

Over The Wire Bandit Level 2 ---> 3

Bandit Level 2 → Level 3

Level Goal

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

Commands you may need to solve this level

`ls` , `cd` , `cat` , `file` , `du` , `find`

Helpful Reading Material

Google Search for "spaces in filename"

```
bandit2@bandit:~$ ls
--spaces in this filename--
bandit2@bandit:~$ cat --spaces in this filename--
cat: unrecognized option '--spaces'
Try 'cat --help' for more information.
bandit2@bandit:~$
```

Using the usual `cat` command to read this file wont work at first.

WHY? When using `-` The computer will either see it as STDIN or STDOUT, meaning it will see it as INPUT or OUTPUT.

If this was a simple case of the `-` being used then the way to access the file would be. `cat ./-`

WHY? By using the `./` We are entering the full path of the file, so that it could be understood the `-` is being referred to as a file and not STDIN.

```
bandit2@bandit:~$ ls -b
--spaces\ in\ this\ filename--
bandit2@bandit:~$ ls | cat -A
--spaces in this filename--$
bandit2@bandit:~$
```

So the next steps to solving this flag is to see the full file name and to check to see if there is anything hidden within the name.

HOW? The commands to use are `ls -b` which will reveal Spaces such as `\` Dashes such as `-` while also showing hidden or control characters like (newline, tab) The `ls | cat -A` will show any invisible characters at the end of the filename like `$` for newline, `^M` for carriage return, etc.)

SOULUTION! Since this file is already tricky enough by using the `---` which is trying to get the shell to look at it as another option other than a readable file. The quickest way to solve this issue is to use `cat -- *` which well tell the cat command to basically look at the filename as a file and nothing else!!

```
bandit2@bandit:~$ ls
--spaces in this filename--
bandit2@bandit:~$ ls -b
--spaces\ in\ this\ filename--
bandit2@bandit:~$ ls | cat -A
--spaces in this filename--$
bandit2@bandit:~$ cat -- * --spaces in this filename--
MNk8KNH3Usiio41PRUEoDFPqfxLPISmx
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:~$ █
```

Bandit Level 3 → Level 4

Level Goal

The password for the next level is stored in a hidden file in the `inhere` directory.

Commands you may need to solve this level

`ls` , `cd` , `cat` , `file` , `du` , `find`

```

bandit3@bandit:~$ ls
inhere
bandit3@bandit:~$ cd inhere
bandit3@bandit:~/inhere$ ls
bandit3@bandit:~/inhere$ ls -la
total 12
drwxr-xr-x 2 root    root    4096 Jul 28 19:03 .
drwxr-xr-x 3 root    root    4096 Jul 28 19:03 ..
-rw-r----- 1 bandit4 bandit3   33 Jul 28 19:03 ... Hiding-From-You
bandit3@bandit:~/inhere$ cd "... Hiding-From-You"
-bash: cd: "... Hiding-From-You: No such file or directory
bandit3@bandit:~/inhere$ cd "... Hiding-From-You"
-bash: cd: "... Hiding-From-You: No such file or directory
bandit3@bandit:~/inhere$ ls -la -b
total 12
drwxr-xr-x 2 root    root    4096 Jul 28 19:03 .
drwxr-xr-x 3 root    root    4096 Jul 28 19:03 ..
-rw-r----- 1 bandit4 bandit3   33 Jul 28 19:03 ... Hiding-From-You
bandit3@bandit:~/inhere$ ls |cat -A
bandit3@bandit:~/inhere$ ls -d .* |cat -A
... Hiding-From-You$
bandit3@bandit:~/inhere$ cd ...Hiding-From-You
-bash: cd: ...Hiding-From-You: Not a directory
bandit3@bandit:~/inhere$ cat ...Hiding-From-You
2WmrDFRmJIq3IPxneAaMGhap0pFhF3NJ
bandit3@bandit:~/inhere$ █

```

Within this flag level it was stated that the password was hidden in a file in the inhere directory. So step 1 would be to run the ls command to see what's stored. After that you easily see the inhere directory so you'll then use cd to change into its directory.

Once you're in you'll have to use the ls -la command because it was stated the information we are looking for is hidden. So this command will show what is hidden.

After running the command you'll see the output. I forgot that I was already in the directory so trying to cd into it is useless. But the fact remains that this file is still hidden but not only that tricks will be used to try and throw you off from obtaining the flag.

So to get around this you'll want to use the ls -d .* |cat -A command.

WHY? Due to this information being hidden the simple ls |cat -A will return nothing. But by using ls -d .* |cat -A it will reveal hidden directories or files and their invisible characters.

HOW? ls Will list directory contents. While -d will mean don't descend into directories only list the directory names only, not their contents. Finally .* will match all hidden files and directories (because they start with a dot)

SOLUTION! After running ls -d .* |cat -A you'll see that there are no spaces in the file name actually. So once you run cat ...Hidden-From_You the flag will be presented.