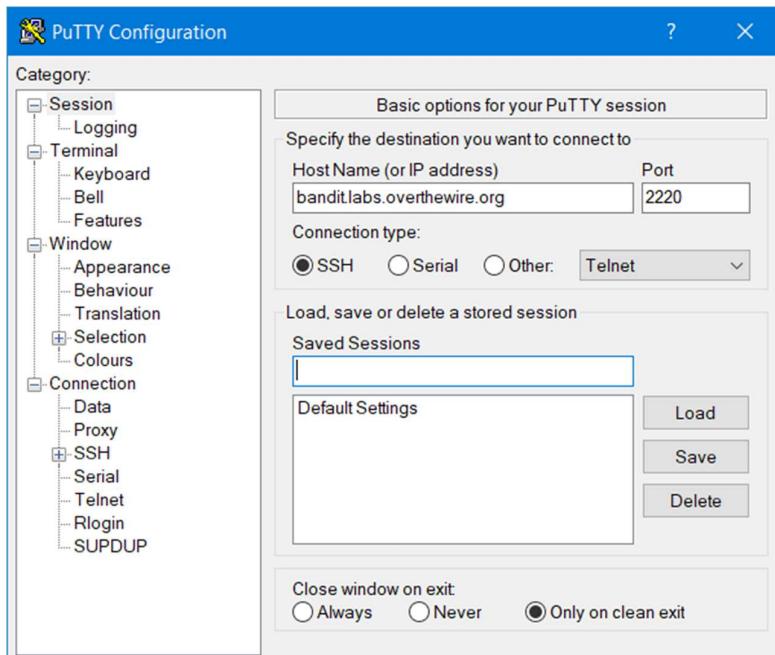


I've done this task in PuTTY Configuration app as it also allows us to connect SSH.

But I have Kali Linux with Windows 10 dual boot. I've been using kali linux for more than 5 months, so i know some basic commands of kali linux.



LEVEL 0

After that i logged in-

```
bandit0@bandit: ~
For your convenience we have installed a few usefull tools which you can find
in the following locations:

* gef (https://github.com/hugsy/gef) in /usr/local/gef/
* pwndbg (https://github.com/pwndbg/pwndbg) in /usr/local/pwndbg/
* peda (https://github.com/longld/peda.git) in /usr/local/peda/
* gdbinit (https://github.com/gdbinit/Gdbinit) in /usr/local/gdbinit/
* pwntools (https://github.com/Gallopsled/pwntools)
* radare2 (http://www.radare.org/)
* checksec.sh (http://www.trapkit.de/tools/checksec.html) in /usr/local/bin/
checksec.sh

--[ More information ]--

For more information regarding individual wargames, visit
http://www.overthewire.org/wargames/

For support, questions or comments, contact us through IRC on
irc.overthewire.org #wargames.

Enjoy your stay!
```

After this I ran the ls command according to task. So I got the readme file. And then I ran cat command to open the readme file.

```
bandit0@bandit: ~
* gef (https://github.com/hugsy/gef) in /usr/local/gef/
* pwndbg (https://github.com/pwndbg/pwndbg) in /usr/local/pwndbg/
* peda (https://github.com/longld/peda.git) in /usr/local/peda/
* gdbinit (https://github.com/gdbinit/Gdbinit) in /usr/local/gdbinit/
* pwntools (https://github.com/Gallopsled/pwntools)
* radare2 (http://www.radare.org/)
* checksec.sh (http://www.trapkit.de/tools/checksec.html) in /usr/local/bin/
checksec.sh

--[ More information ]--

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http://www.overthewire.org/wargames/

For support, questions or comments, contact us through IRC on
irc.overthewire.org #wargames.

Enjoy your stay!

bandit0@bandit:~$ ls
readme
bandit0@bandit:~$ cat readme
```

After opening the file I got the passwords. And I logged in at a new level.

```
bandit0@bandit: ~
For more information regarding individual wargames, visit
http://www.overthewire.org/wargames/
For support, questions or comments, contact us through IRC on
irc.overthewire.org #wargames.
Enjoy your stay!
bandit0@bandit:~$ ls
readme
bandit0@bandit:~$ cat readme
boJ9jbbUNNfktD7800psq0ltutMc3MY1
bandit0@bandit:~$ ssh bandit1@localhost
Could not create directory '/home/bandit0/.ssh'.
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ECDSA key fingerprint is SHA256:98UL0ZWr85496EtCRkKlo20X3OPnyPSB5tB5RPbhczc.
Are you sure you want to continue connecting (yes/no)? yes
Failed to add the host to the list of known hosts (/home/bandit0/.ssh/known_hosts).
This is a OverTheWire game server. More information on http://www.overthewire.org/wargames
```

LEVEL 1

LEVEL GOAL - The password for the next level is stored in a file called - located in the home directory

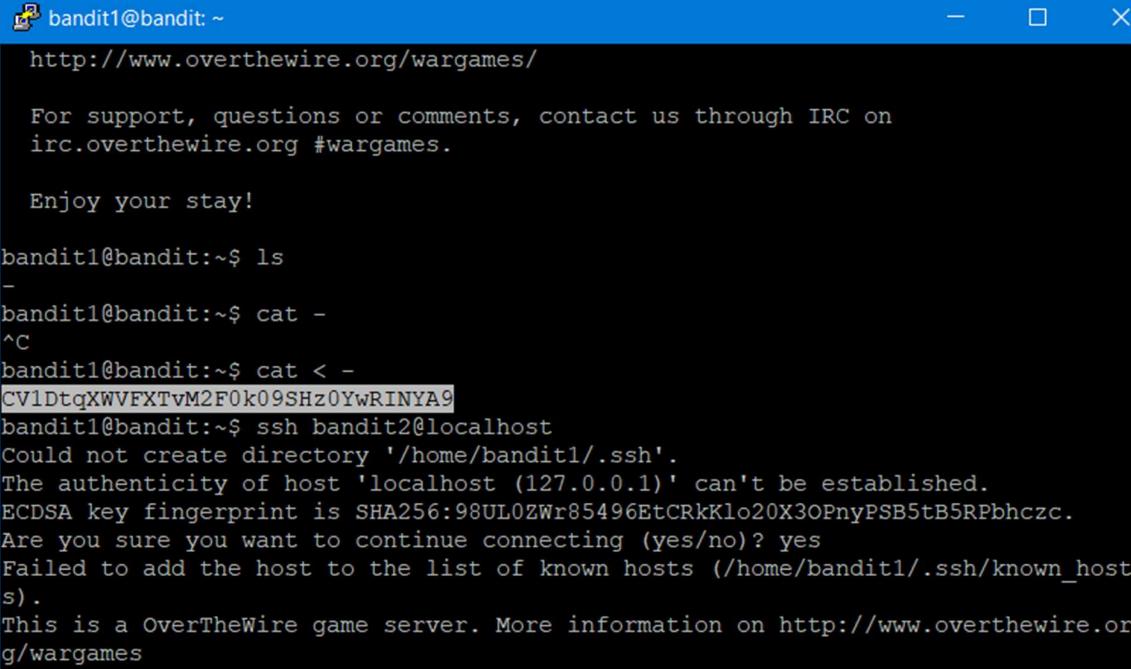
So again I ran ls command and tried to open - file with cat command.

```
bandit1@bandit: ~
* peda (https://github.com/longld/peda.git) in /usr/local/peda/
* gdbinit (https://github.com/gdbinit/Gdbinit) in /usr/local/gdbinit/
* pwntools (https://github.com/Gallopsled/pwntools)
* radare2 (http://www.radare.org/)
* checksec.sh (http://www.trapkit.de/tools/checksec.html) in /usr/local/bin/
checksec.sh

--[ More information ]--

For more information regarding individual wargames, visit
http://www.overthewire.org/wargames/
For support, questions or comments, contact us through IRC on
irc.overthewire.org #wargames.
Enjoy your stay!
bandit1@bandit:~$ ls
-
bandit1@bandit:~$ cat -
^C
bandit1@bandit:~$ cat < -
```

After opening the file, I got the passwords. Then I logged into a new level using that given password.



```
bandit1@bandit: ~
http://www.overthewire.org/wargames/
For support, questions or comments, contact us through IRC on
irc.overthewire.org #wargames.

Enjoy your stay!

bandit1@bandit:~$ ls
-
bandit1@bandit:~$ cat -
^C
bandit1@bandit:~$ cat < -
CV1DtqXWVFXTvM2F0k09SHz0YWRINYA9
bandit1@bandit:~$ ssh bandit2@localhost
Could not create directory '/home/bandit1/.ssh'.
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ECDSA key fingerprint is SHA256:98UL0ZWr85496EtCRkKlo20X3OPnyPSB5tB5RPbhczc.
Are you sure you want to continue connecting (yes/no)? yes
Failed to add the host to the list of known hosts (/home/bandit1/.ssh/known_hosts).
This is a OverTheWire game server. More information on http://www.overthewire.org/wargames
```

LEVEL 2

Level Goal - The password for the next level is stored in a file called **spaces in this filename** located in the home directory

Again I ran ls command and I got this file. I tried to open the file directly with the cat command but I couldn't. So I tried "\".

```
bandit2@bandit: ~
* radare2 (http://www.radare.org/)
* checksec.sh (http://www.trapkit.de/tools/checksec.html) in /usr/local/bin/
checksec.sh

--[ More information ]--

For more information regarding individual wargames, visit
http://www.overthewire.org/wargames/

For support, questions or comments, contact us through IRC on
irc.overthewire.org #wargames.

Enjoy your stay!

bandit2@bandit:~$ ls
spaces in this filename
bandit2@bandit:~$ cat spaces in this filename
cat: spaces: No such file or directory
cat: in: No such file or directory
cat: this: No such file or directory
cat: filename: No such file or directory
bandit2@bandit:~$ cat spaces\ in\ this\ filename
```

And the file opened. I got the passwords so I logged into a new level.

```
bandit2@bandit: ~
irc.overthewire.org #wargames.

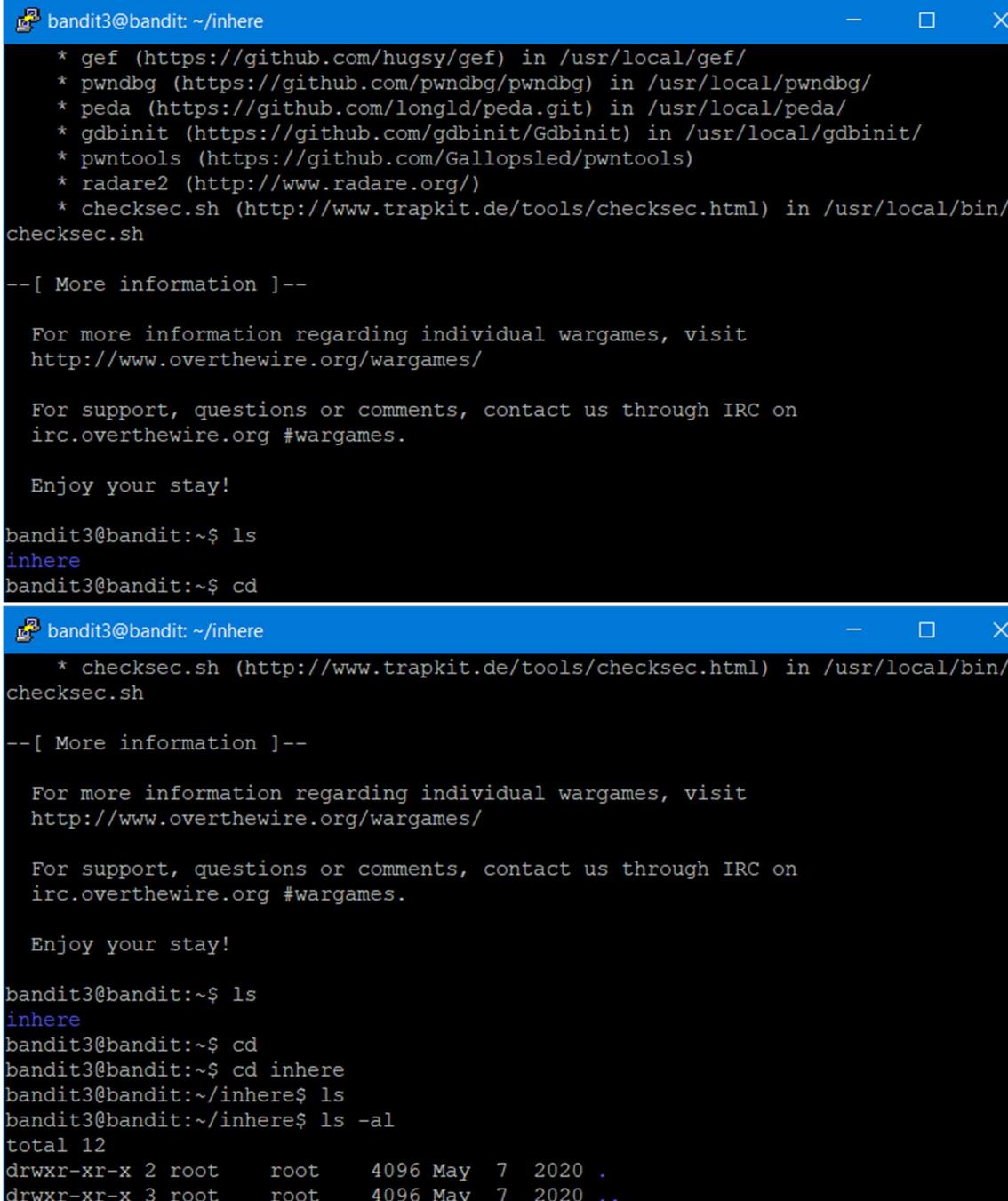
Enjoy your stay!

bandit2@bandit:~$ ls
spaces in this filename
bandit2@bandit:~$ cat spaces in this filename
cat: spaces: No such file or directory
cat: in: No such file or directory
cat: this: No such file or directory
cat: filename: No such file or directory
bandit2@bandit:~$ cat spaces\ in\ this\ filename
UmHadQclWmgdLOKQ3YNgjWxGoRMB5luK
bandit2@bandit:~$ ssh bandit3@localhost
Could not create directory '/home/bandit2/.ssh'.
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ECDSA key fingerprint is SHA256:98UL0ZWr85496EtCRkKlo20X3OPnyPSB5tB5RPbhczc.
Are you sure you want to continue connecting (yes/no)? yes
Failed to add the host to the list of known hosts (/home/bandit2/.ssh/known_hosts).
This is a OverTheWire game server. More information on http://www.overthewire.org/wargames
```

LEVEL 3

Level Goal - The password for the next level is stored in a hidden file in the **inhere** directory.

This time I got a folder named `inhere` using `ls` command. I ran the `cd` command to open that folder.



```
bandit3@bandit:~/inhere
* gef (https://github.com/hugsy/gef) in /usr/local/gef/
* pwndbg (https://github.com/pwndbg/pwndbg) in /usr/local/pwndbg/
* peda (https://github.com/longld/peda.git) in /usr/local/peda/
* gdbinit (https://github.com/gdbinit/Gdbinit) in /usr/local/gdbinit/
* pwntools (https://github.com/Gallopsled/pwntools)
* radare2 (http://www.radare.org/)
* checksec.sh (http://www.trapkit.de/tools/checksec.html) in /usr/local/bin/
checksec.sh

--[ More information ]--

For more information regarding individual wargames, visit
http://www.overthewire.org/wargames/

For support, questions or comments, contact us through IRC on
irc.overthewire.org #wargames.

Enjoy your stay!

bandit3@bandit:~$ ls
inhere
bandit3@bandit:~$ cd

bandit3@bandit:~/inhere
* checksec.sh (http://www.trapkit.de/tools/checksec.html) in /usr/local/bin/
checksec.sh

--[ More information ]--

For more information regarding individual wargames, visit
http://www.overthewire.org/wargames/

For support, questions or comments, contact us through IRC on
irc.overthewire.org #wargames.

Enjoy your stay!

bandit3@bandit:~$ ls
inhere
bandit3@bandit:~$ cd
bandit3@bandit:~$ cd inhere
bandit3@bandit:~/inhere$ ls
bandit3@bandit:~/inhere$ ls -al
total 12
drwxr-xr-x 2 root      root      4096 May  7  2020 .
drwxr-xr-x 3 root      root      4096 May  7  2020 ..
```

I ran the `ls` command again in the folder `inhere`. But the file was hidden, that's why I got nothing. So I ran `ls -al` command to see all the files in that folder.

Then I found the hidden file named `.hidden`. Once again I opened the `.hidden` file using the `cat` command.

```
bandit3@bandit:~/inhere
For more information regarding individual wargames, visit
http://www.overthewire.org/wargames/
For support, questions or comments, contact us through IRC on
irc.overthewire.org #wargames.
Enjoy your stay!
bandit3@bandit:~$ ls
inhere
bandit3@bandit:~$ cd
bandit3@bandit:~$ cd inhere
bandit3@bandit:~/inhere$ ls
bandit3@bandit:~/inhere$ ls -al
total 12
drwxr-xr-x 2 root      root    4096 May  7  2020 .
drwxr-xr-x 3 root      root    4096 May  7  2020 ..
-rw-r----- 1 bandit4 bandit3   33 May  7  2020 .hidden
bandit3@bandit:~/inhere$ cat ./hidden
cat: ./hidden: No such file or directory
bandit3@bandit:~/inhere$ cat .hidden
```

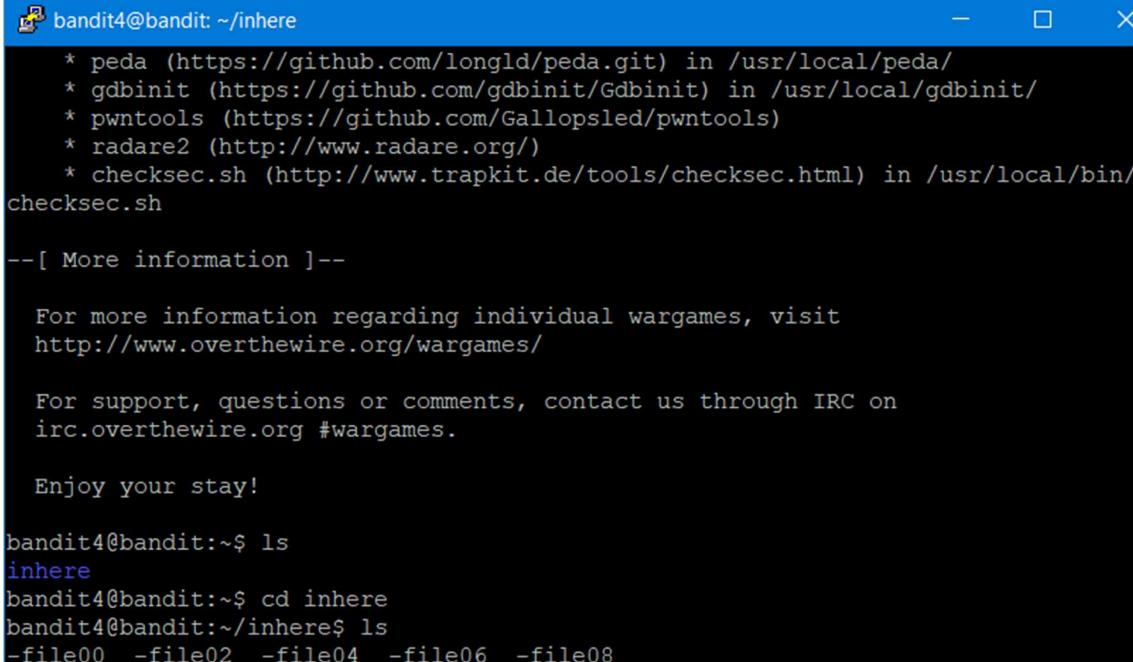
Then I got the password and again I logged into a new level.

```
bandit3@bandit:~/inhere
inhere
bandit3@bandit:~$ cd
bandit3@bandit:~$ cd inhere
bandit3@bandit:~/inhere$ ls
bandit3@bandit:~/inhere$ ls -al
total 12
drwxr-xr-x 2 root      root    4096 May  7  2020 .
drwxr-xr-x 3 root      root    4096 May  7  2020 ..
-rw-r----- 1 bandit4 bandit3   33 May  7  2020 .hidden
bandit3@bandit:~/inhere$ cat ./hidden
cat: ./hidden: No such file or directory
bandit3@bandit:~/inhere$ cat .hidden
pIwrPrtPN36QITSp3Eqaw936yaFoFgAB
bandit3@bandit:~/inhere$ ssh bandit4@localhost
Could not create directory '/home/bandit3/.ssh'.
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ECDSA key fingerprint is SHA256:98UL0ZWr85496EtCRkKlo20X3OPnyPSB5tB5RPbhczc.
Are you sure you want to continue connecting (yes/no)? yes
Failed to add the host to the list of known hosts (/home/bandit3/.ssh/known_hosts).
This is a OverTheWire game server. More information on http://www.overthewire.org/wargames
```

LEVEL 4

Level Goal - The password for the next level is stored in the only human-readable file in the **inhere** directory. Tip: if your terminal is messed up, try the “reset” command.

I opened **inhere** folder and ran the **ls** command.



```
bandit4@bandit:~/inhere
* peda (https://github.com/longld/peda.git) in /usr/local/peda/
* gdbinit (https://github.com/Gdbinit/Gdbinit) in /usr/local/gdbinit/
* pwntools (https://github.com/Gallopsled/pwntools)
* radare2 (http://www.radare.org/)
* checksec.sh (http://www.trapkit.de/tools/checksec.html) in /usr/local/bin/
checksec.sh

--[ More information ]--

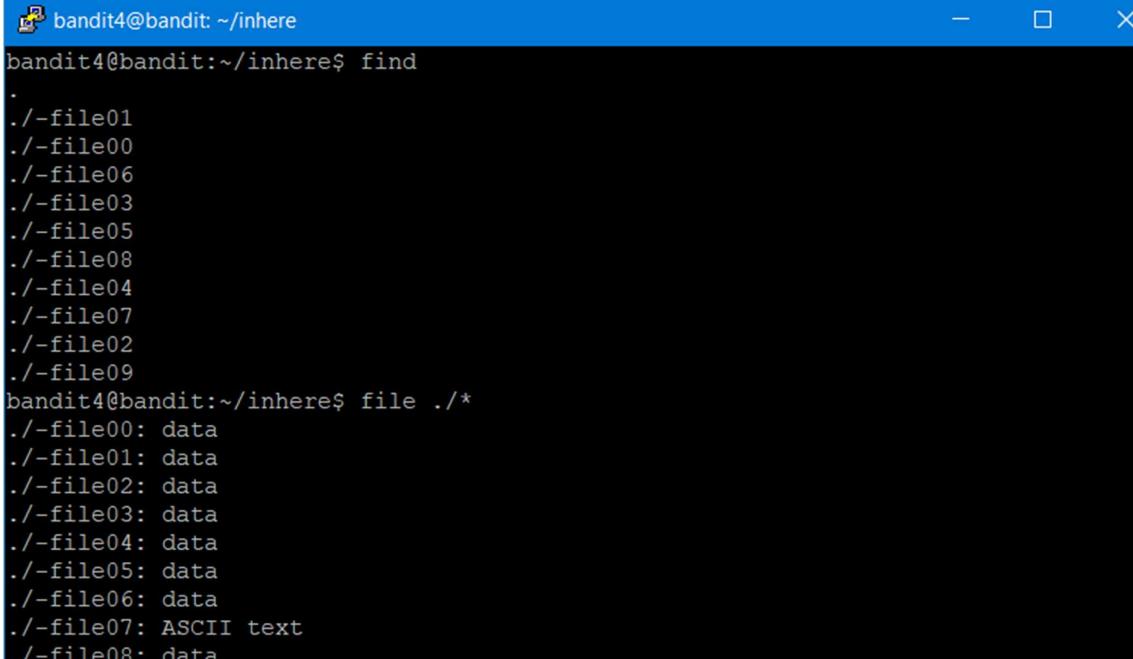
For more information regarding individual wargames, visit
http://www.overthewire.org/wargames/

For support, questions or comments, contact us through IRC on
irc.overthewire.org #wargames.

Enjoy your stay!

bandit4@bandit:~$ ls
inhere
bandit4@bandit:~$ cd inhere
bandit4@bandit:~/inhere$ ls
-file00  -file02  -file04  -file06  -file08
```

I got too many files so I ran the **file** command to get information about file types. And I got **-file07** file as a ASCII TEXT.



```
bandit4@bandit:~/inhere
bandit4@bandit:~/inhere$ find
.
./-file01
./-file00
./-file06
./-file03
./-file05
./-file08
./-file04
./-file07
./-file02
./-file09
bandit4@bandit:~/inhere$ file ./*
./-file00: data
./-file01: data
./-file02: data
./-file03: data
./-file04: data
./-file05: data
./-file06: data
./-file07: ASCII text
./-file08: data
```

And then I opened that file using cat command.

```
bandit4@bandit:~/inhere
./-file06
./-file03
./-file05
./-file08
./-file04
./-file07
./-file02
./-file09
bandit4@bandit:~/inhere$ file ./*
./-file00: data
./-file01: data
./-file02: data
./-file03: data
./-file04: data
./-file05: data
./-file06: data
./-file07: ASCII text
./-file08: data
./-file09: data
bandit4@bandit:~/inhere$ ./-file07
-bash: ./-file07: Permission denied
bandit4@bandit:~/inhere$ cat ./-file07
```

Then I got the password and I logged into a new level.

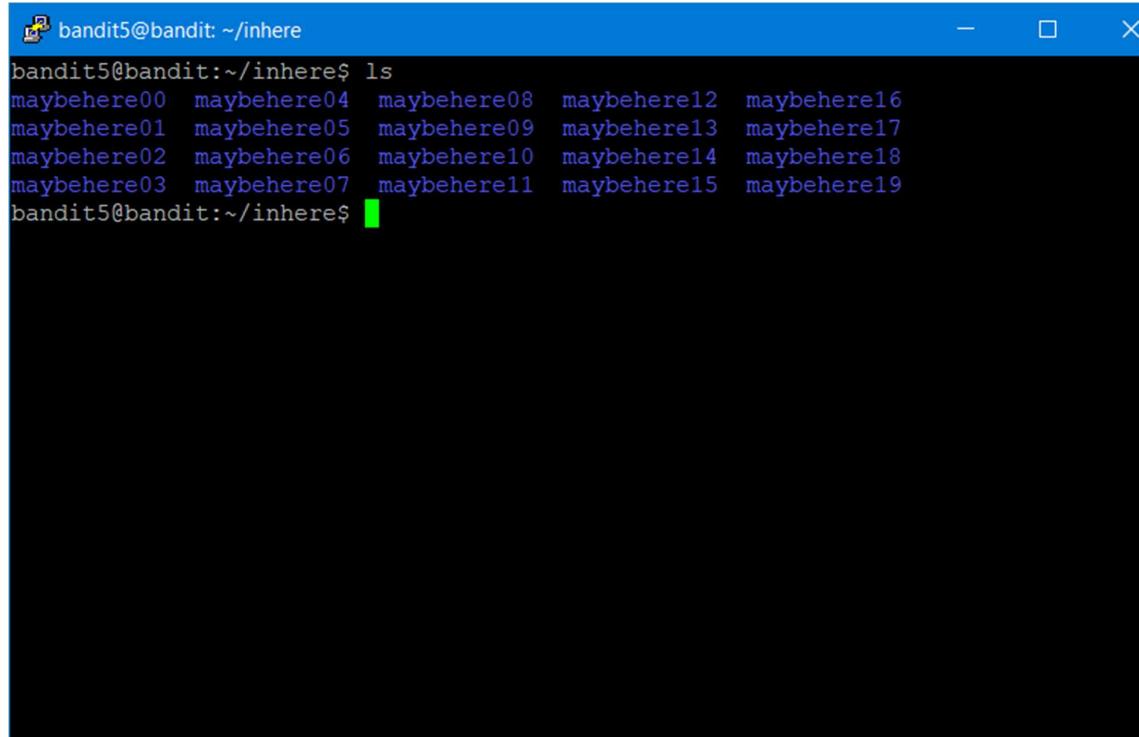
```
bandit4@bandit:~/inhere
./-file01: data
./-file02: data
./-file03: data
./-file04: data
./-file05: data
./-file06: data
./-file07: ASCII text
./-file08: data
./-file09: data
bandit4@bandit:~/inhere$ ./-file07
-bash: ./-file07: Permission denied
bandit4@bandit:~/inhere$ cat ./-file07
koReBOKuIDDepwhWk7jZC0RTdopnAYKh
bandit4@bandit:~/inhere$ ssh bandit5@localhost
Could not create directory '/home/bandit4/.ssh'.
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ECDSA key fingerprint is SHA256:98UL0ZWr85496EtCRkKlo20X3OPnyPSB5tB5RPbhczc.
Are you sure you want to continue connecting (yes/no)? yes
Failed to add the host to the list of known hosts (/home/bandit4/.ssh/known_hosts).
This is a OverTheWire game server. More information on http://www.overthewire.org/wargames
```

LEVEL 5

Level Goal - The password for the next level is stored in a file somewhere under the **inhere** directory and has all of the following properties:

- human-readable
- 1033 bytes in size
- not executable

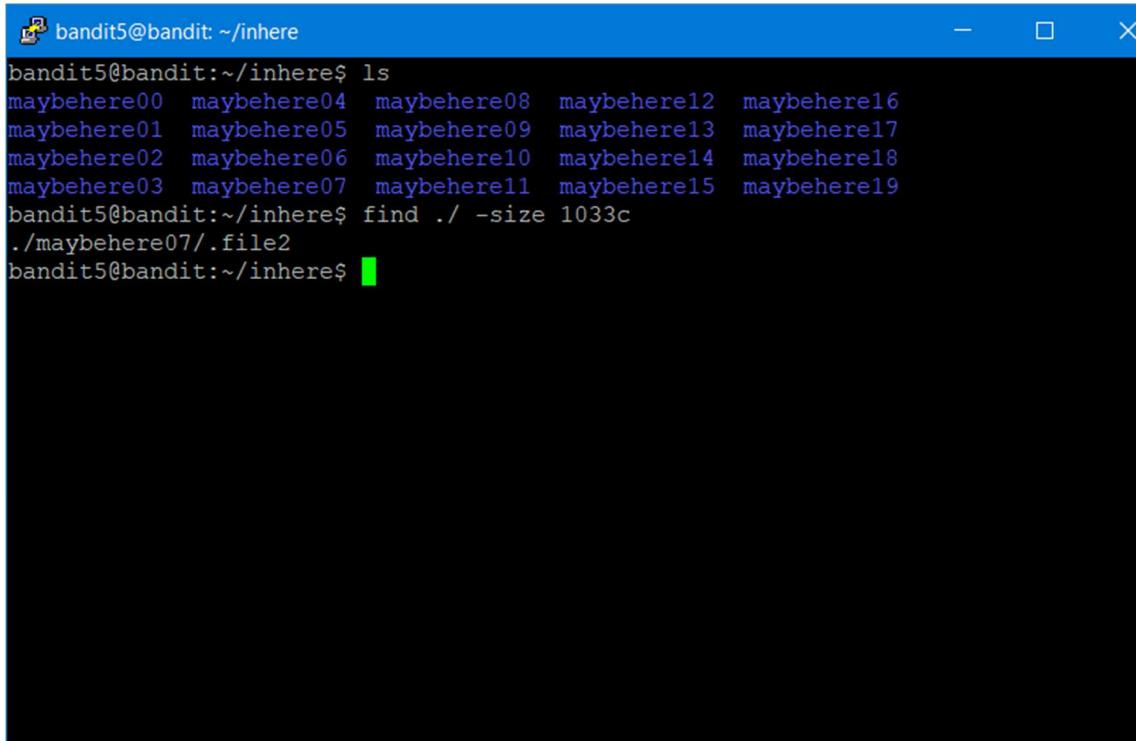
As per the given goal a file is stored into the folder named **inhere**. I opened **inhere** folder. And I got many files named **maybehere**.



A screenshot of a terminal window titled "bandit5@bandit: ~/inhere". The window shows the output of the "ls" command, which lists 20 files named "maybehere00" through "maybehere19". The terminal has a blue header bar and a black body.

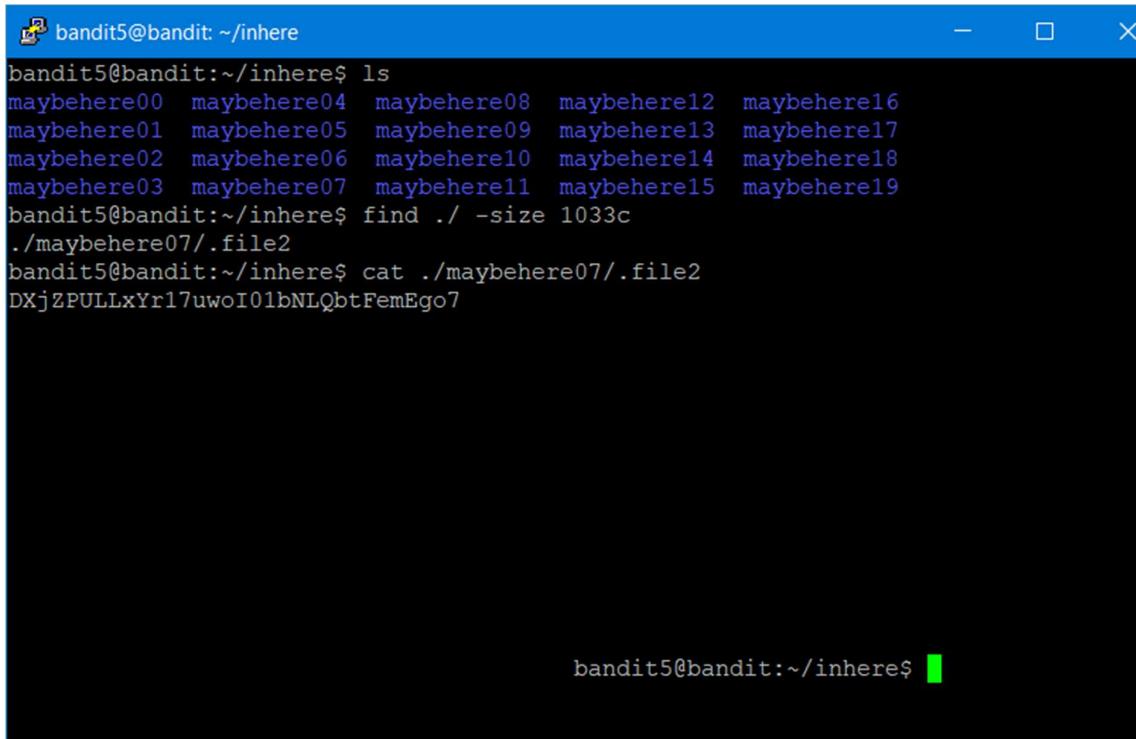
```
bandit5@bandit:~/inhere$ ls
maybehere00  maybehere04  maybehere08  maybehere12  maybehere16
maybehere01  maybehere05  maybehere09  maybehere13  maybehere17
maybehere02  maybehere06  maybehere10  maybehere14  maybehere18
maybehere03  maybehere07  maybehere11  maybehere15  maybehere19
bandit5@bandit:~/inhere$
```

So I ran the find command to find a suitable file of size 1033 bytes.



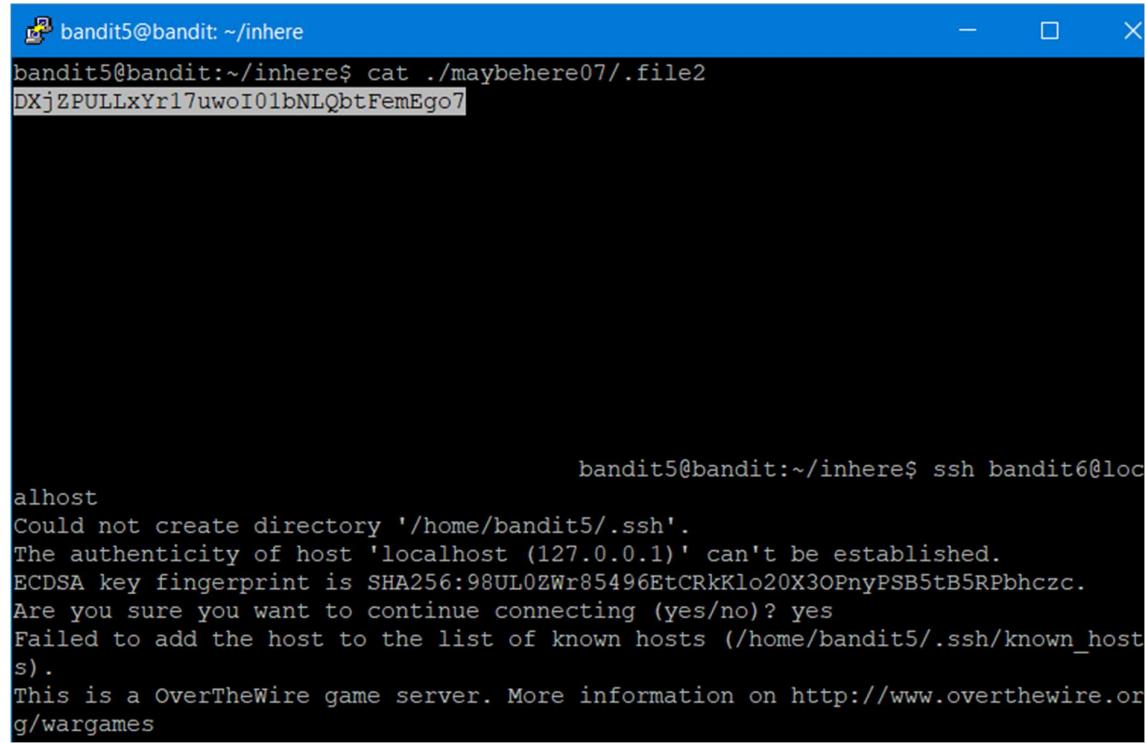
```
bandit5@bandit:~/inhere$ ls
maybehere00 maybehere04 maybehere08 maybehere12 maybehere16
maybehere01 maybehere05 maybehere09 maybehere13 maybehere17
maybehere02 maybehere06 maybehere10 maybehere14 maybehere18
maybehere03 maybehere07 maybehere11 maybehere15 maybehere19
bandit5@bandit:~/inhere$ find ./ -size 1033c
./maybehere07/.file2
bandit5@bandit:~/inhere$
```

Then I got one file named “./maybehere07/.file2”. I opened this file and I got the passwords.



```
bandit5@bandit:~/inhere$ ls
maybehere00 maybehere04 maybehere08 maybehere12 maybehere16
maybehere01 maybehere05 maybehere09 maybehere13 maybehere17
maybehere02 maybehere06 maybehere10 maybehere14 maybehere18
maybehere03 maybehere07 maybehere11 maybehere15 maybehere19
bandit5@bandit:~/inhere$ find ./ -size 1033c
./maybehere07/.file2
bandit5@bandit:~/inhere$ cat ./maybehere07/.file2
DXjZPULLxYr17uwoI01bNLQbtFemEgo7
bandit5@bandit:~/inhere$
```

Then I logged in.



```
bandit5@bandit:~/inhere$ cat ./maybehere07/.file2
DXjZPULLxYr17uwoI01bNLQbtFemEgo7
```



```
bandit5@bandit:~/inhere$ ssh bandit6@loc
alhost
Could not create directory '/home/bandit5/.ssh'.
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ECDSA key fingerprint is SHA256:98UL0ZWr85496EtCRkKlo20X3OPnyPSB5tB5RPbhczc.
Are you sure you want to continue connecting (yes/no)? yes
Failed to add the host to the list of known hosts (/home/bandit5/.ssh/known_hosts).
This is a OverTheWire game server. More information on http://www.overthewire.org/wargames
```

LEVEL 6

Level Goal - The password for the next level is stored **somewhere on the server** and has all of the following properties:

- owned by user bandit7
- owned by group bandit6
- 33 bytes in size

I again ran find command with given conditions.

```
bandit6@bandit: ~
irc.overthewire.org #wargames.

Enjoy your stay!

bandit6@bandit:~$ ls
bandit6@bandit:~$ ls
bandit6@bandit:~$ find / -user bandit7 -group bandit6 -size 33c
find: '/root': Permission denied
find: '/home/bandit28-git': Permission denied
find: '/home/bandit30-git': Permission denied
find: '/home/bandit5/inhere': Permission denied
find: '/home/bandit27-git': Permission denied
find: '/home/bandit29-git': Permission denied
find: '/home/bandit31-git': Permission denied
find: '/lost+found': Permission denied
find: '/etc/ssl/private': Permission denied
find: '/etc/polkit-1/localauthority': Permission denied
find: '/etc/lvm/archive': Permission denied
find: '/etc/lvm/backup': Permission denied
find: '/sys/fs/pstore': Permission denied
find: '/proc/tty/driver': Permission denied
find: '/proc/9669/task/9669/fd/6': No such file or directory
find: '/proc/9669/task/9669/fdinfo/6': No such file or directory
find: '/proc/9669/fd/5': No such file or directory

bandit6@bandit: ~
find: '/run/lvm': Permission denied
find: '/run/screen/S-bandit2': Permission denied
find: '/run/screen/S-bandit22': Permission denied
find: '/run/screen/S-bandit21': Permission denied
find: '/run/screen/S-bandit14': Permission denied
find: '/run/screen/S-bandit13': Permission denied
find: '/run/screen/S-bandit0': Permission denied
find: '/run/screen/S-bandit25': Permission denied
find: '/run/screen/S-bandit24': Permission denied
find: '/run/screen/S-bandit23': Permission denied
find: '/run/screen/S-bandit20': Permission denied
find: '/run/shm': Permission denied
find: '/run/lock/lvm': Permission denied
find: '/var/spool/bandit24': Permission denied
find: '/var/spool/cron/crontabs': Permission denied
find: '/var/spool/rsyslog': Permission denied
find: '/var/tmp': Permission denied
find: '/var/lib/apt/lists/partial': Permission denied
find: '/var/lib/polkit-1': Permission denied
/var/lib/dpkg/info/bandit7.password
find: '/var/log': Permission denied
find: '/var/cache/apt/archives/partial': Permission denied
find: '/var/cache/ldconfig': Permission denied
bandit6@bandit:~$ cat /var/lib/dpkg/info/bandit7.password
```

And I got the file password containing the file. I opened it and logged in to the new level.



```
bandit6@bandit: ~
find: '/run/screen/S-bandit20': Permission denied
find: '/run/shm': Permission denied
find: '/run/lock/lvm': Permission denied
find: '/var/spool/bandit24': Permission denied
find: '/var/spool/cron/crontabs': Permission denied
find: '/var/spool/rsyslog': Permission denied
find: '/var/tmp': Permission denied
find: '/var/lib/apt/lists/partial': Permission denied
find: '/var/lib/polkit-1': Permission denied
/var/lib/dpkg/info/bandit7.password
find: '/var/log': Permission denied
find: '/var/cache/apt/archives/partial': Permission denied
find: '/var/cache/ldconfig': Permission denied
bandit6@bandit:~$ cat /var/lib/dpkg/info/bandit7.password
HKBPTKQnIay4Fw76bEy8PVxKEDQRKTzs
bandit6@bandit:~$ ssh bandit7@localhost
Could not create directory '/home/bandit6/.ssh'.
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ECDSA key fingerprint is SHA256:98UL0ZWr85496EtCRkKlo20X3OPnyPSB5tB5RPbhczc.
Are you sure you want to continue connecting (yes/no)? yes
Failed to add the host to the list of known hosts (/home/bandit6/.ssh/known_hosts).
This is a OverTheWire game server. More information on http://www.overthewire.org/wargames
```

LEVEL 7

Level Goal - The password for the next level is stored in the file **data.txt** next to the word **millionth**

I opened the data.txt file with the cat command and I got too many words.

```
bandit7@bandit: ~
swaddled      snDpr6ve7nuPsjBoTGLrmpOYomdhVzAH
garishness's   UbK1yZ2nC02GEjArlASLw0bT8jgOp9rx
Benny's QQkZrdiFs47KckVLi5ifsFqtLcRxyjvZ
regulated      sxJ8HT73fvZMMIicL50nhawcrsYGUIWP
knottting       vh268WJXw1OSnszed9MVaHD4rTP69lZr
hymnals        7MqsN32lfDbPigtAX6cwFbMzcPAMUoae
Fremont        tCy02wc8xdpFqj1z8xdBQYAHFZPHk7ls
punter's        zAfzaA1IOuBSamCR6eMmRoc9oNXPQ16a
junking        6Tlr5K8YZ1d2Xsdku3TTFYXWB6WOMXYT
Aymara         zSeUS0UyD8Q6a6YPwaClRBbk1x8kFBEc
waned          gL59r6xvewh5y8t0mginiHtCUMG8S6Id
conceded       TWLUptX3HbwD4qsYOQ9sENOnOinNy79sC
kilned         kLjrgoJvftIyUyotuOI4cxFcXQxbC6as
Santayana     KKn1I4fuWdzKyvffplaYrBDzQa3Tr3Pk
Antigua        dRyNiegAg0OkCgrKVQFXMXS06vFArL55
heyday         UAGwM1FzylGa4fHpQZEelUQEZ5J1UpyX
praiseworthy's  bjRB0ugXM4dH7ip9hHB3mbFBMMwlNKNq
separatism     p2167YTCJseAv4YhLZNb2fs7Jiv1DLUW
plan          PLz4ZXwX02fEe4oMd1I78wQX14MIMxtf
confrontation  K1HScgMgzyBQYxBXkxsjKcQ2A5erDIjL
briquet's      aHc51xHj1t3ANF7jH26dd7mHWBfd8VKz
encapsulate    STOVYQEMWtFz54JtjJRrhDXgZcfVw81s
wildfowls      PqcMofjmKj8NBvO9exdu7FY2NG6WUMzb
Finland        xgXsIYggUCMriMoT7W2dSwTG1DCvbRvU
```

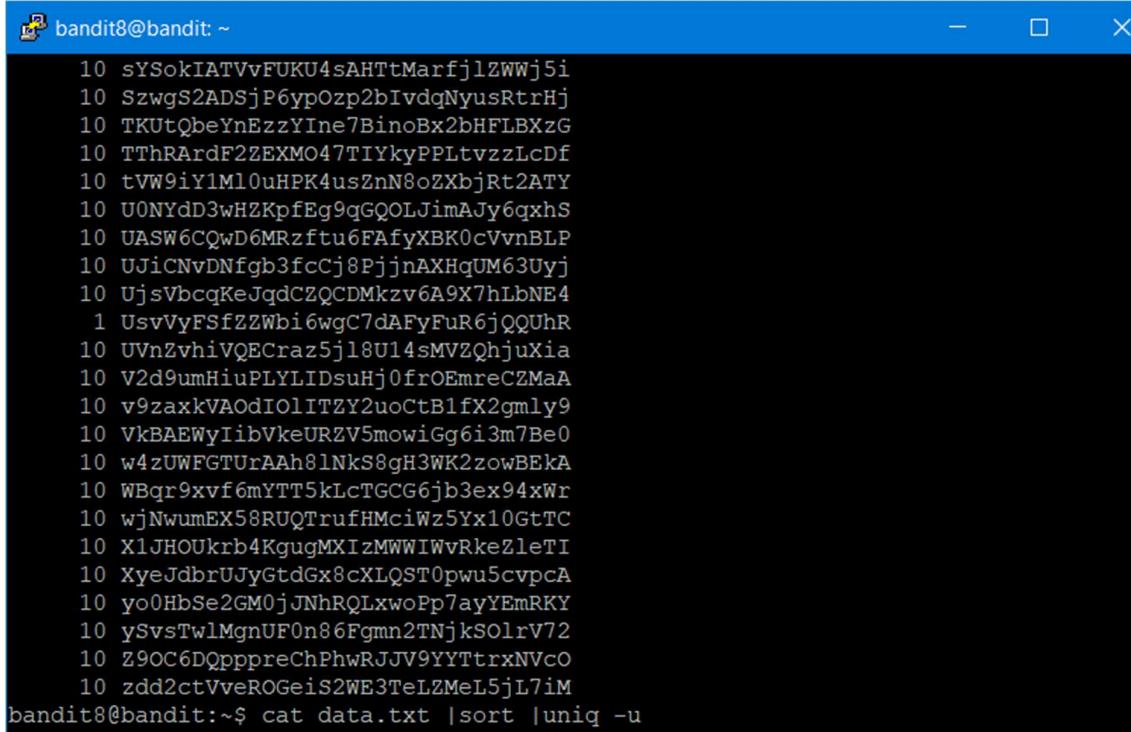
So for finding the millionth word i used the grep command in data.txt file

```
bandit7@bandit: ~
Benny's QQkZrdiFs47KckVLi5ifsFqtLcRxyjvZ
regulated      sxJ8HT73fvZMMIicL50nhawcrsYGUIWP
knottting       vh268WJXw1OSnszed9MVaHD4rTP69lZr
hymnals        7MqsN32lfDbPigtAX6cwFbMzcPAMUoae
Fremont        tCy02wc8xdpFqj1z8xdBQYAHFZPHk7ls
punter's        zAfzaA1IOuBSamCR6eMmRoc9oNXPQ16a
junking        6Tlr5K8YZ1d2Xsdku3TTFYXWB6WOMXYT
Aymara         zSeUS0UyD8Q6a6YPwaClRBbk1x8kFBEc
waned          gL59r6xvewh5y8t0mginiHtCUMG8S6Id
conceded       TWLUptX3HbwD4qsYOQ9sENOnOinNy79sC
kilned         kLjrgoJvftIyUyotuOI4cxFcXQxbC6as
Santayana     KKn1I4fuWdzKyvffplaYrBDzQa3Tr3Pk
Antigua        dRyNiegAg0OkCgrKVQFXMXS06vFArL55
heyday         UAGwM1FzylGa4fHpQZEelUQEZ5J1UpyX
praiseworthy's  bjRB0ugXM4dH7ip9hHB3mbFBMMwlNKNq
separatism     p2167YTCJseAv4YhLZNb2fs7Jiv1DLUW
plan          PLz4ZXwX02fEe4oMd1I78wQX14MIMxtf
confrontation  K1HScgMgzyBQYxBXkxsjKcQ2A5erDIjL
briquet's      aHc51xHj1t3ANF7jH26dd7mHWBfd8VKz
encapsulate    STOVYQEMWtFz54JtjJRrhDXgZcfVw81s
wildfowls      PqcMofjmKj8NBvO9exdu7FY2NG6WUMzb
Finland        xgXsIYggUCMriMoT7W2dSwTG1DCvbRvU
bandit7@bandit:~$ ^C
bandit7@bandit:~$ grep millionth data.txt
```

And then I got the passwords so I moved to the new level.

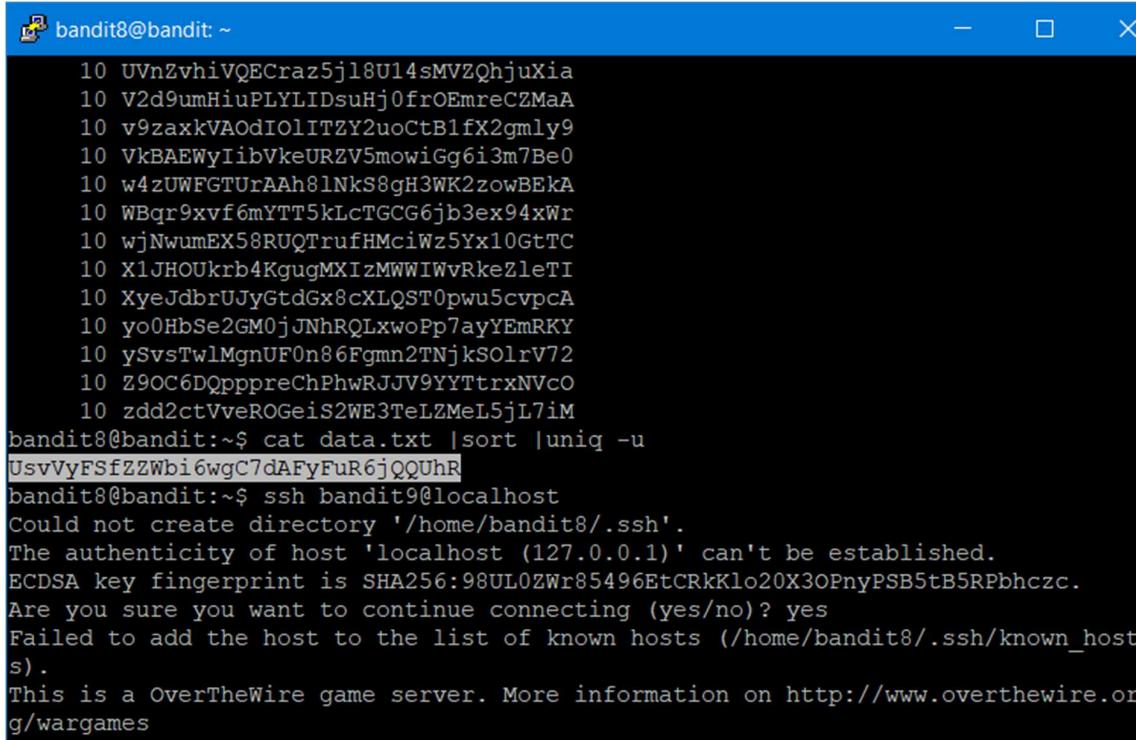
LEVEL 8

Level Goal - The password for the next level is stored in the file **data.txt** and is the only line of text that occurs only once. So I ran cat command with uniq -u and sort.



```
bandit8@bandit: ~
10 sYSokIATVvFUKU4sAHTtMarfjlZWWj5i
10 SzwgS2ADSjP6ypOzp2bIvdqNyusRtrHj
10 TKUtQbeYnEzzYIne7BinoBx2bHFLBXzG
10 TThRARdF2ZEXMO47TIYkyPPLtvzzLcDf
10 tVW9iY1Ml0uHPK4usZnN8oZXbjRt2ATY
10 U0NYdD3wHZKpfEg9qGQOLJmAJy6qxhs
10 UASW6CQwD6MRzftu6FAfyXBK0cVvnBLP
10 UJicCNvDNfgb3fcCj8PjjnAXHqUM63UYj
10 UjsVbcqKeJqdCZQCDMkzv6A9X7hLbNE4
1  UsvVyFSfZZWbi6wgC7dAFyFuR6jQQUhR
10 UVnZvhivQECEraz5j18U14sMVZQhjuXia
10 V2d9umHiuPLYLIDsuHj0froEmreCZMaA
10 v9zaxkVAOdIOlITZY2uoCtb1fx2gmlY9
10 VkBAEWyIibVkeURZV5mowiGg6i3m7Be0
10 w4zUWFGTUrAAh81Nks8gH3WK2zowBEkA
10 WBqr9xvf6mYTT5kLcTGC6jb3ex94xWr
10 wjNwumEX58RUQTrufHMciWz5Yx10GtTC
10 X1JHOukrb4KgugMXIzMWWIWvRkeZletI
10 XyeJdbbrUJyGtdGx8cXLQST0pwu5cvpcA
10 yo0HbSe2GM0jJNhRQLxwoPp7ayYEmRKY
10 ySvsTw1MgnUF0n86Fgmn2TNjkSolrV72
10 z9OC6DQpppreChPhwRJJV9YYTtrxNvcO
10 zdd2ctVveROGeis2WE3TeLZMeL5jL7iM
bandit8@bandit:~$ cat data.txt |sort |uniq -u
```

And then I got the passwords and I logged into the next level.



```
bandit8@bandit: ~
10 UVnZvhiVQECraz5j18U14sMVZQhjuXia
10 V2d9umHiuPLYLIDsuHj0fr0EmreCZMaA
10 v9zaxkVAodIolITZY2uoCtb1fx2gmly9
10 VkBAEWyIibVkeURZV5mowiGg6i3m7Be0
10 w4zUWFGTUrAAh81Nks8gH3WK2zowBEkA
10 WBqr9xvf6mYTT5kLcTGC6jb3ex94xWr
10 wjNwumEX58RUQTrufHMciWz5Yx10GtTC
10 X1JHOUkrb4KgugMXIzMWWIWvRkeZleTI
10 XyeJdbrUJyGtdGx8cXLQST0pwu5cvpcA
10 yo0HbSe2GM0jJNhRQLxwoPp7ayYEmRKY
10 ySvsTw1MgnUF0n86Fgmn2TNjkS0lrV72
10 z9OC6DQpppreChPhwRJJV9YYTtrxNVco
10 zdd2ctVveROGeis2WE3TeLZMeL5jL7iM
bandit8@bandit:~$ cat data.txt |sort |uniq -u
UsvVyFSfZZWbi6wgC7dAFyFuR6jQQUhR
bandit8@bandit:~$ ssh bandit9@localhost
Could not create directory '/home/bandit8/.ssh'.
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ECDSA key fingerprint is SHA256:98UL0ZWr85496EtCRkKlo20X3OPnyPSB5tB5RPbhczc.
Are you sure you want to continue connecting (yes/no)? yes
Failed to add the host to the list of known hosts (/home/bandit8/.ssh/known_hosts).
This is a OverTheWire game server. More information on http://www.overthewire.org/wargames
```

LEVEL 9

Level Goal - The password for the next level is stored in the file **data.txt** in one of the few human-readable strings, preceded by several '=' characters.

So here I googled about the commands I didn't know and I learned one by one each. Then I got the strings command useful here. That's why I used the strings command on data.txt and it work

```
bandit9@bandit: ~
For more information regarding individual wargames, visit
http://www.overthewire.org/wargames/
For support, questions or comments, contact us through IRC on
irc.overthewire.org #wargames.
Enjoy your stay!
bandit9@bandit:~$ ls
data.txt
bandit9@bandit:~$ string data.txt
-bash: string: command not found
bandit9@bandit:~$ strings data.txt
Z/,_
WW"&8
2Qk)
xWa_
x?Xn
//M$#
;yzEt!
WpU~e
`Rn,I
VSXdK
```

Then I got the passwords written as this is the password.

```
bandit9@bandit: ~
S/gA
g<%x
xzY<
blsN
~U^y
x@nQ
*SF=s
}1:LF
]vur
Emlld
&===== truKLdjsbJ5g7yyJ2X2R0o3a5HQJFuLk
_Gmz
\Uli,
A5RK
S'$0
<4t",
4cXO
cj13c:?
&Yra
zEwa
b2+x
z`tlR
o|8M]
.p4Hv
```

Then I moved to the next level and the last level (Level 10).

```
bandit9@bandit: ~
z#j\
1Qit
a'b~
bxBB\u$#
8Zpc      $FOxF[
ANYwPCpk
Xk]E
bh}s
P'uP
\~A:
sCtY
Z/lx+
ej8z
P"``\XZ
1KOA
bandit9@bandit:~$ ssh bandit10@localhost
Could not create directory '/home/bandit9/.ssh'.
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ECDSA key fingerprint is SHA256:98UL0ZWr85496EtCRkKlo20X3OPnyPSB5tB5RPbhczc.
Are you sure you want to continue connecting (yes/no)? yes
Failed to add the host to the list of known hosts (/home/bandit9/.ssh/known_hosts).
This is a OverTheWire game server. More information on http://www.overthewire.org/wargames

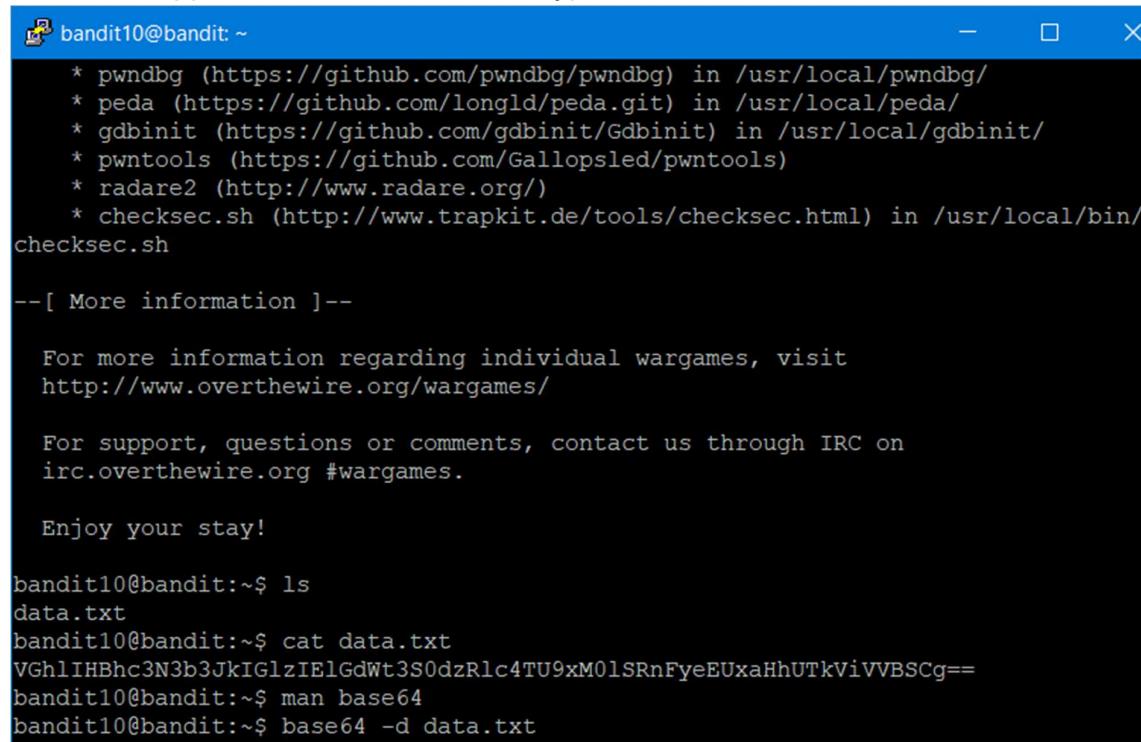
bandit10@bandit: ~
--[ Tools ]--
For your convenience we have installed a few usefull tools which you can find in the following locations:
* gef (https://github.com/hugsy/gef) in /usr/local/gef/
* pwndbg (https://github.com/pwndbg/pwndbg) in /usr/local/pwndbg/
* peda (https://github.com/longld/peda.git) in /usr/local/peda/
* gdbinit (https://github.com/gdbinit/Gdbinit) in /usr/local/gdbinit/
* pwntools (https://github.com/Gallopsled/pwntools)
* radare2 (http://www.radare.org/)
* checksec.sh (http://www.trapkit.de/tools/checksec.html) in /usr/local/bin/checksec.sh
--[ More information ]--
For more information regarding individual wargames, visit
http://www.overthewire.org/wargames/
For support, questions or comments, contact us through IRC on
irc.overthewire.org #wargames.
Enjoy your stay!
```

LEVEL 10

Level Goal - The password for the next level is stored in the file **data.txt**, which contains base64 encoded data.

So I ran the man command to get information to decrypt the file encrypted with base64.

And then I applied that command to decrypt the file.



```
bandit10@bandit: ~
* pwndbg (https://github.com/pwndbg/pwndbg) in /usr/local/pwndbg/
* peda (https://github.com/longld/peda.git) in /usr/local/peda/
* gdbinit (https://github.com/gdbinit/Gdbinit) in /usr/local/gdbinit/
* pwntools (https://github.com/Gallopsled/pwntools)
* radare2 (http://www.radare.org/)
* checksec.sh (http://www.trapkit.de/tools/checksec.html) in /usr/local/bin/
checksec.sh

--[ More information ]--

For more information regarding individual wargames, visit
http://www.overthewire.org/wargames/

For support, questions or comments, contact us through IRC on
irc.overthewire.org #wargames.

Enjoy your stay!

bandit10@bandit:~$ ls
data.txt
bandit10@bandit:~$ cat data.txt
VGhIHBhc3N3b3JkIGlzIElGdWt3S0dzRlc4TU9xM01SRnFyeEUxaHhUTkViVVBS
bandit10@bandit:~$ man base64
bandit10@bandit:~$ base64 -d data.txt
```

Then the data.txt file opened and I got the passwords for level 11. And then I logged into it.

 bandit11@bandit: ~
- □ ×

```
--[ Tools ]--  
  
For your convenience we have installed a few usefull tools which you can find  
in the following locations:  
  
* gef (https://github.com/hugsy/gef) in /usr/local/gef/  
* pwndbg (https://github.com/pwndbg/pwndbg) in /usr/local/pwndbg/  
* peda (https://github.com/longld/peda.git) in /usr/local/peda/  
* gdbinit (https://github.com/gdbinit/Gdbinit) in /usr/local/gdbinit/  
* pwnools (https://github.com/Gallopsled/pwnools)  
* radare2 (http://www.radare.org/)  
* checksec.sh (http://www.trapkit.de/tools/checksec.html) in /usr/local/bin/  
checksec.sh  
  
--[ More information ]--  
  
For more information regarding individual wargames, visit  
http://www.overthewire.org/wargames/  
  
For support, questions or comments, contact us through IRC on  
#wargames.  
  
Enjoy your stay!
```

So I've completed Bandit Level 1-10.