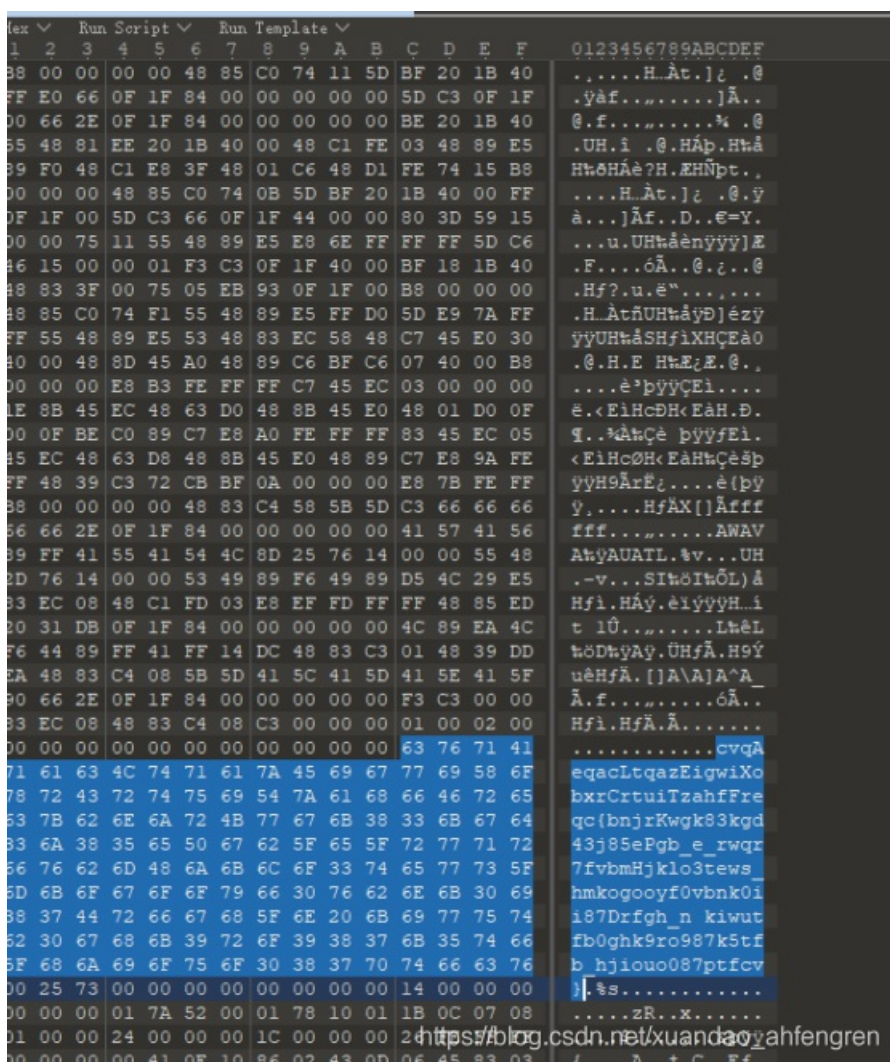


使用ps进行补全，扫描二维码得到flag

flag{#justdiffit}

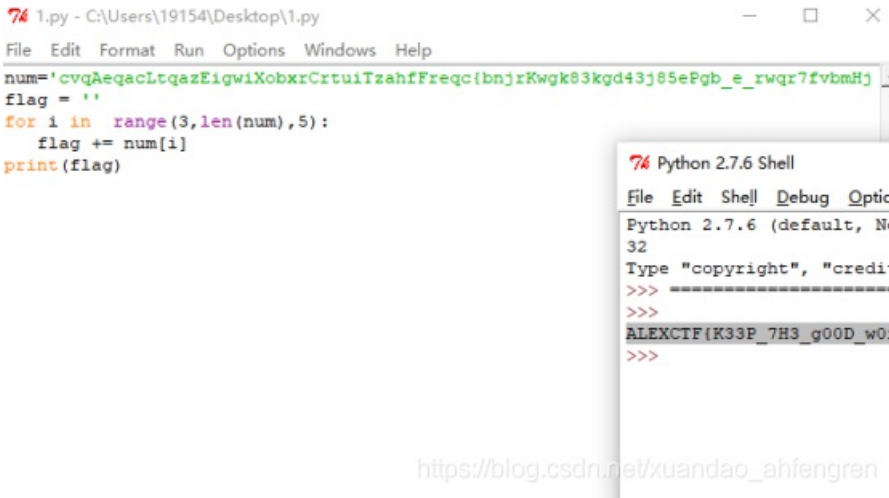
hit-the-core

用010editor打开，发现关键字串



然后我们发现大写的XCTF每个字母之间只隔了四个字母，使用python提取一下，得到flag。

```
num='cvqAeqacLtqazEigwiXobxrCrtuiTzahfFreqc{bnjrKwgk83kgd43j85ePgb_e_rwqr7fvbmHjklo3tews_hmkogooyf0vbnk0ii8
flag = ''
for i in range(3,len(num),5):
    flag += num[i]
print(flag)
```

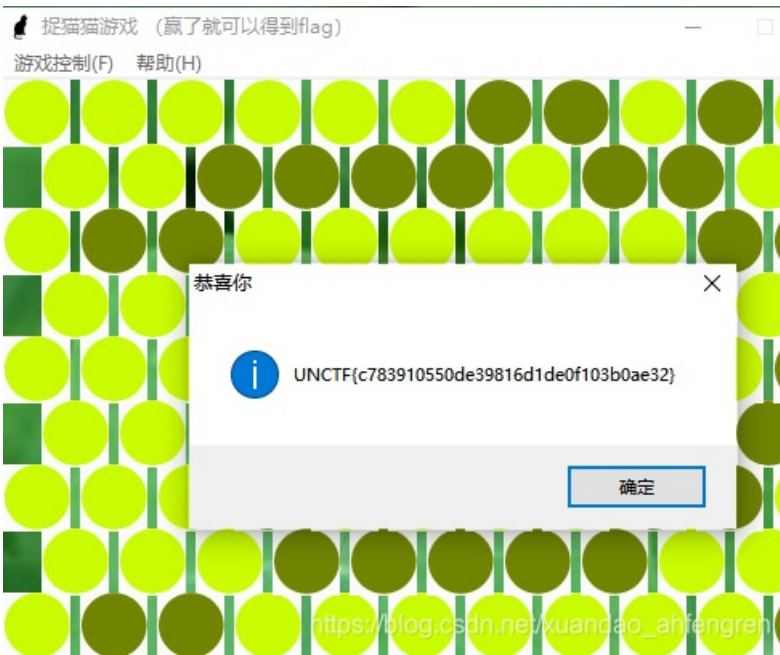


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### 快乐游戏题

直接通关就可以了

提示：flag是固定的可以直接提交，UNCTF{c783910550de39816d1de0f103b0ae32}



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### glance-50

用在线网站直接拼接

<https://tu.sioe.cn/gj/fenjie/>



TWCTF{Bliss by Charles O'Rear}

#### 4-1

先用010editor编辑图片，发现txt文件，直接把后缀修改成zip把文件压缩出来



解压后txt中提示flag在day2.png中，猜想是盲水印

#### 安装环境

```
sudo pip install matplotlib
pip install opencv-python
```

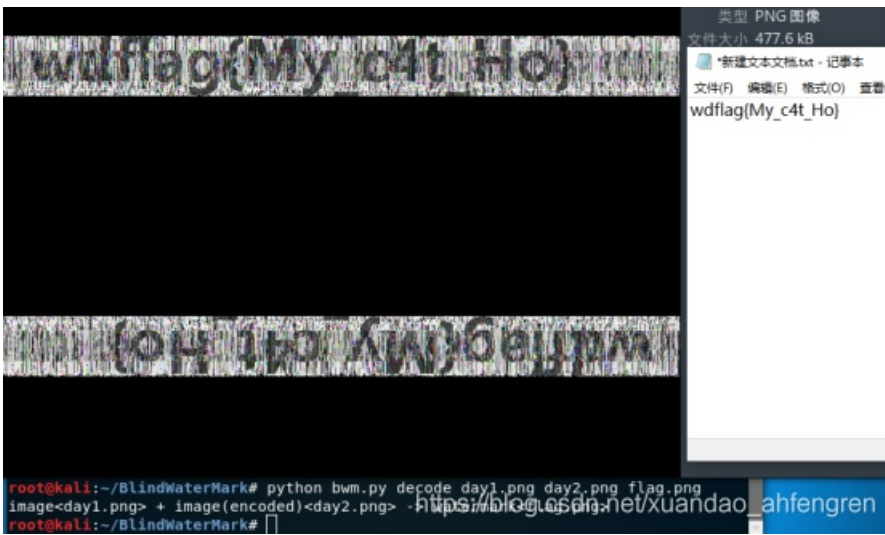
#### 然后安装解密脚本

```
git clone https://github.com/chishaxie/BlindWaterMark
```

#### 解密操作:

```
python bwm.py decode day1.png day2.png flag.png
```

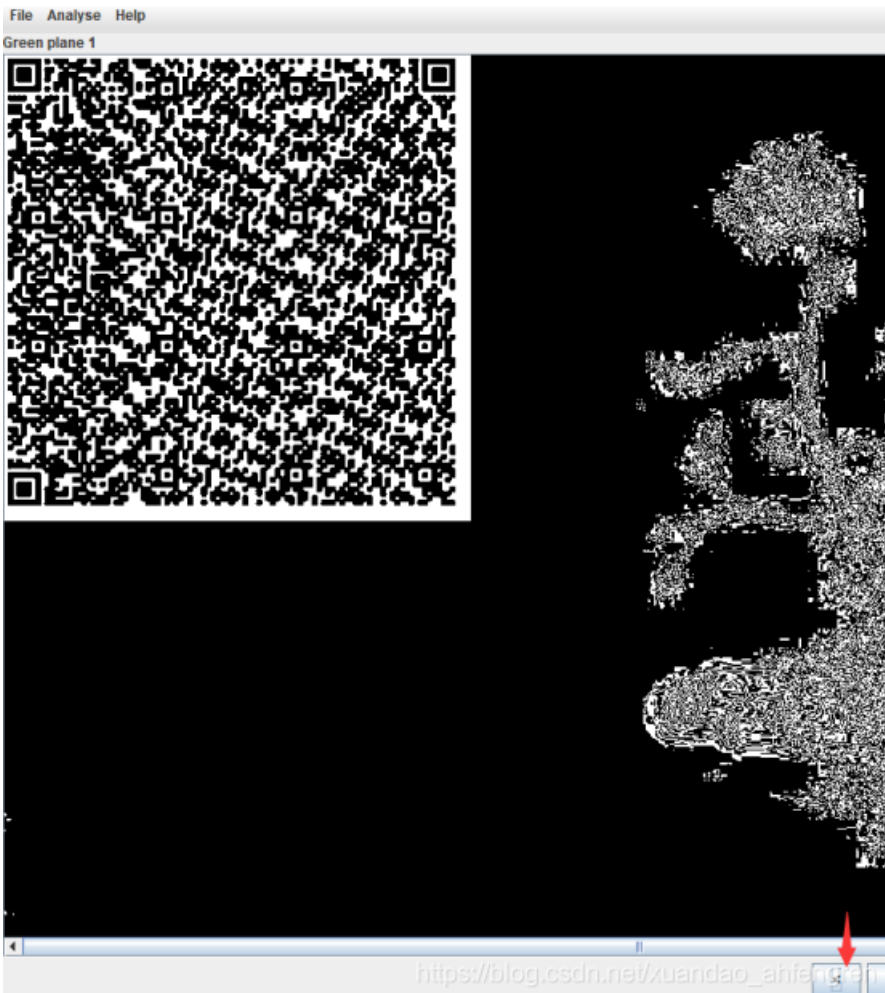




适合作为桌面

用Stegsolve打开左右调节即可出现二维码

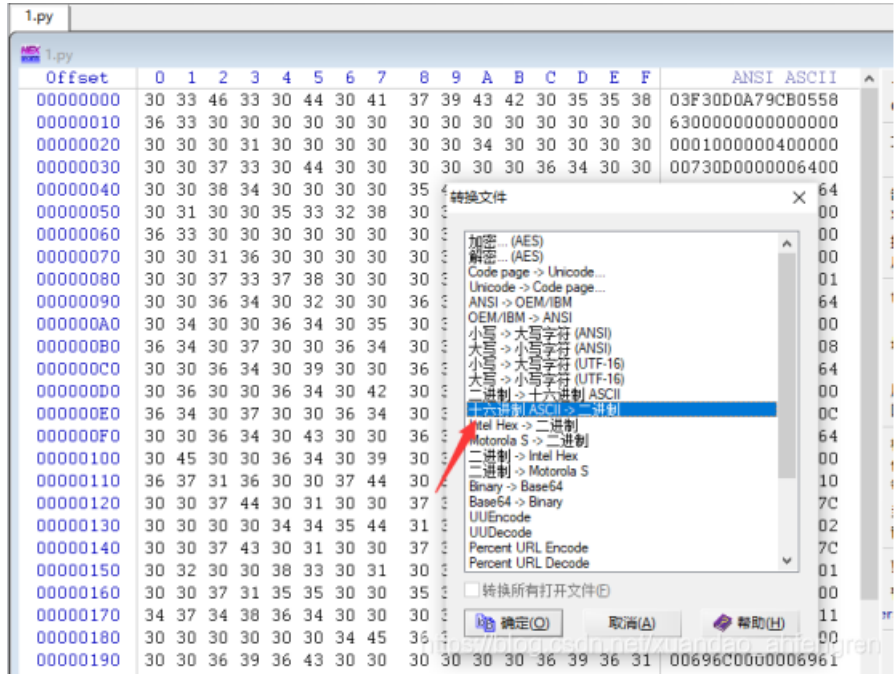
再放在QR上面扫描二维码出现疑似十六进制的内容





内容:  
03F30D0A79CB05586300000000000000010000004000000730D0000006400008400  
005A00006401005328020000063000000003000000160000004300000073780000064  
0100640200640300640400640500640600640700640300640800640900640A0064060064  
0B00640A00640700640800640C00640D00640E00640900640F006716007D000C  
6410007D0100781E007C0000445D16007D02007C01007400007C0200830100377D010C  
715500577C010047486400005328110000004E6966000000696C0000006961000000696  
7000000697B00000069330000006938000000693500000069370000006930000006932C  
00000693400000069310000006965000000697D00000074000000002801000000740300C  
0006368722803000007403000007374727404000000666C6167740100000069280000C  
0002800000007304000000312E707952030000001000000730A00000000148010601  
0D0114014E2801000000520300000028000000002800000000280000000073040000003  
42F70707400000003000000030000000300000000300000003000000030000000300000000

我们放在winhex里面，按Ctrl+r，转换成二进制，然后保存位1.pyc进行反编译python文件

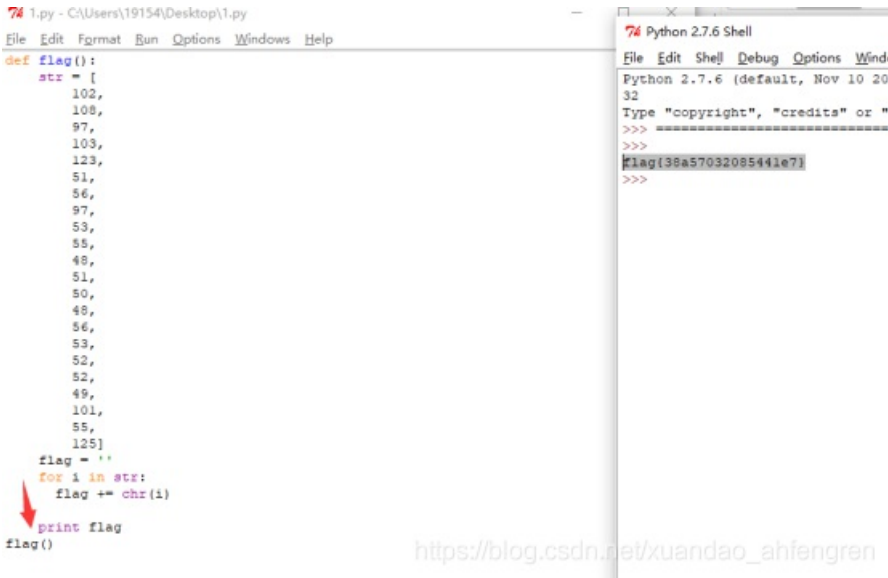


请选择pyc文件进行解密。支持所有Pyt

浏览... 未选择文件。

```
1 #!/usr/bin/env python
2 # encoding: utf-8
3 # 如果觉得不错,可以推荐给你
4
5 def flag():
6     str = [
7         102,
8         108,
9         97,
10        103,
11        123,
12        51,
13        56,
14        97.
```

加多一个flag()即可运行得到flag



心仪的公司

在tcp流中发现fl4g

```

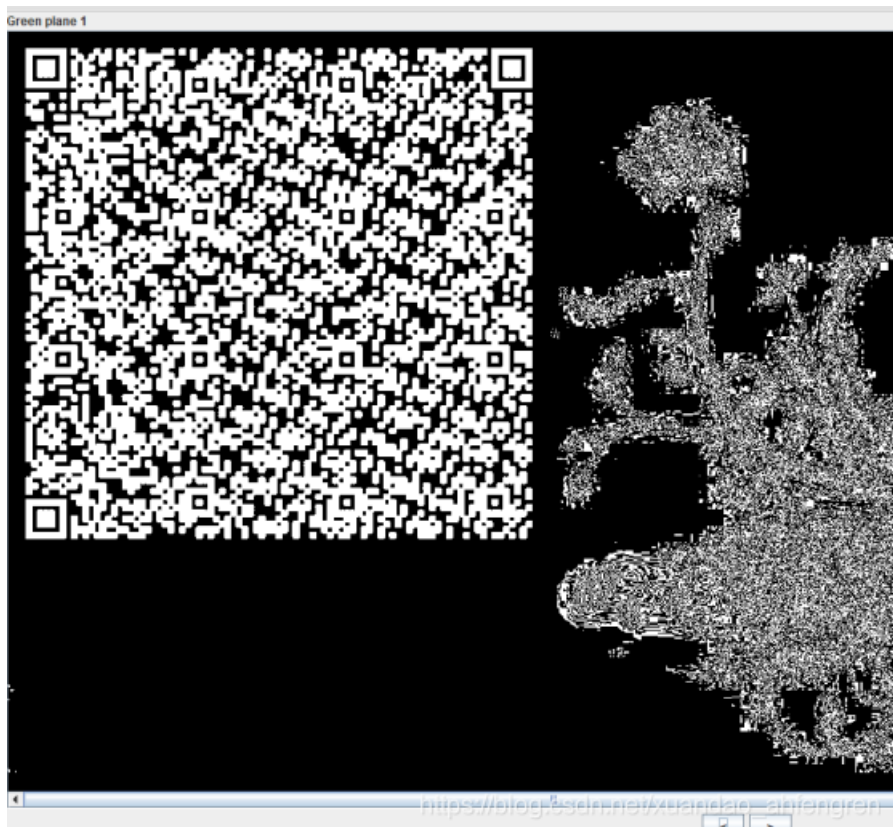
No.      Time           Source           Destination      Protocol Length  Info
-----
13319  161.969715    192.168.1.111  192.168.1.108  TCP        66 50928 → 80 [ACK] Seq=1 A
13320  161.969721    192.168.1.111  192.168.1.108  TCP        789 [TCP Retransmission] 509
13321  161.969725    192.168.1.111  192.168.1.108  TCP        66 50927 → 80 [ACK] Seq=388
13322  161.977939    192.168.1.108  192.168.1.111  TCP       1514 80 → 50928 [ACK] Seq=1 A
13323  161.977985    192.168.1.111  192.168.1.108  TCP        66 50928 → 80 [ACK] Seq=724
13324  161.977999    192.168.1.108  192.168.1.111  TCP       1514 80 → 50928 [ACK] Seq=144
13325  161.978004    192.168.1.111  192.168.1.108  TCP        66 50928 → 80 [ACK] Seq=724
13326  161.978127    192.168.1.108  192.168.1.111  TCP       1514 80 → 50928 [ACK] Seq=289
13327  161.978135    192.168.1.111  192.168.1.108  TCP        66 50928 → 80 [ACK] Seq=724
13328  161.978141    192.168.1.108  192.168.1.111  TCP       1514 80 → 50928 [ACK] Seq=434
13329  161.978145    192.168.1.111  192.168.1.108  TCP        66 50928 → 80 [ACK] Seq=724
13330  161.978150    192.168.1.108  192.168.1.111  HTTP       639 HTTP/1.1 200 OK (JPEG I
13331  161.978153    192.168.1.111  192.168.1.108  TCP        66 50928 → 80 [ACK] Seq=724

[Window size scaling factor: 256]
Checksum: 0xa455 [unverified]
[Checksum Status: Unverified]
Urgent pointer: 0
> Options: (12 bytes), No-Operation (NOP), No-Operation (NOP), Timestamps
> [SEQ/ACK analysis]
> [Timestamps]
TCP payload (573 bytes)
TCP segment data (573 bytes)
[E: Reassembled TCP Segments (6365 bytes): #13322(144R) #13324(144R) #13326(144R) #13328(144R) #13
01c0 78 a2 12 2e 1c 74 86 ca 16 e9 0d 3f 80 5d f3 62 x...t...?..]b
01d0 bc f8 98 e4 fc 86 39 99 3b ba 03 ee 1a c3 6e 35 .....9.;.....n5
01e0 1c 00 a1 66 5d 24 a2 36 db 8f 72 84 0b 12 91 30 ...f]$..6..r...0
01f0 cb 62 bb ad ae 06 9e b7 81 44 2c 16 2a a8 57 4d .b.....D,*WM
0200 61 99 42 eb 15 f9 97 dd 2b 61 3c 88 e1 1b d2 62 a.B.....+a<...b
0210 68 14 10 bc 81 cb 9f c4 ba f9 cb 88 a0 a3 26 df h.....&..
0220 e9 3c de 7e 38 07 68 67 76 71 3b 9c 4e e3 e2 77 <...8 hg vq;N-w
0230 0f 13 b9 c4 ee 71 3b 9c 4e e3 76 8e e3 e2 4c 1a .....q; N-v...L
0240 3b 95 36 69 b3 2a d9 4e e6 b6 4c 73 0f 13 b9 c4 ;.6i.*...Ls...
0250 ee 71 3b 9c 4e e7 13 b9 ff 00 b9 10 69 1c ec ff .q;N.....i...
0260 00 63 7f ff d9 66 6c 34 67 3a 7b 66 74 6f 70 5f .c...f14.g:{ftop
0270 49 73 5f 57 61 69 74 69 6e 67 5f 34 5f 79 7d .Is.Waiting_4_y}
From (639 bytes) Reassembled TCP (6365 bytes)

```

## stage1

放进Stegsolve里左右调整



保存再放在RQ分析二维码，然后放进winhex转换为二进制，保存为pyc进行反编译python文件后运行即可





版本: 18  
纠错等级: L, 掩码: 3  
内容:

```
03F30D0AB6266A5763000000000000000000000040000000730D0000006400008400  
005A000064010053280200000063000000000030000000800000043000000734E0000006  
401006402006403006404006405006406006405006407006708007D000006408007D0100  
781E007C0000445D16007D02007C01007400007C0200830100377D0100712B00577C0  
10047486400005328090000004E694100000696C000000697000000069680000006961  
00000694C000000696200000074000000002801000007403000000636872280300000  
7403000000737472740400000666C616774010000069280000000280000000073070  
0000746573742E70795203000000100800730A00000001E9108010201E4014E280  
100000520300000280000000280000000028000000007307000000746573742E7079
```

6	7	8	9	A	B	C	D	E	F	ANSI	AS
5A	57	63	00	00	00	00	00	00	00	ó	¶&jWc
70	00	00	73	0D	00	00	00	64	00	@	s
70	64	01	00	53	28	02	00	00	00		Z d S(
70	00	00	08	00	00	00	43	00	00	c	
54	01	00	64	02	00	64	03	00	64	=N	d d d
76	00	64									转换文件
70	7D	01									
70	7C	01									
70	71	2B									
70	00	00									
70	00	00									
70	00	69									
70	74	03									
70	00	00									
71	00	00									
77	00	00									
71	00	00									
71	14	01									
70	00	00									

```
File Edit Format Run Options Windows Python 2.7.6 Shell  
def flag():  
    str = [  
        65,  
        108,  
        112,  
        104,  
        97,  
        76,  
        97,  
        98]  
    flag = ''  
    for i in str:  
        flag += chr(i)  
    print flag  
flag()
```

# Easycap

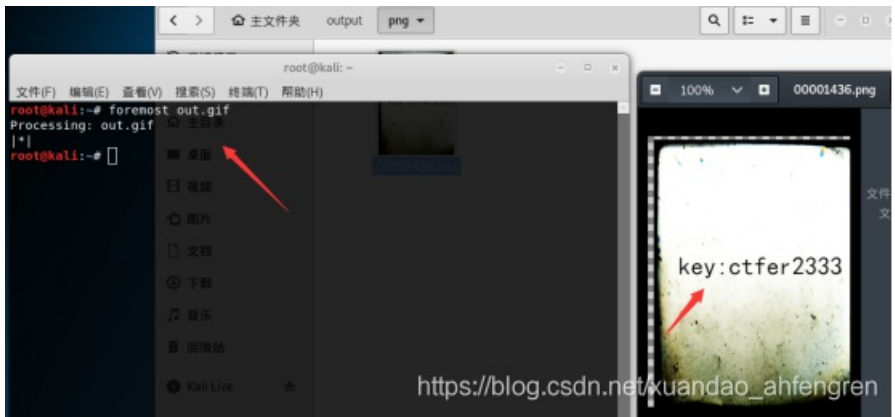
打开数据包，追踪tcp流即可



## 双色块

binwalk分析发现尾部有png，用foremost分离出来

拿出来是□个密码



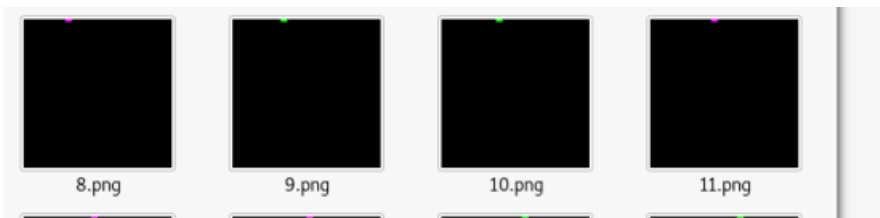
gif轮播之后发现是□个2424的像素点，每个像素为1010，每个点颜色为00ff00或是ff00ff 先把gif分离成单帧

```
#!/usr/bin/env python2
# -*- coding: utf-8 -*-

import os
from PIL import Image

def main(gif_file):
    png_dir = 'frame/'
    img = Image.open(gif_file)
    while True:
        current = img.tell()
        img.save(png_dir + str(current + 1) + '.png')
        img.seek(current + 1)
if __name__ == '__main__':
    gif_file = 'out.gif'
    main(gif_file)
```

会出先很多图片



然后读取每个png中的对应点的信息，并按照8bit转换为ascii

```
#!/usr/bin/env python2
# -*- coding: utf-8 -*-

import os
from PIL import Image

def main():
    png_dir = 'frame/'
    ret = ""
    for i in range(0,24):
        line = ""
        for j in range(0,24):
            file_name = "frame/" + str(i * 24 + j + 1) + ".png"
            x = j * 10 + 5
            y = i * 10 + 5
            img = Image.open(file_name)
            img = img.convert("RGB")
            img_array = img.load()
            r, g, b = p = img_array[x, y]
            if g == 255:
                line += "0"
            if r == 255 and b == 255:
                line += "1"
            if len(line) == 8:
                ret += chr(int(line, 2))
                line = ""
        print ret
    if __name__ == '__main__':
        main()
```

两个等会后面的hhh去除掉然后进□DES解密即可得到flag

```
root@kali:~# python 1.py
o8DlxK+H8wsiXe/ERFpAMaBPiIcj1sHyG0MmQDkK+uXsVZgre5DSXw==hhhhhhhhhhhhhhhh
```



## 很普通的数独

将有数字的格子写成0，没有的写成1



11111101010101000101000001111110000101111111  
100000101100111101010011101100011001001000001  
101110101110011111010011111101000101001011101  
101110101101100010001010000011110001101011101  
10111010001110010000111110111111011101011101  
100000101100100000011000100001110100001000001  
111111101010101010101010101010101011101111111  
00000000011001101001000110100110011100000000  
11001110010010000111111100100101000000101111  
10100100101111111101110101011110101101001100  
100000111100100100000110001101001101010001010  
001100010011010001010011000100000010110010000  
010110101010001111110100011101001110101101111  
100011000100011100111011101101100101101110001  
001100110100000000010010000111100101101011010  
101000001011010111110011011111101001110100011  
110111110111011001101100010100001110000100000  
1101010000101010000111011011110101101001100  
010011111110001011111010001000011011101101100  
011001011001010101100011110101001100001010010  
0101111111110101111111101101101111111111100  
011110001100000100001000101000100100100011110  
111110101110011100111010110100110100101010010  
110010001011101011101000111100000011100010000  
101011111011100111101111111100001010111110010  
110100011000111000100111101101111101000100010  
111101111110001001000011010110001111110111110  
011001010101000110010100010001000101101010001  
011101110101101101100100001101101000111101001  
110110001001101100010101101111110100101100110  
000011100111000000000100001010101111100010010  
111010010011110011101110010100001011111010010  
101001100010111111110100000100001010101010100  
000010011001001101110101001111100101111101101  
000010111101110001101011000001000101110100110  
011110011010100010100000011011000001110010000  
100110100100001101111111101100101110111110011  
00000000111110101101000101011100100100011010  
111111100011111011011010101101110011101011110  
100000101110101101101000111110010001100010001  
10111010101110000111111101101001000111111011  
101110100110111101101000001001101100011101101  
101110100000011101100001101010110010010010001  
100000101011001011111011001011000011010110000  
111111101010101001111011110101101110000101101

然后使用python写个脚本来生成图片。

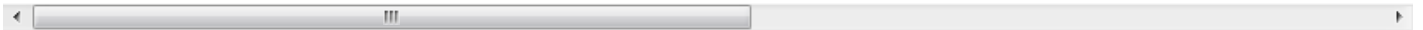
```

from PIL import Image
x = 45
y = 45
im = Image.new('RGB', (x, y))
white = (255, 255, 255)
black = (0, 0, 0)
with open('ss.txt') as f:
    for i in range(x):
        ff = f.readline()
        for j in range(y):
            if ff[j] == '1':
                im.putpixel((i, j), black)
            else:
                im.putpixel((i, j), white)
im.show()

```

扫出来是：

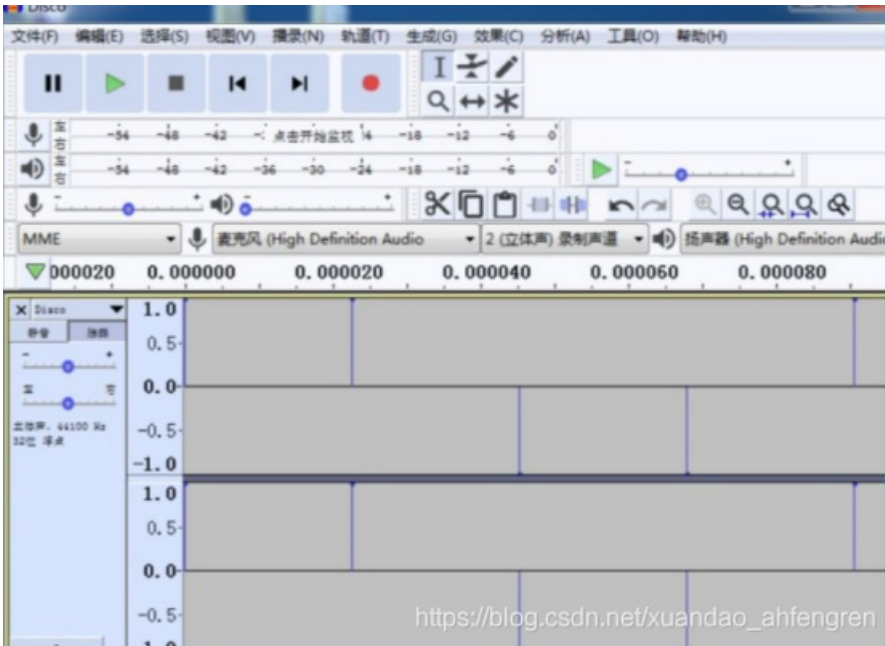
Vm0xd1NtUXlWa1pPVldoVFIUSINjRIJVVGtOamJGWnlWmJfFHMUxV1ZqTldNakZlWVcxS1lxTnNhRmhoTVZweV



是多个base64加密的，解密出来是flag{y0ud1any1s1}

### 很普通的Disco

峰值高的点为1，峰值低的点为0。抠出来，是105个二进制数，每7个数为一组，刚好15组，也就是15个字母，最后用python跑出来即可



```

Python 2.7.6 Shell
File Edit Shell Debug Options Windows Help
Python 2.7.6 (default, Nov 10 2013, 19:24:18) [MSC v.1500 32
32
Type "copyright", "credits" or "license()" for more informat
>>>
#flag{WOW*funny}
>>>

1.py - C:\Users\19154\Desktop\1.py
File Edit Format Run Options Windows Help
# coding=utf-8
l='110011011011001100001110011111101110101101100001010111'
h=[]
j=''
for i in range(0, len(l), 7):
    h.append('0'+l[i:i+7])
for q in h:
    j+=chr(int(q,2))
print(j)

```

flag{WOW\*funny}

就在其中

打开数据包发现，找到了key

还有一些文件，果断用foremost分离出来

```

Line-based text data (15 lines)
-----BEGIN RSA PRIVATE KEY-----\n
MIIICXgIBAAKBgQD0UN0A+70iM0VCJ1ni0n/U1BRj0u8yMhH4QI+xTbjHgbE7w0uk\n
Oa0+2PyQXiIzZnF5jCkJuVDYjALGcKrZM40CQB8d85B/LTc36XZ7JVFX5kGy5tI\n
R3tquuPIVKINDAsH1Sgh9S7YSS39RdnSa5r0UyGhrLzXwz9M9IO4e+QQ+CQIDAQAB\n
AoGAD1aw5mGubtCxbkeBOVYf+V/fXnjVSf76QbrzsD1k0ooUjFV6sKRZC5Pd7S7H\n
H+1owENBBgEKvoBtb/cqA2tvU9vQ415TMBJcHv6LEcb9WpPnMxPV2GhJ0+DTPGPy\n
Xnu1U2LZjwx+NaF5rESoSSVS2Zaa1ixBs4RWRXk+1HEbTFECQQD6Rp6jMweRgPH0\n
pR3mgIK83zL+kzqYM51sIPv3DIC5JQN2kXqK73IDQCFV1fXnr91AAVRzLDsAXLq\n
1e/o6yQLAkEA+edY+GER1LuD1t2k9Js0Dc7EwnLcxoFUE60ivj8GF9jzLskGHxsv\n
0IV6J50hwPh54kAxAnqCjSjNRAWGNzr+uwJBALYEjDum1LdGrxXZ0jAkGHC6Z0z\n
aK3uwHdXGc1nqCp+t9EQpq3KzQf+L4AeKXRQONEq5m9I2LQ/vGocwrmD4dcCQ00b\n
rTy0inWz8upAFPK0e2hUwvA/pkzgyosoCMhDyI9kD0gmV1v10bd77em9o8dWM97\n
-----B EGIN RSA
PRIVATE KEY----
MIICXg IBAAKBgQ
D0UN0A+7 0iM0VCJ1
ni0n/U1B Rj0u8yMw
H4QI+xTb jHgbE7w0
uk-Oa0+2 PyQXiIz
Znf5jCkJ uVDYjALG
cKrZM40C QB8d85B/
LTc36XZ7 JVFx5kGy
5tI-R3tq uuPIVKND
AsH1Sgh9 S7YSS39R
dnSa5r0U yGhrLzXw
zzM9IO4e +QQ+CQID
AQAB-AoG AD1aw5mG
ubtCxbke BOVYf+V/
fXnjVSf7 6QbrzsD1
k0ooUjFV6 sKRZC5Pd
7S7H\n
-----

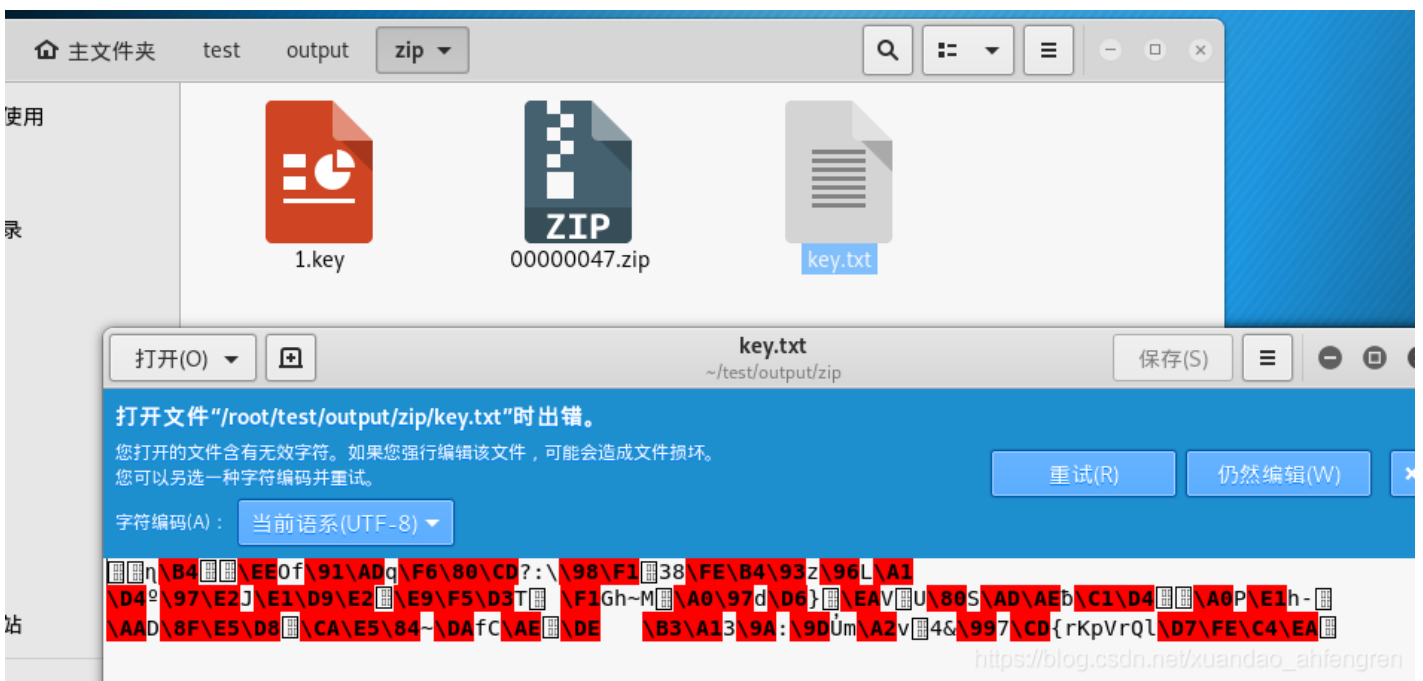
```

```

s)
142588562 IDA Pro 6.5 Setup.exe\r\n
128 key.txt\r\n
20 20 31 31 3a 31 35 41 08-09-16 11:15A
20 20 20 20 20 20 20 20 M
65 79 2e 74 78 74 0d 0a 128 k ey.txt
20 20 31 31 3a 32 39 41 08-10-16 11:29A

```

有个压缩包，里面的key.txt文件被加密过了，我们有密码就可以直接解密



openssl rsautl -decrypt -in key.txt -inkey 1.key -out flag.txt

in为要解密的加密文档-inkey为密钥-out为输出文档

```
hi, boys and girls! flag is {haPPy_Use_0penSsI}
```

再见李华

用winhex打开看到key.txt，把后缀改成zip

```
14 UU U1 | - | |>1yUPK
J0 00 1A |   | | I  q %
74 1F B8 |   |   | key.txt ,
3F 7C C2 | mFf n j | | | | | | | |
```

打开需要密码。

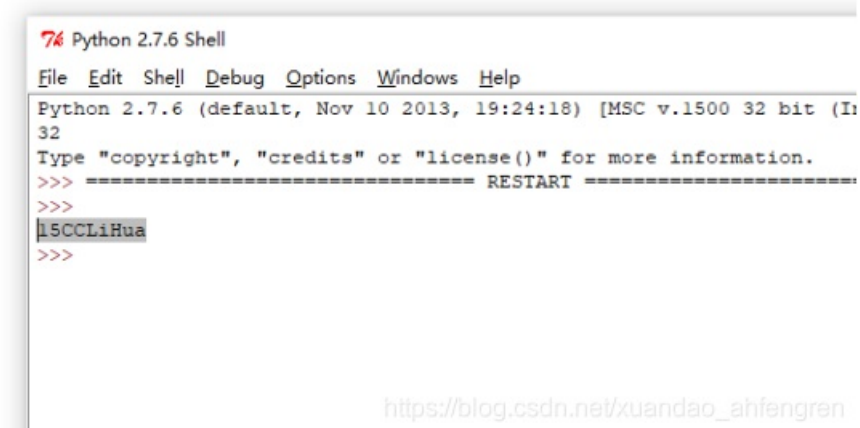
没有特殊字符，是指密码中没有特殊字符。而不少于1000个字，这个1000是8的二进制，所以密码是9位或9位以上，最后署名，意思是密码中后面5位数是Lihua，最后用Advanced ZIP Password Recovery\_4.0进行破解。最后密码为15CCLiHua

```
import string
from hashlib import md5
a = string.ascii_letters + string.digits

for a1 in a:
    for a2 in a:
        for a3 in a:
            for a4 in a:
                if '1a4fb3fb5ee' in md5(bytes(a1 + a2 + a3 + a4 + 'LiHua').encode('ascii')).hexdigest():
                    print a1+ a2 + a3 + a4 + 'LiHua'
                    break
```

```
port string
om hashlib import md5
= string.ascii_letters + string.digits

r al in a:
    for a2 in a:
        for a3 in a:
            for a4 in a:
                if '1a4fb3fb5ee' in md5(bytes(a1 + a2 + a3 + a4 + 'LiHua').
                print a1+ a2 + a3 + a4 + 'LiHua'
                break
```



```
Python 2.7.6 Shell
File Edit Shell Debug Options Windows Help
Python 2.7.6 (default, Nov 10 2013, 19:24:18) [MSC v.1500 32 bit (I
32
Type "copyright", "credits" or "license()" for more information.
>>> ===== RESTART =====
>>>
15CCLiHua
>>>
```

[https://blog.csdn.net/xuandao\\_ahfengren](https://blog.csdn.net/xuandao_ahfengren)

肥宅快乐题

打通关后获取base64加密后的flag，解密即可





## warmup

先将 open\_forum.png 压缩为 open\_forum.zip, 然后明文破解

```
python bwm.py encode fuli.png fuli2.png res.png
```



```
flag{bWm_Are_W0nderfu1}
```