

# 2021-05-6 CTF Misc buu oj day7 6道题

原创

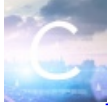
[LiNa\\_IlnA\\_741](#)  于 2021-05-06 23:22:48 发布  56  收藏

分类专栏: [ctf](#)

版权声明: 本文为博主原创文章, 遵循 [CC 4.0 BY-SA](#) 版权协议, 转载请附上原文出处链接和本声明。

本文链接: [https://blog.csdn.net/LiNa\\_IlnA\\_741/article/details/116357990](https://blog.csdn.net/LiNa_IlnA_741/article/details/116357990)

版权



[ctf](#) 专栏收录该内容

17 篇文章 0 订阅

订阅专栏

这里写目录标题

## 九连环

类型

图片文件

解题

## 面具下的flag

### webshell后门

类型

文件

解题

## 被劫持的神秘礼物

类型

文件

解题

## 刷新过的图片

类型

图片文件

解题

## snake

类型

图片文件

解题

## 梅花香之苦寒来

类型

图片文件

解题

## 九连环

### 类型

jpg图片分析

### 图片文件

123456cry.jpg

### 解题

1. 据说是伪加密（文件目录加密而全局目录未加密），但是经过基础检查，用binwalk分析是可以zip文件的：

```
(root@kali)~[~/buu oj]
# binwalk 123456cry.jpg

DECIMAL      HEXADECIMAL    DESCRIPTION
-----
0            0x0            JPEG image data, JFIF standard 1.01
19560       0x4C68         Zip archive data, at least v1.0 to extract, name: asd/
48454       0xBD46         Zip archive data, at least v1.0 to extract, compressed size: 184, uncompressed size: 184, name: asd/qwe.zip
48657       0xBE11         End of Zip archive, footer length: 22
48962       0xBF42         End of Zip archive, footer length: 22

(root@kali)~[~/buu oj]
# binwalk 123456cry.jpg -e

DECIMAL      HEXADECIMAL    DESCRIPTION
-----
0            0x0            JPEG image data, JFIF standard 1.01
19560       0x4C68         Zip archive data, at least v1.0 to extract, name: asd/
48454       0xBD46         Zip archive data, at least v1.0 to extract, compressed size: 184, uncompressed size: 184, name: asd/qwe.zip
48657       0xBE11         End of Zip archive, footer length: 22
48962       0xBF42         End of Zip archive, footer length: 22
```

2. 解压后的文件又看到一个图片和一个加密的zip压缩包，压缩包里面和asd文件夹里一样，都是一张图片“good-已合并.jpg”和一个带flag.txt的“qwe”压缩包：

```
(root@kali)~[~/buu oj/_123456cry.jpg.extracted/asd]
# ll
总用量 33
-rwxrwxrwx 1 root root 29992  4月 30 16:42 good-已合并.jpg
-rwxrwxrwx 1 root root   184  4月 30 16:42 qwe.zip
```

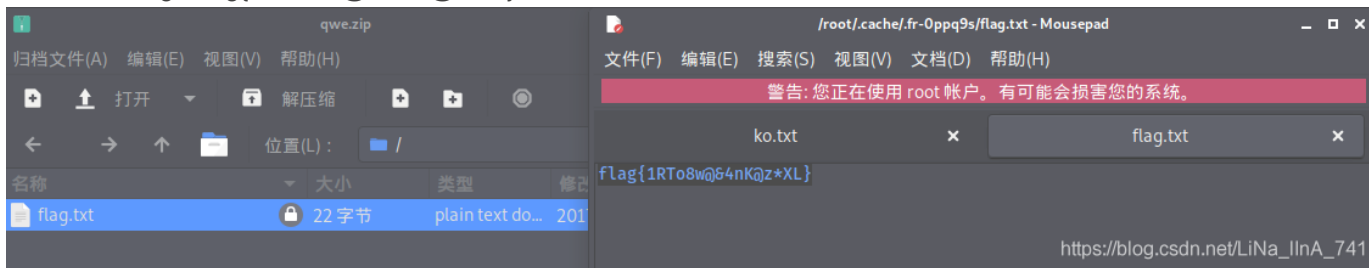
3. 基础检查“good-已合并.jpg”并未发现异常，这里下载了一个新的隐写查看工具steghide，看一下steghide制作图种，是将一个txt文件嵌入到jpg文件中，这道题是相反操作，`steghide extract -sf good-已合并.jpg`把txt文本提取出来，得到ko.txt 打开后看到压缩包密码：bV1g6t5wZDJif^J7

```
(root@kali)~[~/buu oj/_123456cry.jpg.extracted/asd]
# steghide extract -sf good-已合并.jpg
Enter passphrase:
wrote extracted data to "ko.txt".

(root@kali)~[~/buu oj/_123456cry.jpg.extracted/asd]
# ll
总用量 33
-rwxrwxrwx 1 root root 29992  4月 30 16:42 good-已合并.jpg
-rwxrwxrwx 1 root root    48  4月 30 17:36 ko.txt
-rwxrwxrwx 1 root root   184  4月 30 16:42 qwe.zip

(root@kali)~[~/buu oj/_123456cry.jpg.extracted/asd]
# cat ko.txt
bV1g6t5wZDJif^J7
```

4. 解压缩得到flag：flag{1RTo8w@&4nK@z\*XL}



## 面具下的flag

关键文件解压不出来，研究中。。。

## webshell后门

### 类型

webshell后门分析

### 文件

---

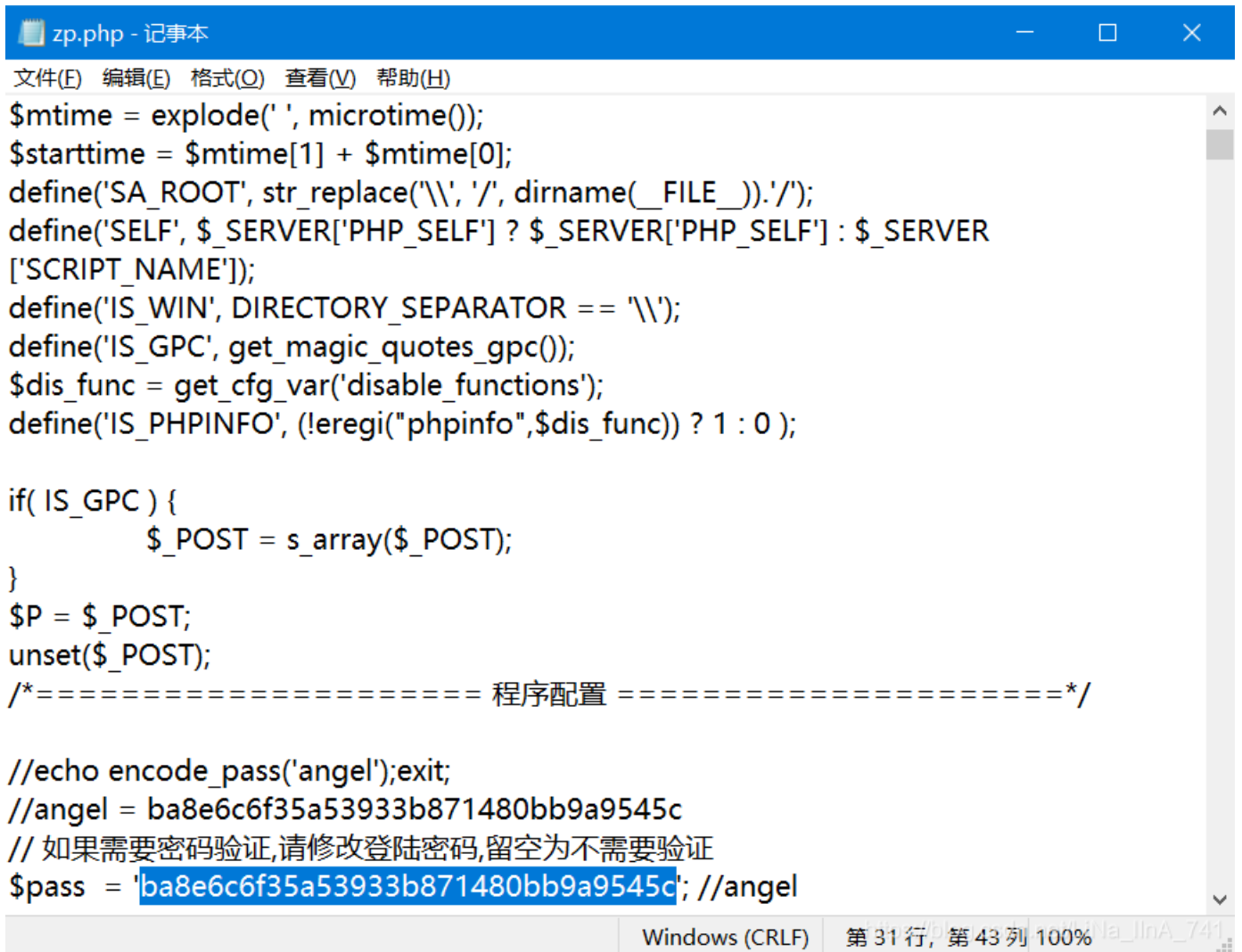
名称

- 📁 开发文档
- 📁 wap
- 📁 vote
- 📁 upload\_files
- 📁 template
- 📁 member
- 📁 inc
- 📁 images
- 📁 html
- 📁 hack
- 📁 guestbook
- 📁 form
- 📁 ewebeditor
- 📁 do
- 📁 data
- 📁 cache
- 📁 admin
- 📁 a\_d
- 📄 特别鸣谢.txt
- 📄 升级功能.txt
- 📄 安装说明.txt
- 📄 robots.txt
- 📄 list.php
- 📄 index.php
- 📄 bencandy.php

解题

复习题，同day6后门查杀解压后D盾查杀解压文件目录，发现可疑文件，搜索pass得到flag:

flag{ba8e6c6f35a53933b871480bb9a9545c}



## 被劫持的神秘礼物

### 类型

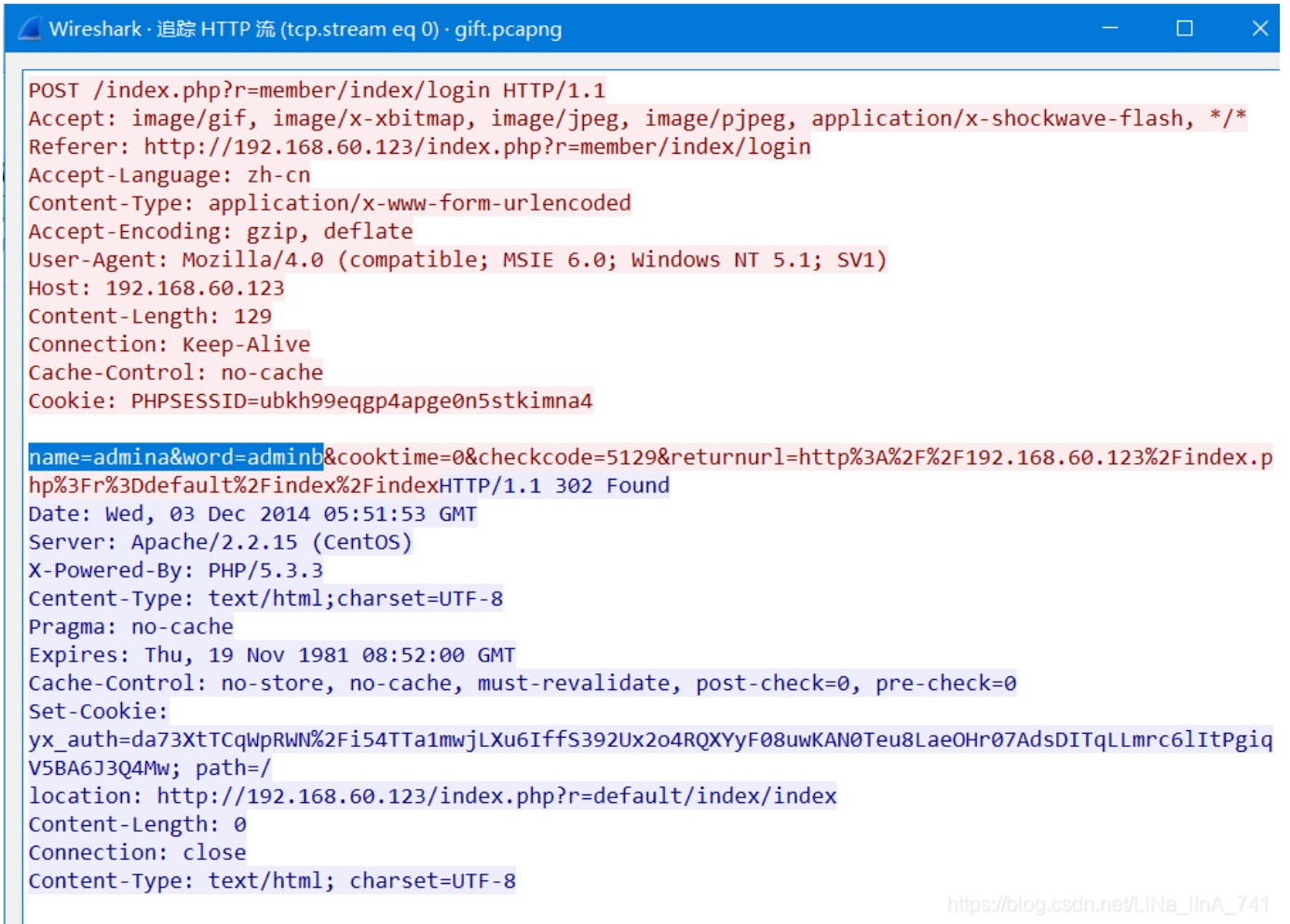
流量包分析

### 文件

gift.pcapng

## 解题

1. Wireshark打开文件，追踪http流（题目中说找到账号密码，账号密码一般都是http请求中提交的），账号名为admina，密码为adminb

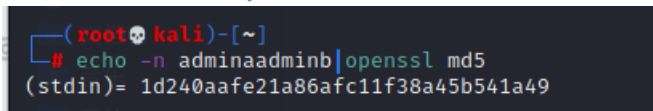


```
Wireshark · 追踪 HTTP 流 (tcp.stream eq 0) · gift.pcapng
POST /index.php?r=member/index/login HTTP/1.1
Accept: image/gif, image/x-xbitmap, image/jpeg, image/pjpeg, application/x-shockwave-flash, */*
Referer: http://192.168.60.123/index.php?r=member/index/login
Accept-Language: zh-cn
Content-Type: application/x-www-form-urlencoded
Accept-Encoding: gzip, deflate
User-Agent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; SV1)
Host: 192.168.60.123
Content-Length: 129
Connection: Keep-Alive
Cache-Control: no-cache
Cookie: PHPSESSID=ubkh99eqgp4apge0n5stkimna4

name=admina&word=adminb&coovertime=0&checkcode=5129&returnurl=http%3A%2F%2F192.168.60.123%2Findex.p
hp%3Fr%3Ddefault%2Findex%2FindexHTTP/1.1 302 Found
Date: Wed, 03 Dec 2014 05:51:53 GMT
Server: Apache/2.2.15 (CentOS)
X-Powered-By: PHP/5.3.3
Content-Type: text/html; charset=UTF-8
Pragma: no-cache
Expires: Thu, 19 Nov 1981 08:52:00 GMT
Cache-Control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0
Set-Cookie:
yx_auth=da73XtTCqWpRWN%2Fi54TTa1mwjLXu6Iffs392Ux2o4RQXYyF08uwKAN0Teu8Lae0Hr07AdsDITqLLmrc6lItPgiq
V5BA6J3Q4Mw; path=/
location: http://192.168.60.123/index.php?r=default/index/index
Content-Length: 0
Connection: close
Content-Type: text/html; charset=UTF-8
```

[https://blog.csdn.net/LiNa\\_IInA\\_741](https://blog.csdn.net/LiNa_IInA_741)

2. 拼接后用kali linux命令 `echo -n adminaadminb|openssl md5`  
回显flag: `flag{1d240aafe21a86afc11f38a45b541a49}`



```
(root@kali)~[~]
# echo -n adminaadminb|openssl md5
(stdin)= 1d240aafe21a86afc11f38a45b541a49
```

## 刷新过的图片

### 类型

jpg图片分析

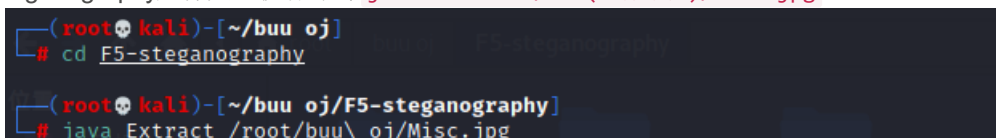
### 图片文件

Misc.jpg

## 解题

题目提示刷新，找到隐写工具F5-Steganography

下载后打开F5-Steganography文件夹，执行命令 `java Extract /...(文件路径)/Misc.jpg`



```
(root@kali)~[~/buu oj]
# cd F5-steganography

(root@kali)~[~/buu oj/F5-steganography]
# java Extract /root/buu\oj/Misc.jpg
```

```

Picked up _JAVA_OPTIONS: -Dawt.useSystemAAFontSettings=on -Dswing.aatext=true
Huffman decoding starts
Permutation starts
309504 indices shuffled
Extraction starts
Length of embedded file: 190 bytes
(1, 31, 5) code used

(root@kali)-[~/buu oj/F5-steganography]
└─# ll
总用量 261
-rwxrwxrwx 1 root root 213 5月 6 13:05 bin.noise
drwxrwxrwx 1 root root 4096 5月 6 13:05 cryp
-rwxrwxrwx 1 root root 94 5月 6 13:05 d
-rwxrwxrwx 1 root root 62 5月 6 13:05 d.bat
-rwxrwxrwx 1 root root 109 5月 6 13:05 e
-rwxrwxrwx 1 root root 103 5月 6 13:05 e.bat
-rwxrwxrwx 1 root root 4685 5月 6 13:05 Embed.class
-rwxrwxrwx 1 root root 5250 5月 6 13:05 Embed.java
-rwxrwxrwx 1 root root 4227 5月 6 13:05 Extract.class
-rwxrwxrwx 1 root root 5941 5月 6 13:05 Extract.java
-rwxrwxrwx 1 root root 18007 5月 6 13:05 gpl.txt
drwxrwxrwx 1 root root 0 5月 6 13:05 image
drwxrwxrwx 1 root root 4096 5月 6 13:05 james
drwxrwxrwx 1 root root 0 5月 6 13:05 java
-rwxrwxrwx 1 root root 316 5月 6 13:05 license.txt
-rwxrwxrwx 1 root root 188706 5月 6 13:05 lopez.bmp
-rwxrwxrwx 1 root root 373 5月 6 13:05 Makefile
-rwxrwxrwx 1 root root 63 5月 6 13:05 ms_d.bat
-rwxrwxrwx 1 root root 104 5月 6 13:05 ms_e.bat
drwxrwxrwx 1 root root 4096 5月 6 13:05 ortega
-rwxrwxrwx 1 root root 190 5月 6 13:08 output.txt
-rwxrwxrwx 1 root root 1975 5月 6 13:05 readme.md

```

binwalk输出文件发现该文件为zip文件，提取后得到flag: flag{96efd0a2037d06f34199e921079778ee}

```

(root@kali)-[~/buu oj/F5-steganography]
└─# binwalk output.txt
DECIMAL      HEXADECIMAL     DESCRIPTION
-----
0             0x0             Zip archive data, at least v2.0 to extract, compressed size: 40, uncompressed size: 38, name: flag.txt
168          0xA8           End of Zip archive, footer length: 22

(root@kali)-[~/buu oj/F5-steganography]
└─# binwalk output.txt -e
DECIMAL      HEXADECIMAL     DESCRIPTION
-----
0             0x0             Zip archive data, at least v2.0 to extract, compressed size: 40, uncompressed size: 38, name: flag.txt
168          0xA8           End of Zip archive, footer length: 22

```

```

drwxrwxrwx 1 root root 0 5月 6 13:05 image
drwxrwxrwx 1 root root 4096 5月 6 13:05 james
drwxrwxrwx 1 root root 0 5月 6 13:05 java
-rwxrwxrwx 1 root root 316 5月 6 13:05 license.txt
-rwxrwxrwx 1 root root 188706 5月 6 13:05 lopez.bmp
-rwxrwxrwx 1 root root 373 5月 6 13:05 Makefile
-rwxrwxrwx 1 root root 63 5月 6 13:05 ms_d.bat
-rwxrwxrwx 1 root root 104 5月 6 13:05 ms_e.bat
drwxrwxrwx 1 root root 4096 5月 6 13:05 ortega
-rwxrwxrwx 1 root root 190 5月 6 13:08 output.txt
drwxrwxrwx 1 root root 0 5月 6 13:09 output.txt.extracted
-rwxrwxrwx 1 root root 1975 5月 6 13:05 readme.md
drwxrwxrwx 1 root root 0 5月 6 13:05 sum

(root@kali)-[~/buu oj/F5-steganography]
└─# cd output.txt.extracted

(root@kali)-[~/buu oj/F5-steganography/output.txt.extracted]
└─# ll
总用量 1
-rwxrwxrwx 1 root root 190 5月 6 13:09 0.zip
-rwxrwxrwx 1 root root 38 5月 6 13:09 flag.txt

(root@kali)-[~/buu oj/F5-steganography/output.txt.extracted]
└─# cat flag.txt
flag{96efd0a2037d06f34199e921079778ee}

```

# snake

## 类型

jpg图片分析

## 图片文件

snake.jpg

## 解题

1. 常规检查, binwalk解压, 得到两个文件cipher、key

```
(root@kali)~/buu oj/snake
# binwalk snake.jpg -e
```

DECIMAL	HEXADECIMAL	DESCRIPTION
0	0x0	JPEG image data, JFIF standard 1.01
30	0x1E	TIFF image data, big-endian, offset of first image directory: 8
2925	0xB6D	Copyright string: "Copyright Apple Inc., 2015"
278260	0x43EF4	Zip archive data, at least v1.0 to extract, compressed size: 82, uncompressed size: 82, name: key
278375	0x43F67	Zip archive data, at least v1.0 to extract, compressed size: 48, uncompressed size: 48, name: cipher
278632	0x44068	End of Zip archive, footer length: 22

2. key可以直接打开, 看到内容为base64编码, 解码后得到一句话: What is Nicki Minaj's favorite song that refers to snakes? (百度查这句话出来的全是实验吧的writeup) 所以key是anaconda。

```
(root@kali)~/buu oj/snake/_snake.jpg.extracted
# ll
总用量 2
-rwxrwxrwx 1 root root 394 5月 6 13:48 43EF4.zip
-rwxrwxrwx 1 root root 48 1月 3 2016 cipher
-rwxrwxrwx 1 root root 82 1月 3 2016 key

(root@kali)~/buu oj/snake/_snake.jpg.extracted
# more key
V2hhdCBpcyBOaWNraSBNaW5haidzIGZhdm9yaXRlIHNVbmcgdGhhdCByZWZlcnMgdG8gc25ha2VzPwo=

(root@kali)~/buu oj/snake/_snake.jpg.extracted
```

## Base64 在线解码、编码



常规Base64 CSS Base64 DES加密/解密 3DES加密/解密 AES加密/解密 RSA加密/解密

V2hhdCBpcyBOaWNraSBNaW5haidzIGZhdm9yaXRlIHNVbmcgdGhhdCByZWZlcnMgdG8gc25ha2VzPwo=

编码源格式:  文本  Hex 解码结果: 自动检测 中文编码: UTF-8 编码 解码

What is Nicki Minaj's favorite song that refers to snakes?

当前编码: [Ascii]  
数据长度: 59 Bytes  
插件数: 16, 耗时: 1ms\_741

3. serpent在线解密上传cipher文件, 输入key后解密得flag: flag{who\_knew\_serpent\_cipher\_existed}

Input type: File



File:  [Browse](#)


Function:

Mode:

Key:   
(plain)

Plaintext  Hex

[> Encrypt!](#) [> Decrypt!](#) [▶](#) [🔗](#)

 100%  
File was uploaded.

Decrypted text:

00000000	43 54 46 7b 77 68 6f 5f 6b 6e 65 77 5f 73 65 72
00000010	70 65 6e 74 5f 63 69 70 68 65 72 5f 65 78 69 73
00000020	74 65 64 7d 00 00 00 00 00 00 00 00 00 00 00 00

[\[Download as a binary file\] \[?\]](#)

```
CTF {who_knew_serpent_cipher_existed}.....
```

[https://blog.csdn.net/qq\\_41460116/article/details/105411111](https://blog.csdn.net/qq_41460116/article/details/105411111)

## 梅花香之苦寒来

### 类型

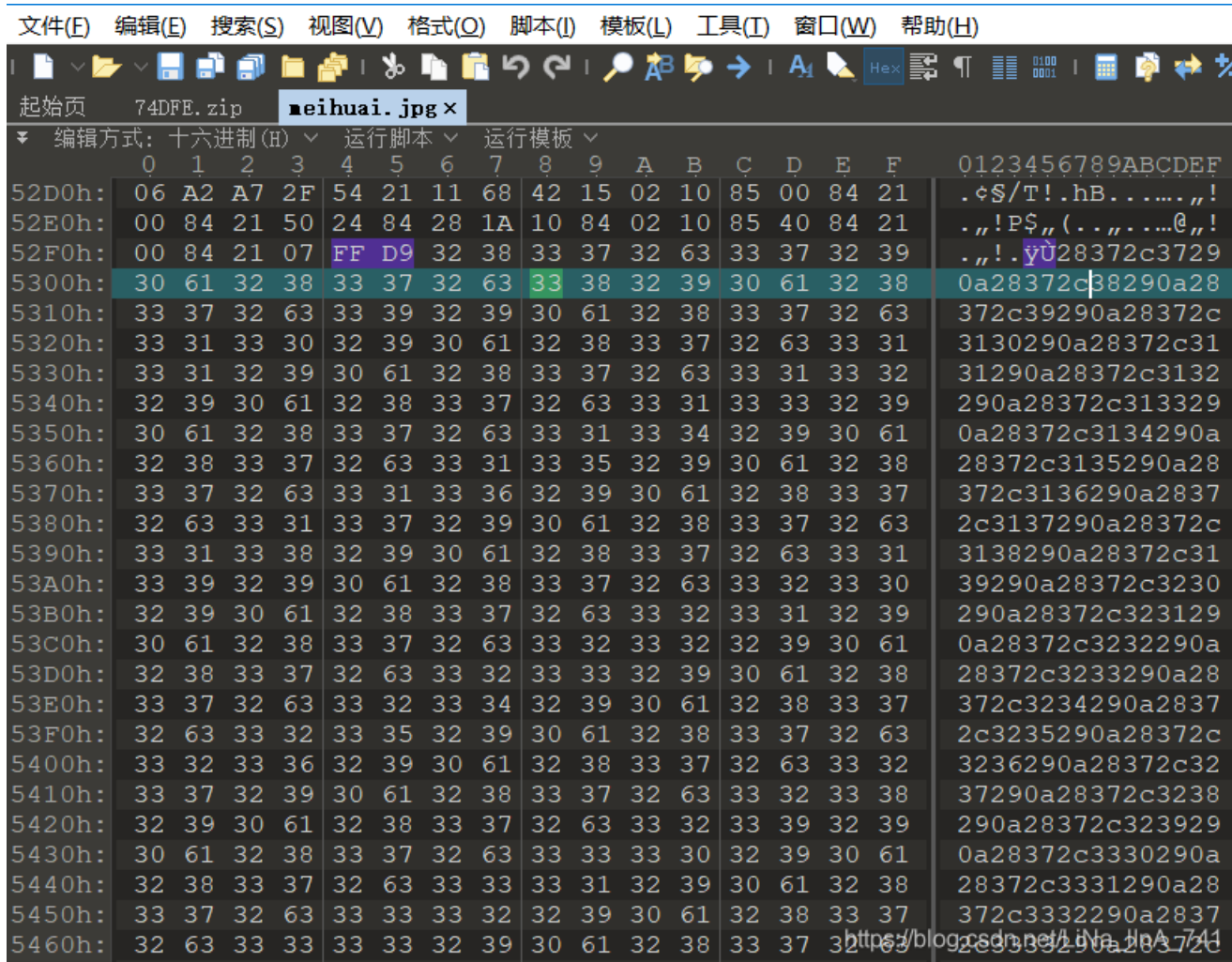
jpg图片分析

### 图片文件

meihuai.jpg

### 解题

1. 图片内容“图穷匕见”，基础检查用010Editor打开搜索jpg文件尾FF D9，后面全是数字字母，取出来两位转个ascii码试试，28->'(', 37->'7', 2c->',', 29->')', 0a->回车，前五个16进制数字转换成ascii得到(7,7):



2. 复制所有图片后数字保存为hex.txt文件，用python脚本转换成ascii.txt:

```
with open('hex.txt','r') as h:
    h = h.read()

tem = ''

f = open('ascii.txt','w'):
for i in range(0,len(h),2):
    #h中每两个数字字符组成一个十六进制数，如'0x28'，故步长为2，
    tem = '0x' + h[i] + h[i+1]
    tem = int(tem, base=16)
    #十六进制字符串转换成十进制整型
    print(chr(tem), end = '', file = f)
    #十进制整型转换成字符型即ascii码
f.close()
```

1	(7,7)
2	(7,8)
3	(7,9)
4	(7,10)
5	(7,11)
6	(7,12)
7	(7,13)
8	(7,14)
9	(7,15)
10	(7,16)
11	(7,17)
12	(7,18)
13	(7,19)
14	(7,20)
15	(7,21)
16	(7,22)
17	(7,23)
18	(7,24)
19	(7,25)
20	(7,26)
21	(7,27)
22	(7,28)
23	(7,29)
24	(7,30)
25	(7,31)
26	(7,32)

34996	(271,213)
34997	(271,214)
34998	(271,236)
34999	(271,237)
35000	(271,238)
35001	(271,239)
35002	(271,240)
35003	(271,241)
35004	(271,242)
35005	(271,243)
35006	(271,244)
35007	(271,245)
35008	(271,246)
35009	(271,247)
35010	(271,248)
35011	(271,249)
35012	(271,250)
35013	(271,265)
35014	(271,266)
35015	(271,267)
35016	(271,268)
35017	(271,269)
35018	(271,270)
35019	(271,271)
35020	

3. 得到内容为坐标，可以用来作图，为了利用Kali Linux中画图工具GNUPLOT，修改ascii.txt格式，去掉左右括号，把横纵坐标中间逗号改用空格隔开，用python脚本：

```
with open('ascii.txt','r') as a:
    a = a.read()
    a = a.split()
    #每个坐标分割为一组修改对象
    tem = ''

f = open('plot.txt', 'w'):
for i in range(0, len(a)):
    tem = a[i]
    tem = tem.lstrip('(')
    #去掉左括号'('
    tem = tem.rstrip(')')
    #去掉右括号')'
    for j in range(0, len(tem)):
        if (j=='，'):
            tem = tem[:j] + ' ' + tem[:j+1]
        #逗号改为空格
    print(tem, file = f)
f.close()
```

---

1	7	7
2	7	8
3	7	9
4	7	10
5	7	11
6	7	12
7	7	13
8	7	14
9	7	15
10	7	16
11	7	17
12	7	18
13	7	19
14	7	20
15	7	21
16	7	22
17	7	23
18	7	24
19	7	25
20	7	26
21	7	27
22	7	28
23	7	29
24	7	30
25	7	31
26	7	32
27	7	33

---

34996	271	213
34997	271	214
34998	271	236
34999	271	237
35000	271	238
35001	271	239
35002	271	240
35003	271	241
35004	271	242
35005	271	243
35006	271	244
35007	271	245
35008	271	246
35009	271	247
35010	271	248
35011	271	249
35012	271	250
35013	271	265
35014	271	266
35015	271	267
35016	271	268
35017	271	269
35018	271	270
35019	271	271
35020		

4. 到plot.txt所在目录下执行 `gnuplot`，进入gnuplot后执行 `plot "plot.txt"` 得到二维码图片，扫码得到flag: `flag{40fc0a979f759c8892f4dc045e28b820}`

```
(root@kali)-[~/buu oj/梅花香之苦寒来]
└─# ll
总用量 1885
-rwxrwxrwx 1 root root 215 5月 6 15:56 1.py
-rwxrwxrwx 1 root root 327 5月 6 16:13 2.py
-rwxrwxrwx 1 root root 344057 5月 6 15:56 ascii.txt
-rwxrwxrwx 1 root root 649566 5月 6 15:46 hex.txt
-rwxrwxrwx 1 root root 670804 11月 7 2017 meihuai.jpg
-rwxrwxrwx 1 root root 262084 5月 6 16:13 plot.txt

(root@kali)-[~/buu oj/梅花香之苦寒来]
└─# gnuplot

      G N U P L O T
      Version 5.4 patchlevel 1   last modified 2020-12-01

      Copyright (C) 1986-1993, 1998, 2004, 2007-2020
      Thomas Williams, Colin Kelley and many others

      gnuplot home:      http://www.gnuplot.info
      faq, bugs, etc:   type "help FAQ"
      immediate help:   type "help" (plot window: hit 'h'

Terminal type is now 'qt'   https://blog.csdn.net/LiNa_llnA_741
gnuplot> plot
```



## Free Online Barcode Reader

To get such results using [ClearImage SDK](#) use [TBR Code 103](#).

If your **business** application needs barcode recognition capabilities, email your technical questions to [support@inlitesearch.com](mailto:support@inlitesearch.com) email your sales inquiries to [sales@inlitesearch.com](mailto:sales@inlitesearch.com)

File: <b>flag.png</b>	New File
Pages: <b>1</b>	Barcodes: <b>1</b>
Barcode: 1 of 1	Type: <b>QR</b>
Length: 38	Rotation: left
Module: 13.1pix	Rectangle: {X=62,Y=74,Width=460,Height=470}
<input type="text" value="flag{40fc0a979f759c8892f4dc045e28b820}"/>	

[https://blog.csdn.net/linA\\_441](https://blog.csdn.net/linA_441)

引用最后一题题目，“梅花香自苦寒来”，冲冲冲！



[创作打卡挑战赛](#) >

[赢取流量/现金/CSDN周边激励大奖](#)