Bandit Level 4 —> Level 5

SSH Parameters	
Host:	bandit.labs.overthewire.org
Port:	2220

Website URLs	
Level 4 → Level 5	[OverTheWire: Level Goal: Bandit Level 4 → Level 5](#)
Level 5 → Level 6	[OverTheWire: Level Goal: Bandit Level 5 → Level 6](#)

Passwords		
Level	User Name	Password
Level 4 → Level 5	bandit3	2EW7BBsr6aMMoJ2HjW067dm8EgX26xNe
Level 5 → Level 6	Bandit4	lrIWWI6bB37kxfiCQZqUdOIYfr6eEeqR

SSH Information
Host: bandit.labs.overthewire.org
Port: 2220

Bandit

Level 0
Level 0 → Level 1
Level 1 → Level 2
Level 2 → Level 3
Level 3 → Level 4
Level 4 → Level 5

Bandit Level 4 → Level 5

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.

Commands you may need to solve this level

ls, cd, cat, file, du, find

```
bandit4@bandit:~$ ###########################################################################
bandit4@bandit:~$ #Execute id and whomai commands to determine if we are in Bandit Level 4
bandit4@bandit:~$ ###########################################################################
bandit4@bandit:~$
bandit4@bandit:~$ id && whoami
uid=11004(bandit4) gid=11004(bandit4) groups=11004(bandit4)
bandit4
bandit4@bandit:~$
```

```
bandit4@bandit:~$ ###########################################################################
bandit4@bandit:~$ #Execute the pwd to determine if we are in the Level 4 Directory
bandit4@bandit:~$ #Utilize ls to view contents of home directory and assess if it contains inhere directory
bandit4@bandit:~$ #Navigate to inhere directory, via cd command
bandit4@bandit:~$ #Use ls to view contents of inhere directory
bandit4@bandit:~$ #Utilize file command to identify ASCII files, in the inhere directory, that may contain Level 5 passwords
bandit4@bandit:~$ ###########################################################################
```

```
bandit4@bandit:~$ pwd
/home/bandit4
bandit4@bandit:~$
bandit4@bandit:~$ ###############################################################################################
bandit4@bandit:~$
bandit4@bandit:~$ ls
inhere
bandit4@bandit:~$
bandit4@bandit:~$ ###############################################################################################
bandit4@bandit:~$
bandit4@bandit:~$ cd inhere/
bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$ ls
-file00  -file01  -file02  -file03  -file04  -file05  -file06  -file07  -file08  -file09
bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$ ###############################################################################################
bandit4@bandit:~/inhere$ #Since the files in the inhere directory are prefixed with a dash, -, we must proceed the file naes
 with double dashes, --, when processing them with the file command.  If the file names are not proceeded with -- the file c
ommand will attempt to interpret anything after the dash as a command option/switch and command processing will not be succe
ssful/error out.
bandit4@bandit:~/inhere$ ###############################################################################################
bandit4@bandit:~/inhere$ ▯
```

```
bandit4@bandit:~/inhere$ ###############################################################################################
bandit4@bandit:~/inhere$ #file command
bandit4@bandit:~/inhere$ ###############################################################################################
bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$ file -- *
-file00: data
-file01: data
-file02: data
-file03: data
-file04: data
-file05: data
-file06: data
-file07: ASCII text
-file08: data
-file09: Non-ISO extended-ASCII text, with no line terminators
bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$ ###############################################################################################
bandit4@bandit:~/inhere$ #-file07 and -file09 are ASCII files and may contain the password.  we will cat them to see which c
ontains the password
bandit4@bandit:~/inhere$ ###############################################################################################
```

```
bandit4@bandit:~/inhere$ ###############################################################################################
bandit4@bandit:~/inhere$ #cat -file07 and -file09
bandit4@bandit:~/inhere$ ###############################################################################################
bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$ cat -- -file09
�3��¡N|?�5|b�5�8�y���
                        í�
                              bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$ #Based on the output of the above command we noted the password is not in -file09 as it is not read
able
bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$ cat -- -file07
lrIWWI6bB37kxfiCQZqUdOIYfr6eEeqR
bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$ #Based on the above we noted the password is contained in -file07
```

```
bandit4@bandit:~/inhere$ ###############################################################################################
bandit4@bandit:~/inhere$ #Based on examination of -file07 and -file09 we noted the password is contained in -file07
bandit4@bandit:~/inhere$ #-file07 is an ASCII text file
bandit4@bandit:~/inhere$ #To isolaate -file07, from the other files in the direcotry, we will use the grep command
bandit4@bandit:~/inhere$ #Strategy in using grep will be to select those file(s) that are not ASCII text
bandit4@bandit:~/inhere$ #As such, the strategy will be to not select tose files that are type data or Non-ISO extended-ASCI
I text, with no line terminators
bandit4@bandit:~/inhere$ #To accomplish this we will invoke the -v switch to not select lines with the string data OR Non-IS
O.  The syntax of this command is:
bandit4@bandit:~/inhere$ #              grep -v "data\|Non-ISO"
bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$ #the -v is the operator for not and \| is the OR operator
bandit4@bandit:~/inhere$ ###############################################################################################▯
```

```
bandit4@bandit:~/inhere$ ########################################################################
bandit4@bandit:~/inhere$ #File types of each file in the inhere directory
bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$ file -- *
-file00: data
-file01: data
-file02: data
-file03: data
-file04: data
-file05: data
-file06: data
-file07: ASCII text
-file08: data
-file09: Non-ISO extended-ASCII text, with no line terminators
bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$ #grep command
bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$ file -- * | grep -v "data\|Non-ISO"
-file07: ASCII text
bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$ #Next we want to isolate the file name (-file07) so we can cat it via a chained bash command to aut
omate the process of obtaining the password to this level.
```

```
bandit4@bandit:~/inhere$ file -- * | grep -v "data\|Non-ISO"
-file07: ASCII text
bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$
bandit4@bandit:~/inhere$ #We need to isolate the file name from the string, "-file07: ASCII text"
bandit4@bandit:~/inhere$ #This will be accompished via the cut command
bandit4@bandit:~/inhere$ #Additionally we will invoke the delimiter (-d) and field (-f) options
bandit4@bandit:~/inhere$ #We will use the semicolon (:) as our delimiter.
bandit4@bandit:~/inhere$ #Utilizing : as the delimiter and selecting the first field will output the file name
bandit4@bandit:~/inhere$ # -file07
```

```
bandit4@bandit:~/inhere$ file -- * | grep -v "data\|Non-ISO" | cut -d : -f 1
-file07
bandit4@bandit:~/inhere$
```

```
bandit4@bandit:~/inhere$ ########################################################################
bandit4@bandit:~/inhere$ #Componund command to automate the harvesting process for this Level (Level 4)
bandit4@bandit:~/inhere$ #Within the parenthesis is the series of commands that harvest the file name that needs to be read
to get the password.
bandit4@bandit:~/inhere$ #There is a $, to the left of the ( parenthesis.  The $ transforms the output to a variable that ca
n be read by the cat command to the left of it.
bandit4@bandit:~/inhere$ ########################################################################
```

```
bandit4@bandit:~/inhere$ cat -- $(file -- * | grep -v "data\|Non-ISO" | cut -d : -f 1)
lrIWWI6bB37kxfiCQZqUdOIYfr6eEeqR
```

****

Level 5 —> Level 6 Password
****

lrIWWI6bB37kxfiCQZqUdOIYfr6eEeqR