Search Skills

Shodan - https://www.shodan.io\ Search engine to find exposed devices like networking equipment, industrial control systems, and IoT devices.

Censys - https://censys.io\ Similar to Shodan, but focuses more on websites, certificates, and internet assets.

VirusTotal - https://www.virustotal.com\ Scans files and URLs using multiple antivirus engines. Users can upload files or links and check community feedback.

Have I Been Pwned - https://haveibeenpwned.com\ Checks if your email or data has been leaked in known data breaches. Highlights risks of reusing passwords.

Google Dorking Operators:

- "exact phrase" Use double quotes to search for an exact phrase (e.g. "passive reconnaissance").
- site: Limits search results to a specific website (e.g. site\:tryhackme.com success stories).
- - (minus) Excludes results with a specific word (e.g. pyramids -tourism).
- filetype: Finds files by extension (e.g. filetype\:ppt cybersecurity).

CVE (Common Vulnerabilities and Exposures)

A standardized dictionary of publicly known vulnerabilities. Each is assigned a CVE ID (e.g. CVE-2024-29988) for easy tracking and reference across tools and teams.

Never exploit systems unless you have legal permission (e.g. as part of red team work or with written consent).

Linux Fundamentals

What is Linux?

- A lightweight, open-source operating system.
- Used in: web servers, car control systems, checkout tills, and critical infrastructure (e.g. traffic lights).

Downsides:

• Relies on the terminal (text-based), which can be intimidating for beginners.

Common Linux Commands

Command	Description
echo	Outputs any text provided.
whoami	Shows the current logged-in user.
ls	Lists files in the current directory.
cd	Changes to a different directory.
cat	Displays the content of a file.
pwd	Prints the current working directory path.

Examples:

```
tryhackme@linux1:~$ echo Hello
Hello

tryhackme@linux1:~$ echo "Hello Friend!"
Hello Friend!
```

Searching for Files

find

Locates files and directories.

```
find -name "*"
```

grep

Searches within file content for specific strings or values.

```
grep "81.143.211.90" access.log
```

Shell Operators

Symbol	Description
&	Runs a command in the background.
&&	Chains commands; second runs only if the first succeeds.

Symbol	Description
>	Redirects output to a new file (overwrites existing content).
>>	Redirects output to a file (appends to existing content).

Clarifications:

- ullet is useful for running long tasks (like copying large files) without locking your terminal.
- && lets you run one command after another **only if** the first command succeeds. Example: mkdir folder && cd folder
- > takes the output of a command and writes it to a file. Example: echo Hello > file.txt
- >> does the same but **appends** to the file instead of replacing it. Example: echo Again >> file.txt

End of notes – TryHackMe Linux Fundamentals 1