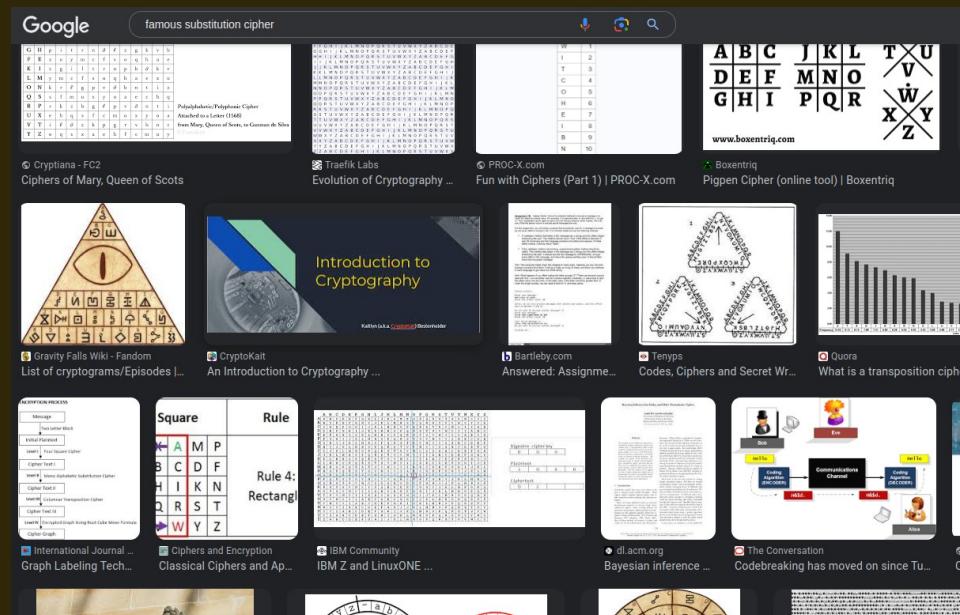# Crypto

Warm Up 1

When I Look at given image,I know it is one of substitution cipher.But I don't know the name of cipher.So,I searched "famous substitution cipher" on google and it gave me many of things.

So I go to image section to recognize.In somewhere,the image catched my eye.

"Gravity Falls Wiki" It is so similar our image.So I research about this.In last,I know it is gravity falls cipher.And then,I go to decode.fr to decrypt it.And then,I got JOHN WICk.
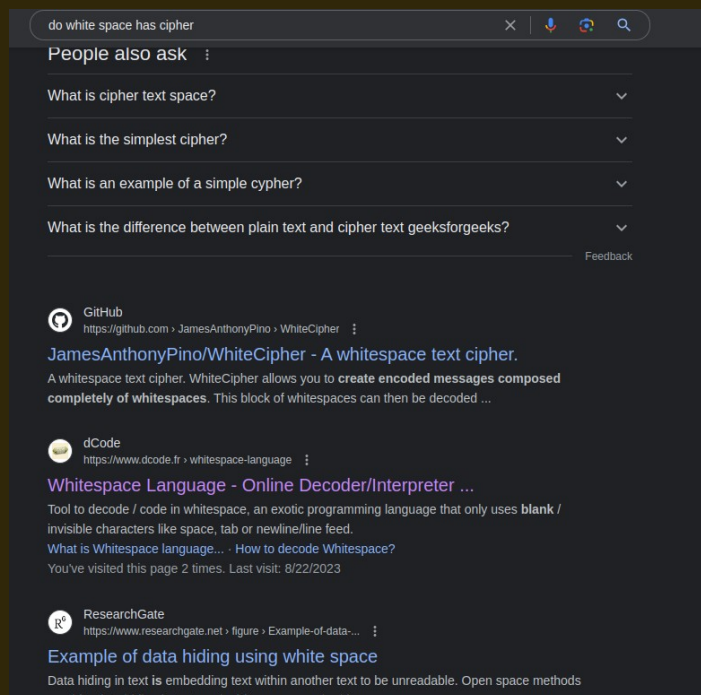
Game

Game is very easy bcz I think it is reversed text.So I tested on decode.fr about reverse text and then I got original text.
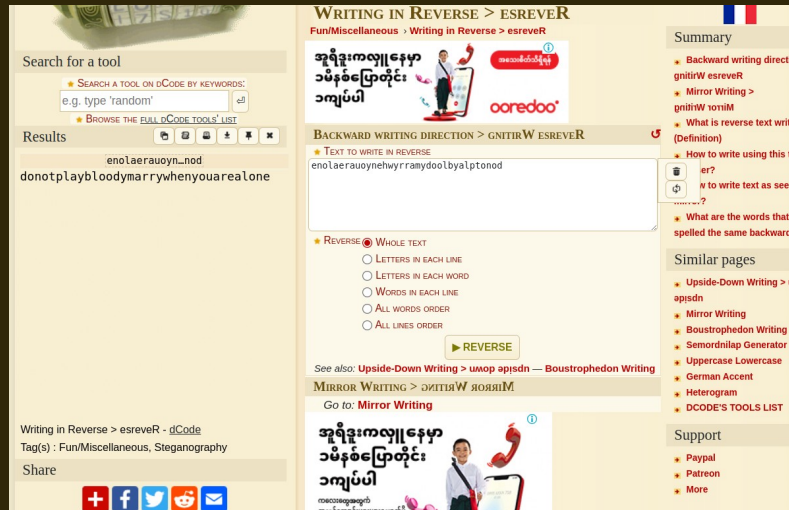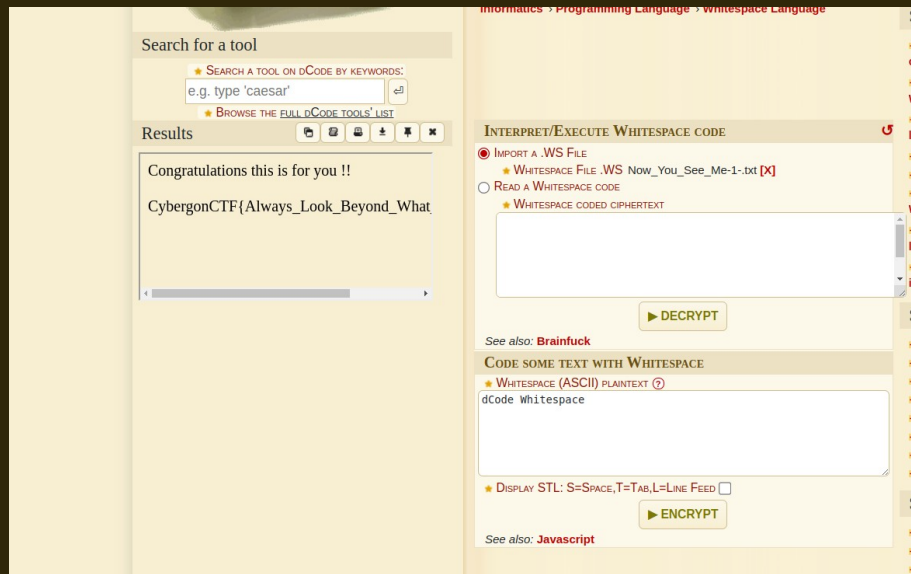

Now You see me

At first,I got txt file.I didn't saw nothing in file.But I noticed white space there.So.I check out on google by typing "Do white space has cipher".I saw the link.
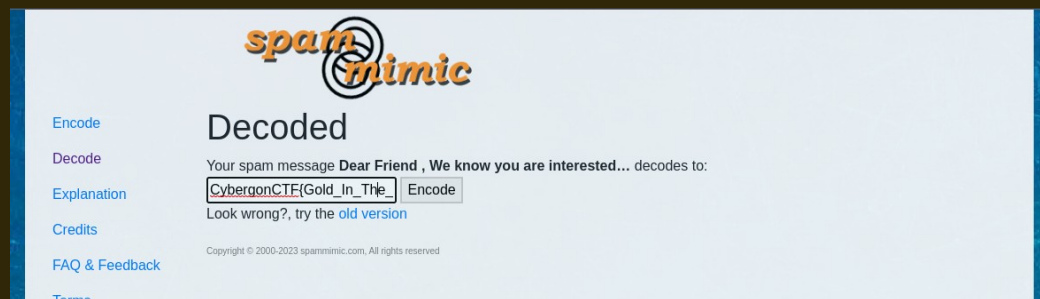
And after decrypted we got flag.

Now You see me 2

In this challenge also has txt file.And I found long paragraph and then,I confuse with this paragraph.So,i copy and paste out in google this paragraph and research it.In suddenly,i saw the link about "Spamming decoder".After decrypted,I got flag.
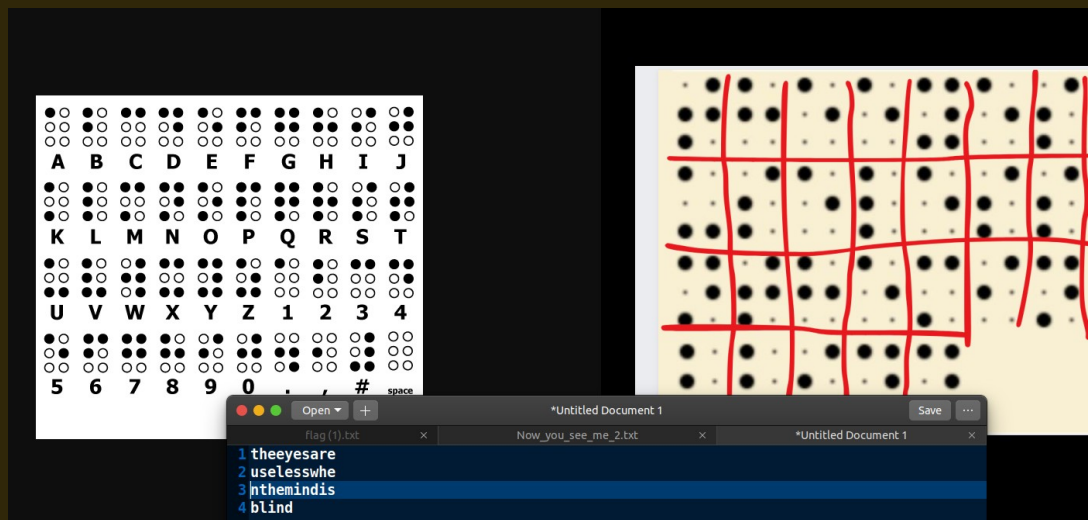
Dots

This challenge has the hint."Connected the dots",So I thinked it is morse code when I connected dot.But it doesn't work.I got many tension.So,I use google image search what is is.In few min,I knew it is braille font.
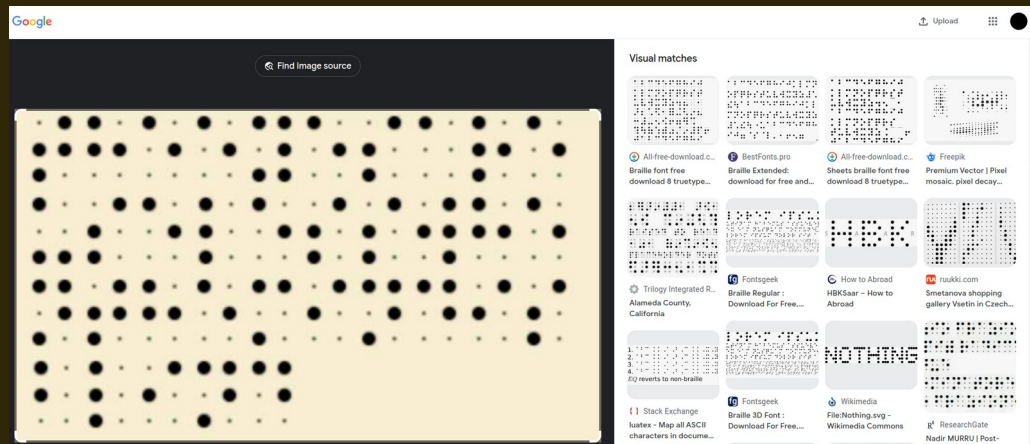
And I dcode manually.After I decoded I got plain text.It is flag

EZ Rsa

At first,we have two files from challenge.One file is python encryption file and other file is encrypted output file.And it is RSA encrption method.But in this challenge not same original rsa encryption bcz p

and q are multiply by one random numbers.But we don't know this num.So,we have to brute it to get p and q between 100 and 999.If it is incorrect in getting long to bytes,we will get error.

The write up for this challenge can complex or confuse your mind because my weak Eng unable explanation to get clearly.

Formula reference : https://www.cs.utexas.edu/~mitra/honors/soln.html

Decryption formula:

$n = p * q$

$\varphi(n) = (p - 1) * (q - 1)$

d = e^(-1) mod φ(n)

m=c^d%n

Explanation or assign value

e=0x10001

$\varphi(n)=phi\_n$

So,we made it script.

Script Link : https://pastebin.com/CtJfVjb6

DO Not Access
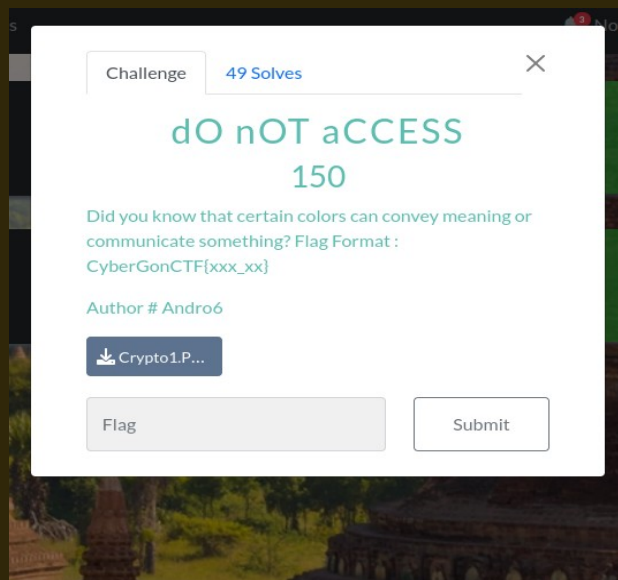
At First, we got from image and recognize what it is. I use Google image search and I found one interesting link that is medium link.
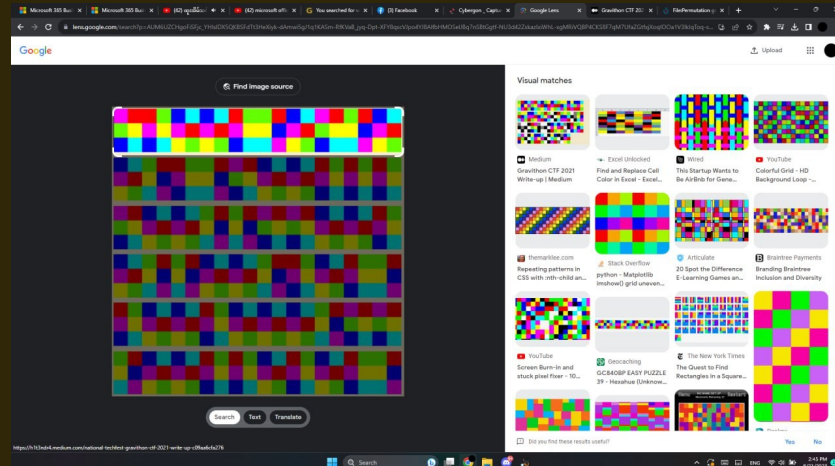
I read carefully and then I know what is that. So,I changed to plain text from this image with Hexahue Cipher.

And I got long text.WTH is that! I use decode fr tool to recognize what it is. I found genetic code

So I decode all of about this and found nothing. And next,I had idea to search by adding "CTF" after "Genetic code". So,I saw one GitHub link and found image that is include DNA code in this link.

The Link : https://github.com/omemishra/DNA-Genetic-Python-Scripts-CTF

Then,I got plaintext and flag after decrypted.