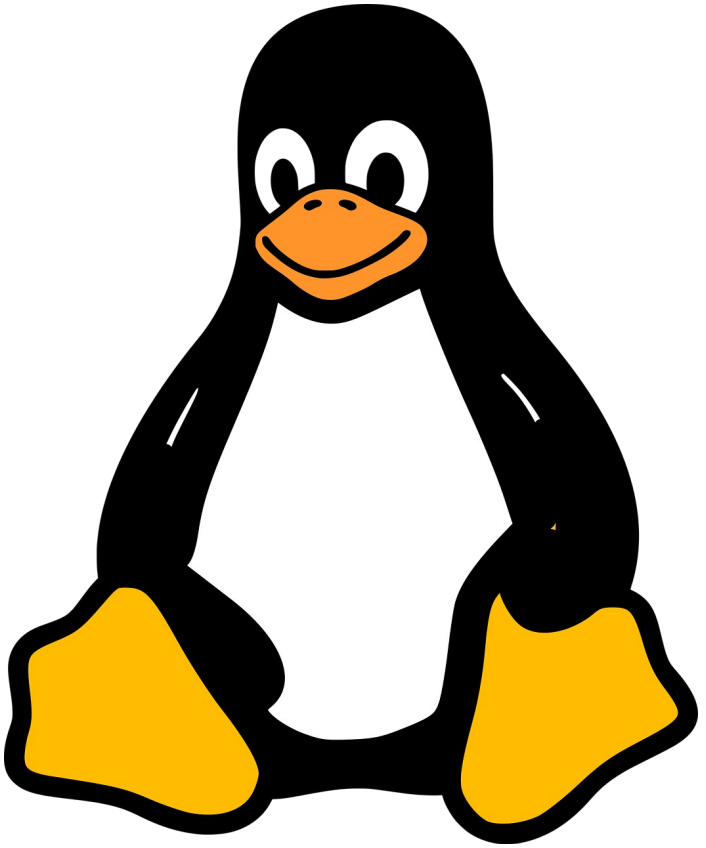
HackerFrogs Afterschool OverTheWire Bandit: Part 2

Class:
Linux OS Operations

Workshop Number:
AS-LIN-02

Document Version:
1.2

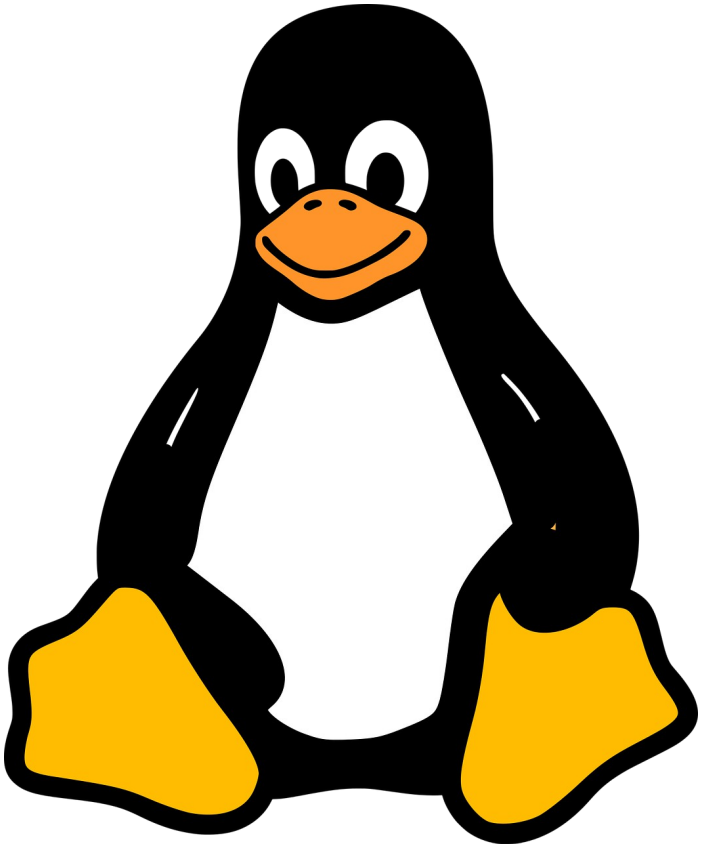
Special Requirements:
Completion of AS-LIN-01



What We Learned In The Previous Workshop

This is the second intro Linux OS operations workshop.

In the previous workshop we learned about the following Linux commands:



Ls Command

The Ls command lists the files and directories in the current directory.

It can be used with the `-l` argument to output in a list format, and with the `-a` argument to include hidden files and directories in the output. These two arguments can be combined to produce both ouputs, e.g., `-la`

Ls Command

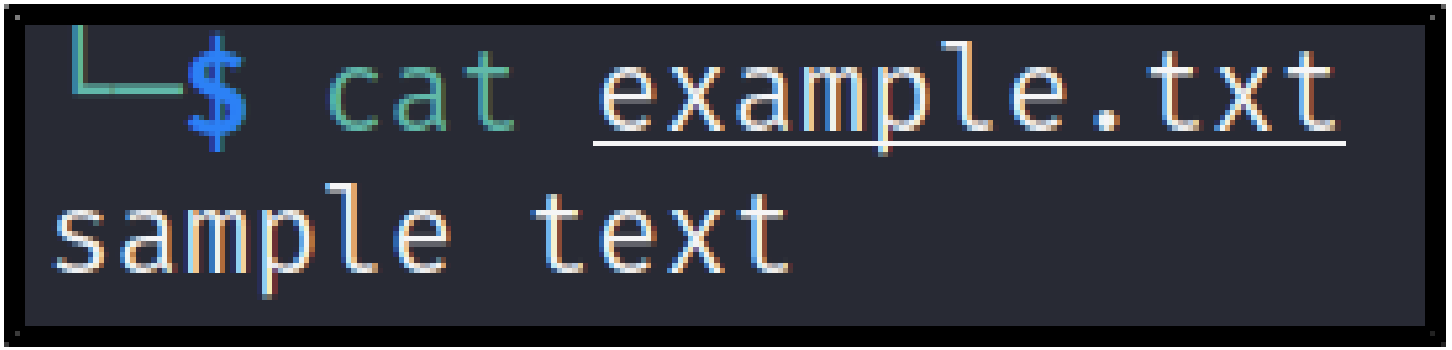
```
└─$ ls -la
total 12
drwxr-xr-x  2 shyhat shyhat 4096 May 30 09:28 .
drwxr-xr-x 42 shyhat shyhat 4096 May 30 09:21 ..
-rw-r--r--  1 shyhat shyhat   12 May 30 09:28 example.txt
```

Cat Command

The Cat command lists
the contents of a file.
The name of the file to
be read must be supplied
as an argument
to the command.

E.g., `cat example.txt`

Cat Command



Echo Command

```
echo b0  bandit0 >> banditpass.txt
```

The Echo command creates output based on whatever argument is supplied to it. It is very useful for creating output for redirection.

Output Redirection

```
echo b0  bandit0 >> banditpass.txt
```

Output redirection is the process of redirecting the output of a command, either into a file, or into another command.

Output Redirection

```
echo b0  bandit0 >> banditpass.txt
```

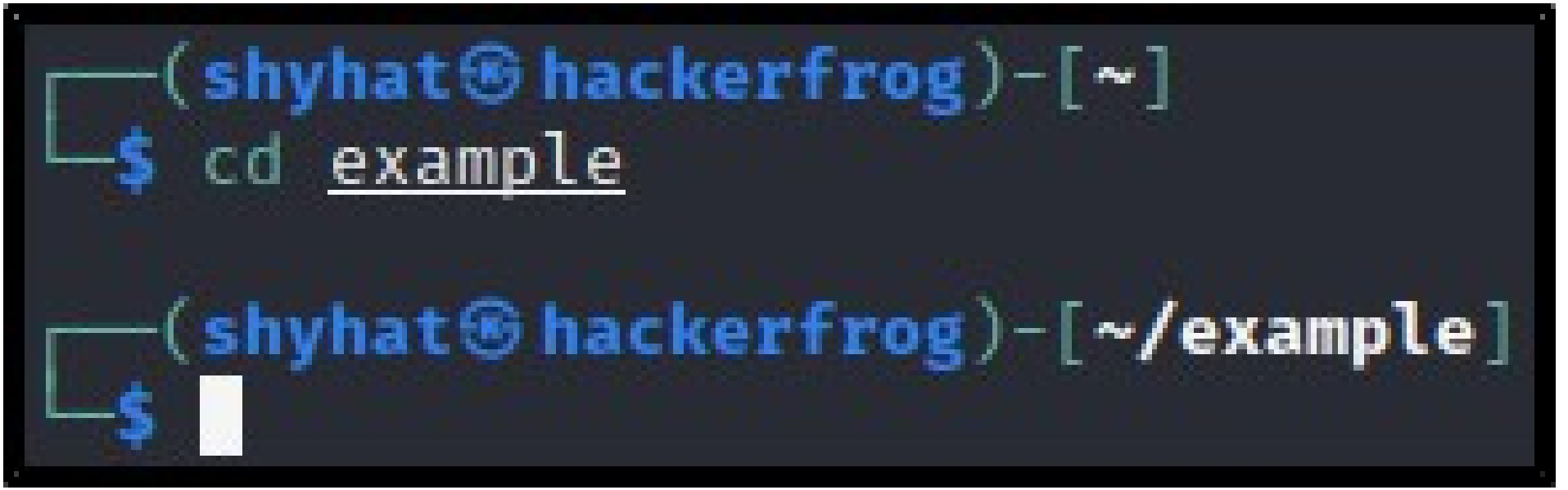
Here the double greater-than (>>) symbols redirect output into a file, but if that file already exists, it will instead append to that file.

Cd Command

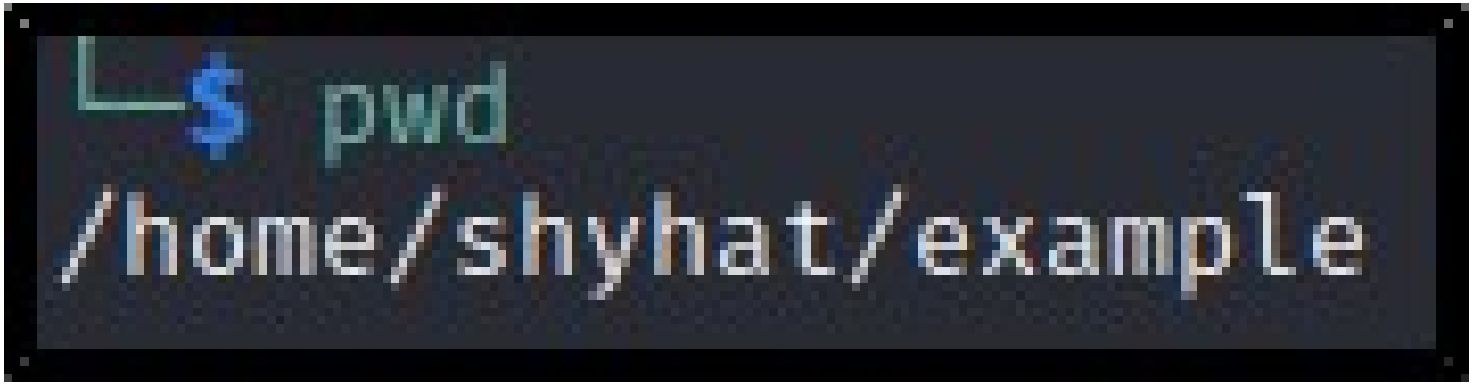
The Cd command changes the current directory to the one specified. The new directory must be supplied as an argument to the command.

E.g., `cd downloads`

Cd Command



Pwd Command



The Pwd command will output the name of the current directory (a.k.a. the present working directory).

Let's Continue Where We Left Off!

Open your command line interface (CLI) terminal, then navigate to the following URL in a web browser:

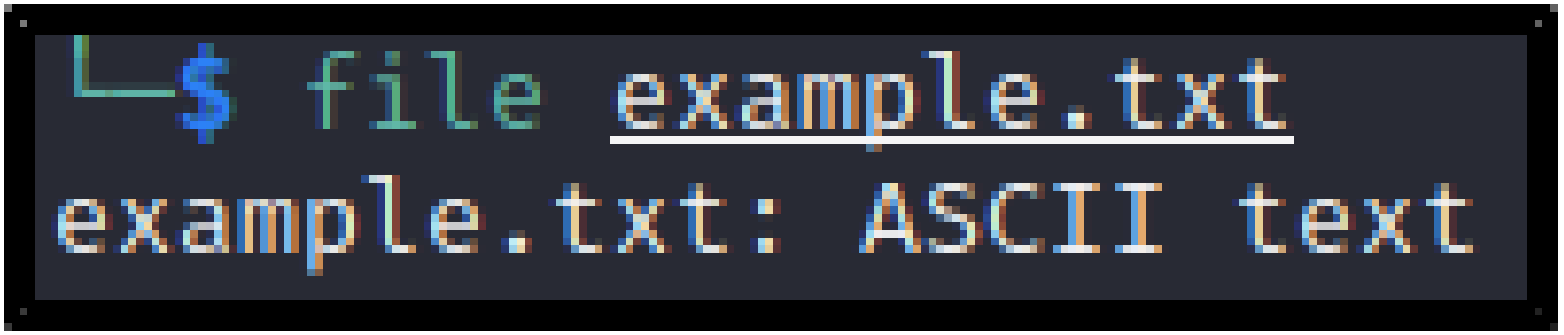
https://overthewire.org/wargames/bandit/bandit4.html

File Command

The File command identifies the type of contents for a specified file. The file name must be supplied as an argument to the File command.

E.g., `file picture.jpg`

File Command

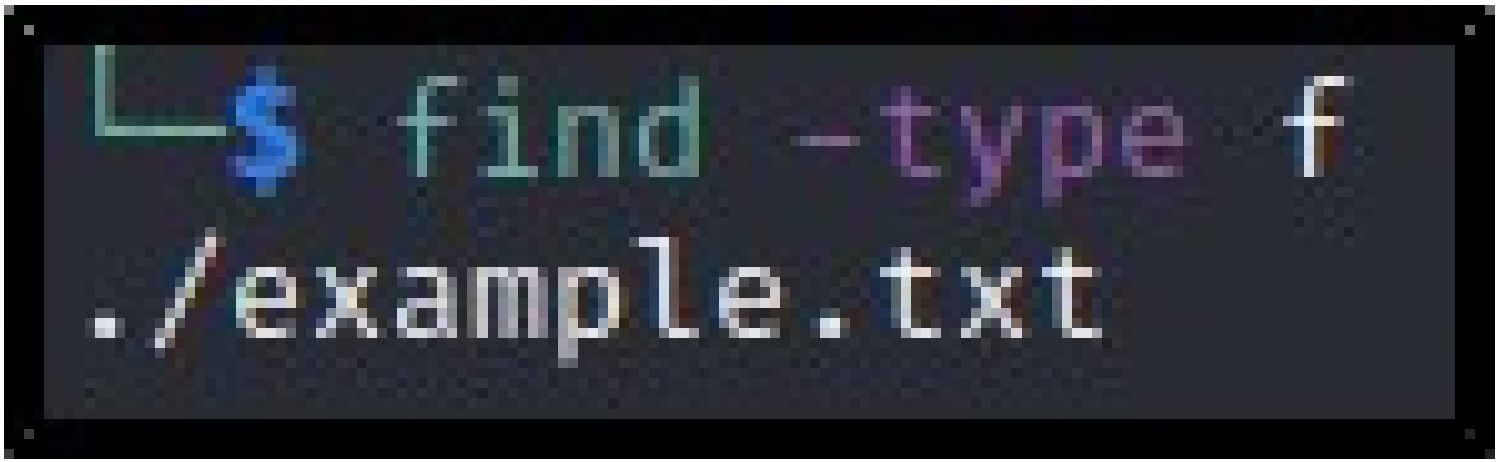


Find Command

The Find command allows a search of files and / or directories in the file system, and matches files in the output according to the criteria provided by the command arguments.

The argument `-type` searches by file or directories and the argument `-size` searches for files of a particular size.

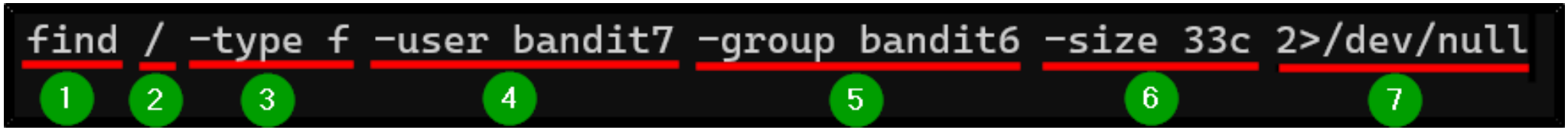
Find Command



Find Command

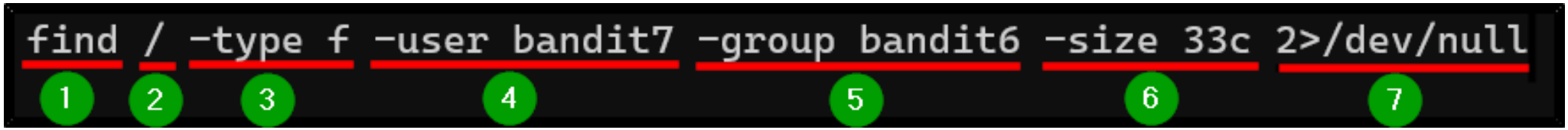
The Find command is used to search for files on the system. It can used with many different arguments and flags to refine its search parameters.

Find Command



1 – The command itself
2 – The location to be searched
3 – The type of data to be returned, file / directory
4 – The file / directory user ownership
5 – The file / directory group ownership
6 – The file / directory size
7 – Omit error messages from output

Find Command



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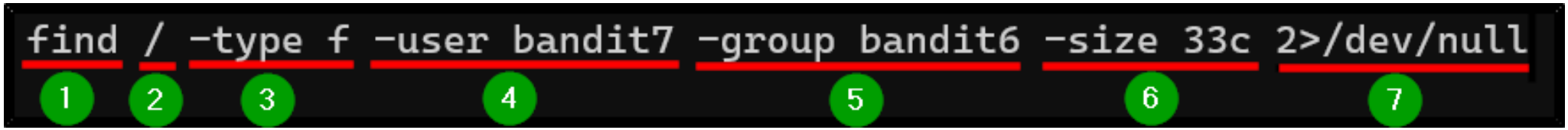

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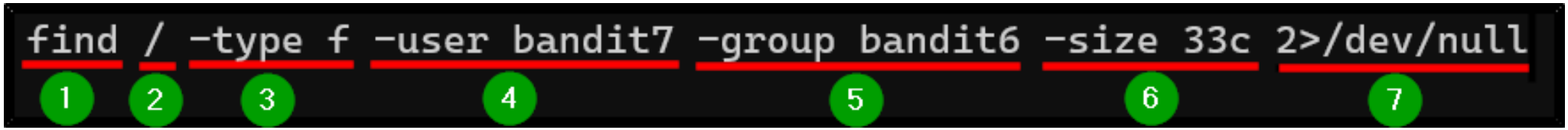

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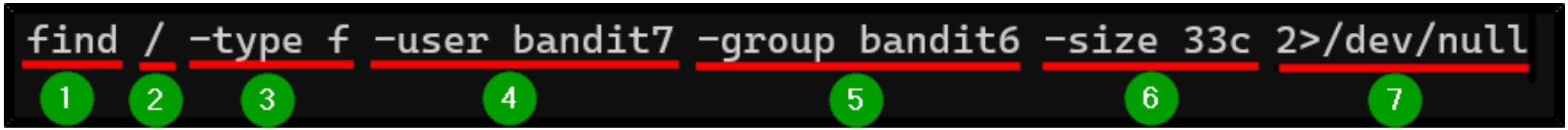

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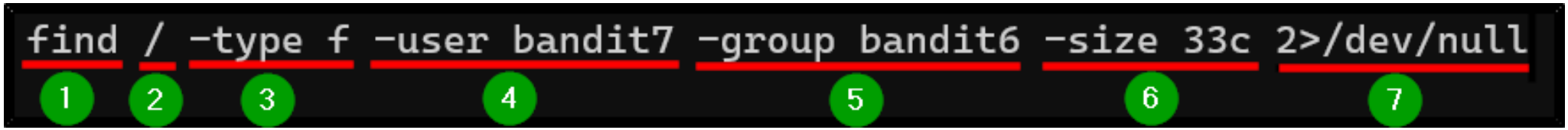

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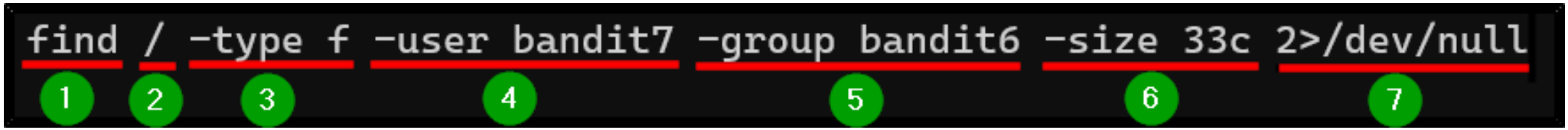

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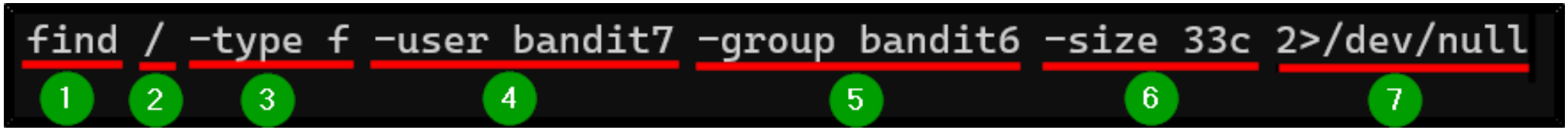

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Grep Command

The Grep command searches within the contents of files for specified strings. It is very commonly used to pick out specific words or phrases.

Grep Command

1 – The command itself

2 – The pattern to search for in the file / directory

3 – The file to be searched

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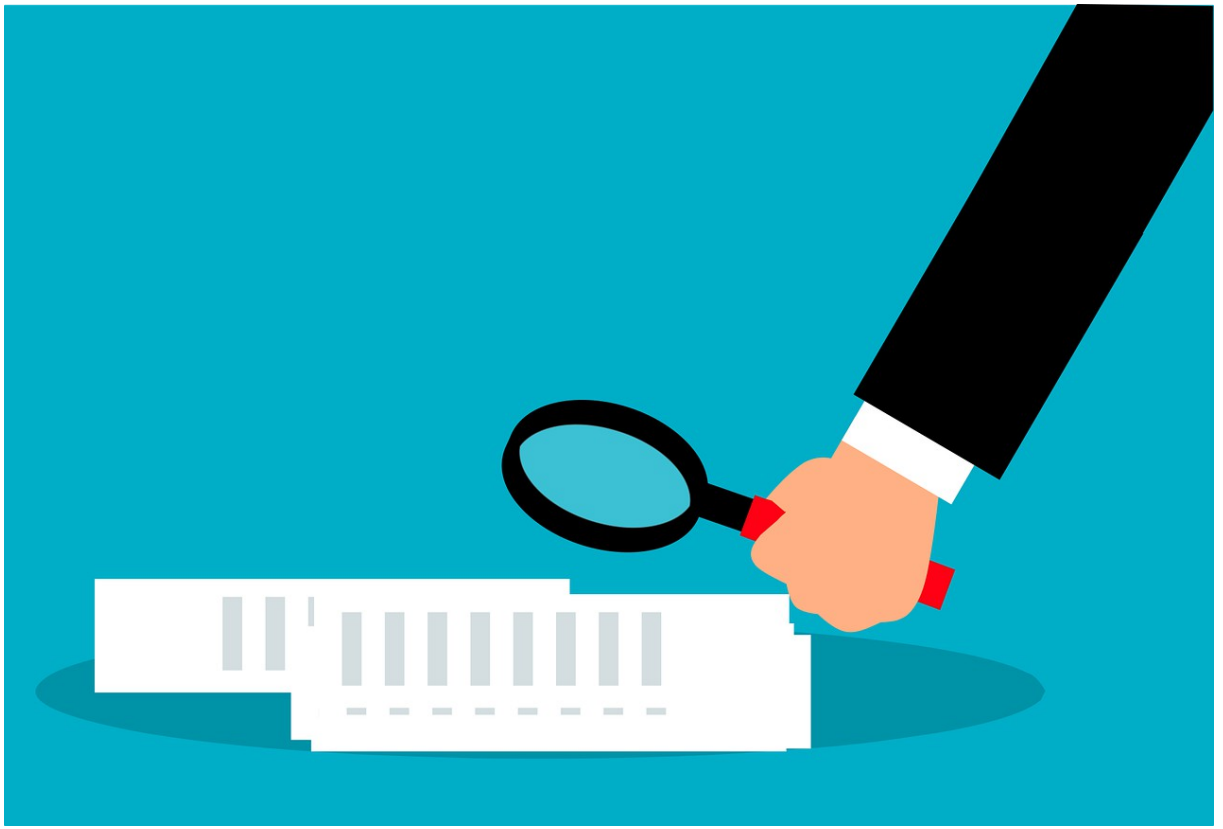
Summary



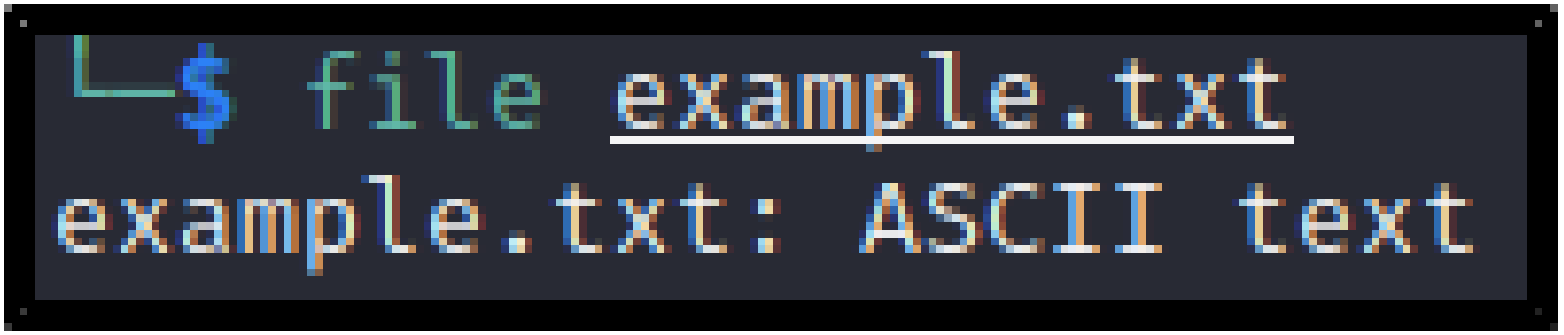
Let's review the Linux commands we learned in today's workshop:

File Command

The File command identifies the type of contents for a specified file. The file name must be supplied as an argument to the File command.

E.g., `file picture.jpg`

File Command



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The Find command is used to search for files on the system. It can used with many different arguments and flags to refine the search parameters.

Grep Command

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What's Next?

In the next HackerFrogs Afterschool Linux OS workshop, we'll switch gears and improve our Linux understanding with the TryHackMe education platform.

Try Hack Me

Extra Credit

Looking for more study material on this workshop's topics?

See this video's description for links to supplemental documents and exercises!

Until Next Time, HackerFrogs!