

Room 3: Search skills

Summary:

- This room demonstrates how one can leverage the internet to obtain relevant information using special search engines and a variety of search operators.

Objective:

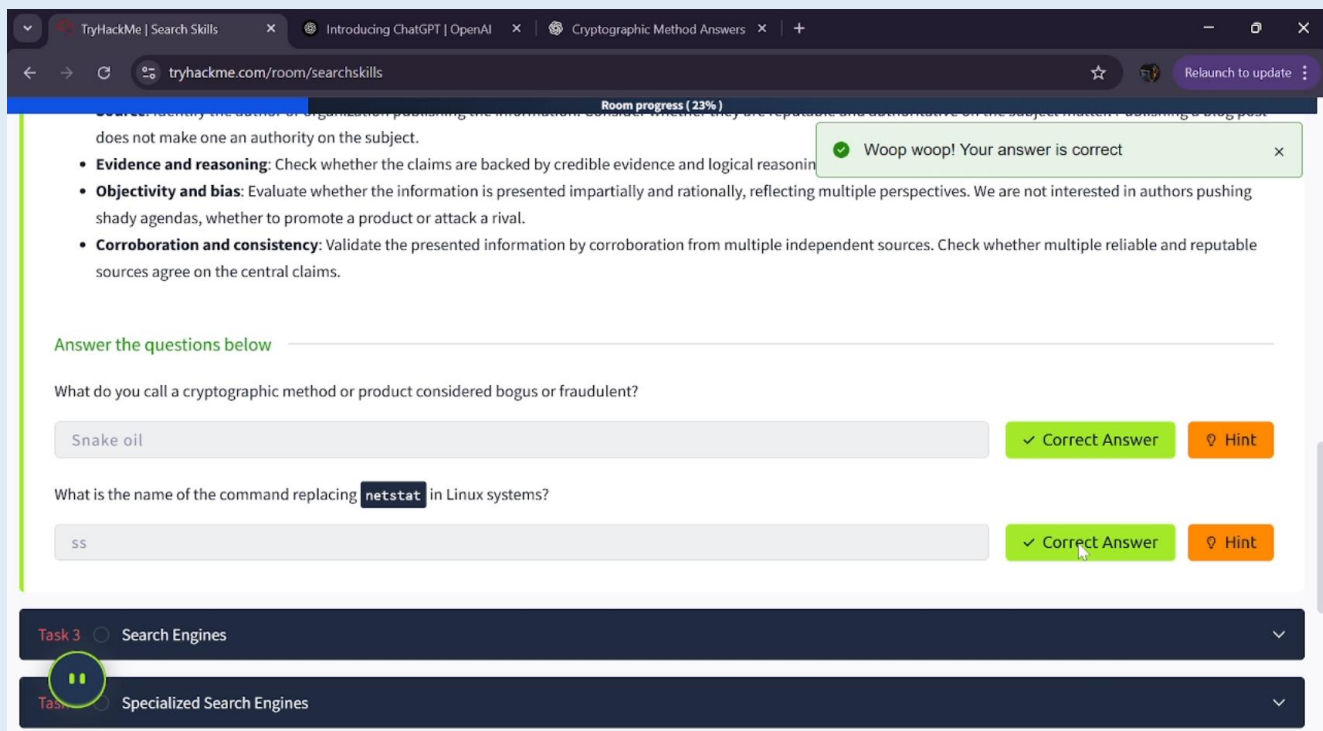
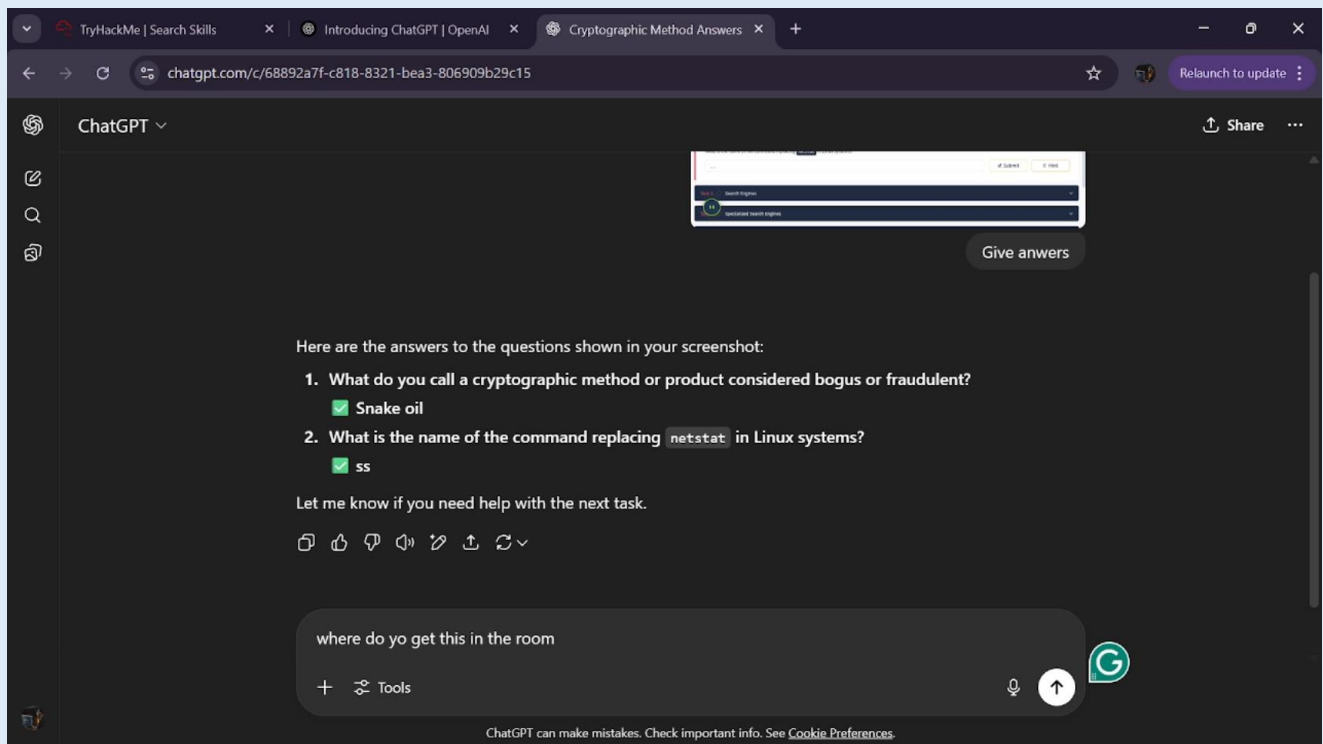
- To effectively explore the internet using specialized search engines, technical documentation, and search operators

Tools Used:

- Google Chrome
- Search Operators:
 - “exact phrase”
 - site:
 - “phrase” -“exact phrase”
 - Filetype:
- Specialized search engines:
 - Shodan
 - Censys
 - Virus.Total
 - Have I Been Pwned
- Critical Vulnerability Exposure & Exploit:
 - CVE Program
 - Exploit Database
 - GitHub
- Microsoft Windows

Steps Taken:

- Evaluated information sources



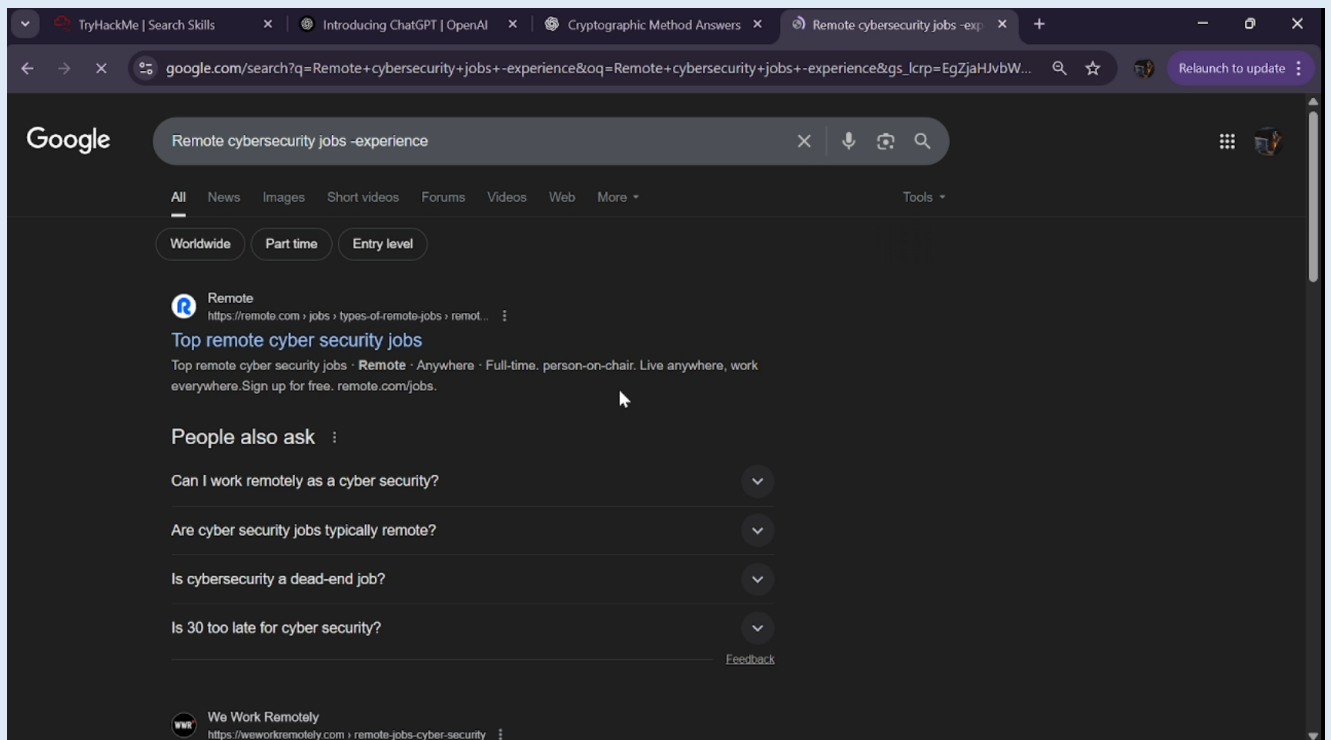
- Explored search operators using Google:
Filetype:

The screenshot shows the TryHackMe 'Search Skills' room. The browser tabs include 'TryHackMe | Search Skills', 'Introducing ChatGPT | OpenAI', 'Cryptographic Method Answers', and 'filetype: pdf free hacking tools'. The room progress is 30%. The main content area explains the 'filetype:' operator, giving an example: 'filetype:ppt cyber security'. It then asks the user to limit a Google search to PDF files containing 'cyber warfare report'. The user has entered 'filetype:pdf cyber warfare report' in the input field, and a green 'Correct Answer' button is visible. Below this, another question asks what the Linux command 'ss' stands for, with a 'Submit' button. A sidebar on the left shows a task list: 'Task 4 Specialized Search Engines', 'Task 5 Vulnerabilities and Exploits' (highlighted with a green circle), and 'Task 6 Technical Documentation'.

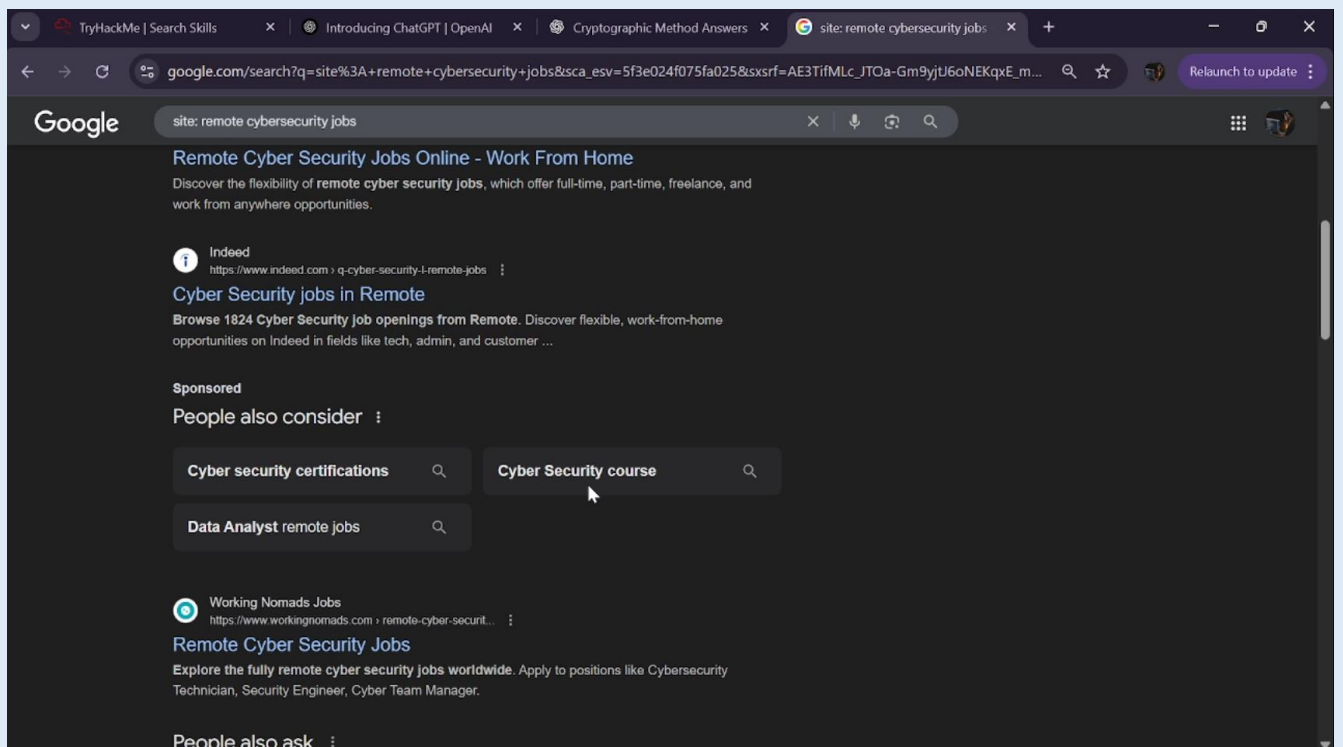
“exact phrase”

The screenshot shows a Google search result for the query 'What phrase does the Linux command "ss" stand for?'. The search bar contains the query. The top result is titled 'socket statistics' and explains that 'ss' is a CLI command for network statistics, a simpler version of 'netstat'. The result is from phoenixNAP, dated 3 Feb 2021. Below the main result, there is a 'People also ask' section with three questions: 'What is SS in Linux?', 'What does SS stand for in Linux?', and 'What is the SS command in Linux man?'. Each question has a dropdown arrow.

“Phrase” - “phrase”

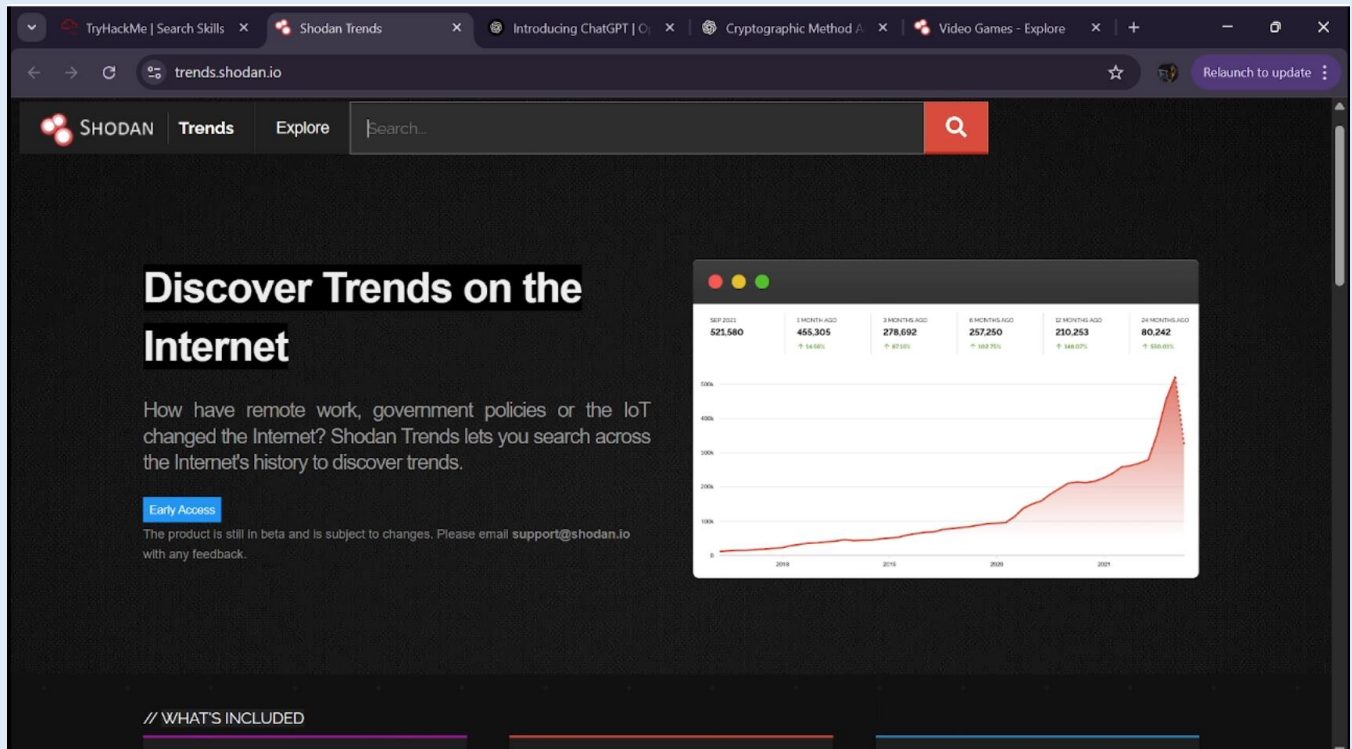


Site:

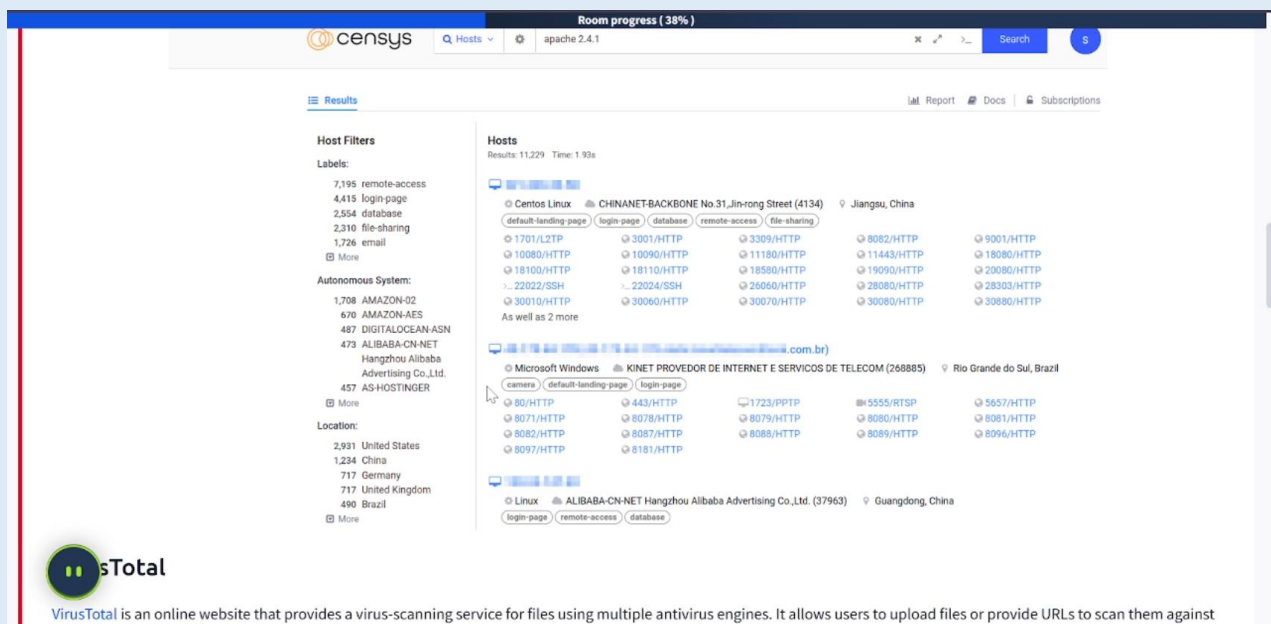


- Explored specialized search engines:

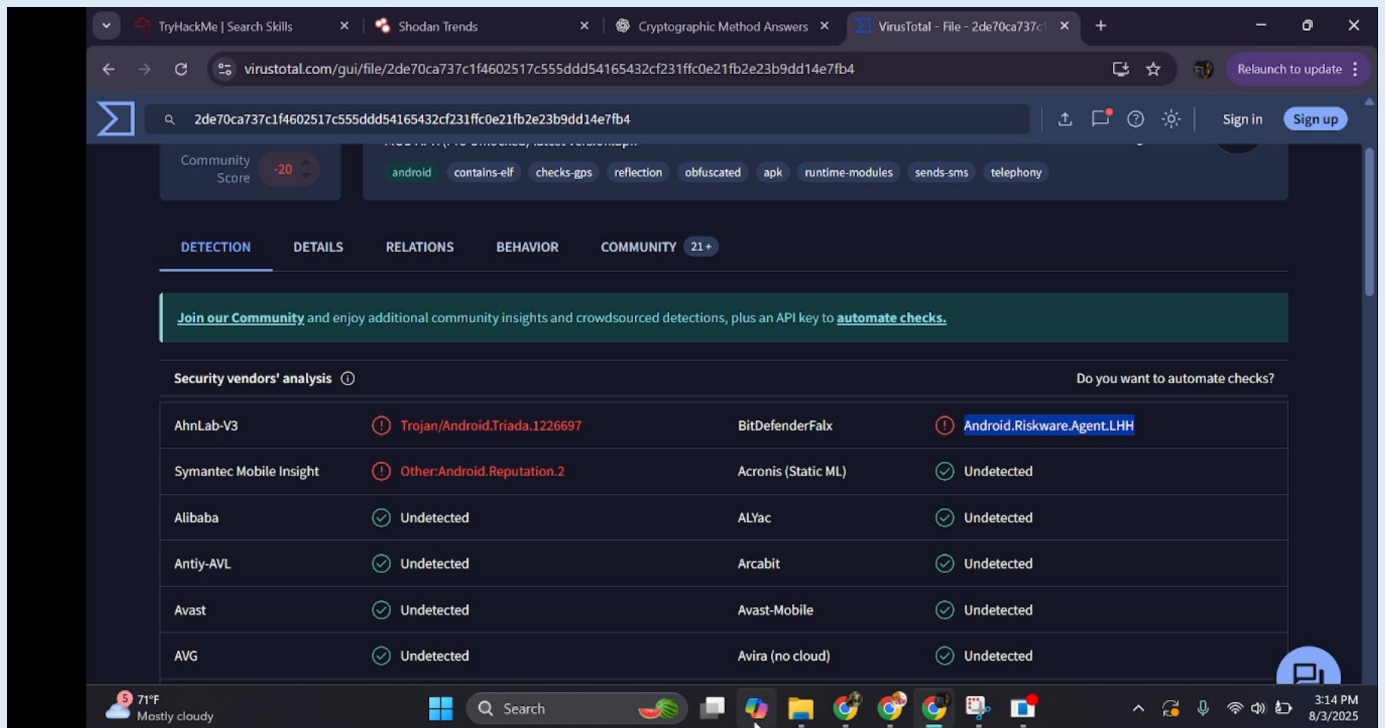
Shodan



Censys



Virus.Total



The screenshot shows the VirusTotal web interface for a file analysis. The browser tabs include 'TryHackMe | Search Skills', 'Shodan Trends', 'Cryptographic Method Answers', and 'VirusTotal - File - 2de70ca737c1f4602517c555ddd54165432cf231ffc0e21fb2e23b9dd14e7fb4'. The address bar shows the URL 'virustotal.com/gui/file/2de70ca737c1f4602517c555ddd54165432cf231ffc0e21fb2e23b9dd14e7fb4'. The file name in the search bar is '2de70ca737c1f4602517c555ddd54165432cf231ffc0e21fb2e23b9dd14e7fb4'. The 'Community Score' is -20. The 'DETECTION' tab is selected, showing a table of security vendors' analysis results.

Community Score: -20

Tags: android, contains-elf, checks-gps, reflection, obfuscated, apk, runtime-modules, sends-sms, telephony

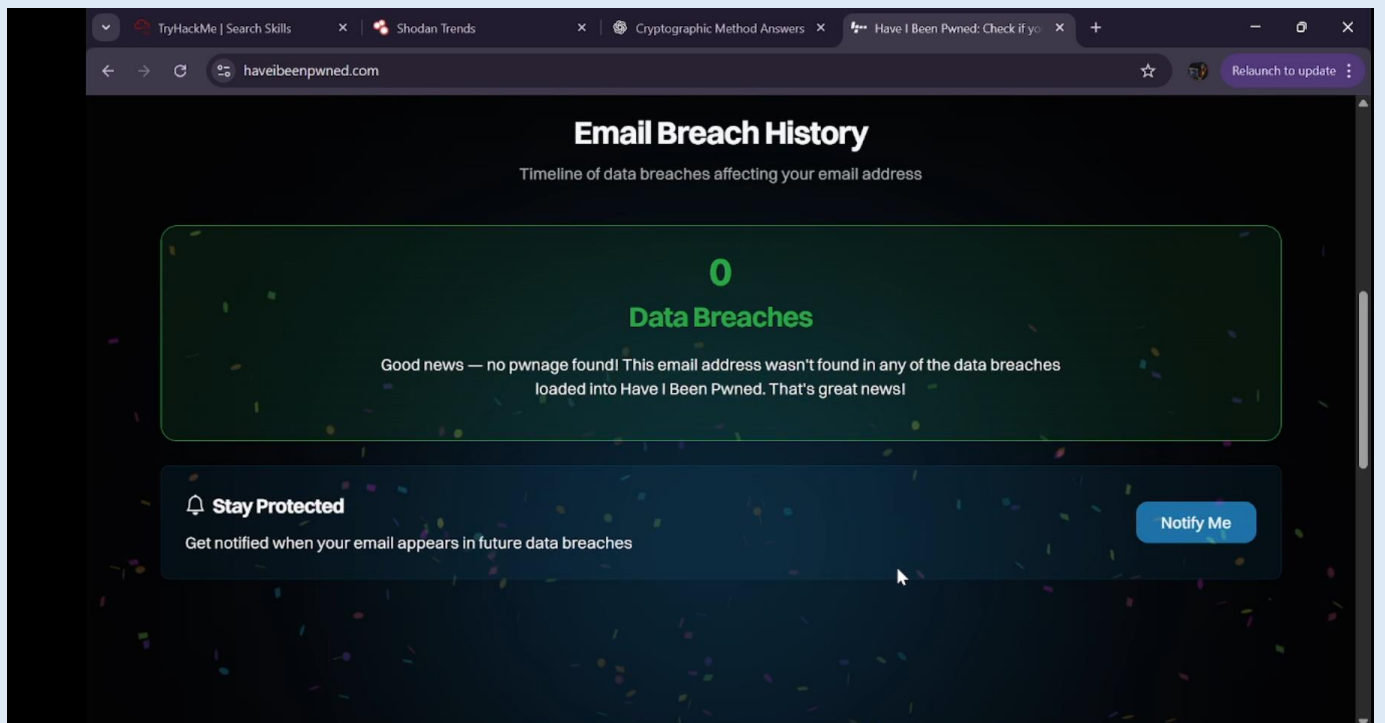
Join our Community and enjoy additional community insights and crowdsourced detections, plus an API key to [automate checks](#).

Security vendors' analysis

Vendor	Detection
AhnLab-V3	Trojan.Android.Triada.1226697
BitDefenderFalx	Android.Riskware.Agent.LHH
Symantec Mobile Insight	Other:Android.Reputation.2
Acronis (Static ML)	Undetected
Alibaba	Undetected
ALYac	Undetected
Antiy-AVL	Undetected
Arcabit	Undetected
Avast	Undetected
Avast-Mobile	Undetected
AVG	Undetected
Avira (no cloud)	Undetected

Do you want to automate checks?

Have I Been Pwned



The screenshot shows the 'Email Breach History' page on the 'Have I Been Pwned' website. The browser tabs include 'TryHackMe | Search Skills', 'Shodan Trends', 'Cryptographic Method Answers', and 'Have I Been Pwned: Check if yo...'. The address bar shows the URL 'haveibeenpwned.com'. The page title is 'Email Breach History' with the subtitle 'Timeline of data breaches affecting your email address'. The main content area shows '0 Data Breaches' and a message: 'Good news — no pwnage found! This email address wasn't found in any of the data breaches loaded into Have I Been Pwned. That's great news!'. At the bottom, there is a 'Stay Protected' section with a 'Notify Me' button.

Email Breach History

Timeline of data breaches affecting your email address

0 Data Breaches

Good news — no pwnage found! This email address wasn't found in any of the data breaches loaded into Have I Been Pwned. That's great news!

Stay Protected

Get notified when your email appears in future data breaches

Notify Me

- Demonstrated how to use search for vulnerabilities:

CVE Database

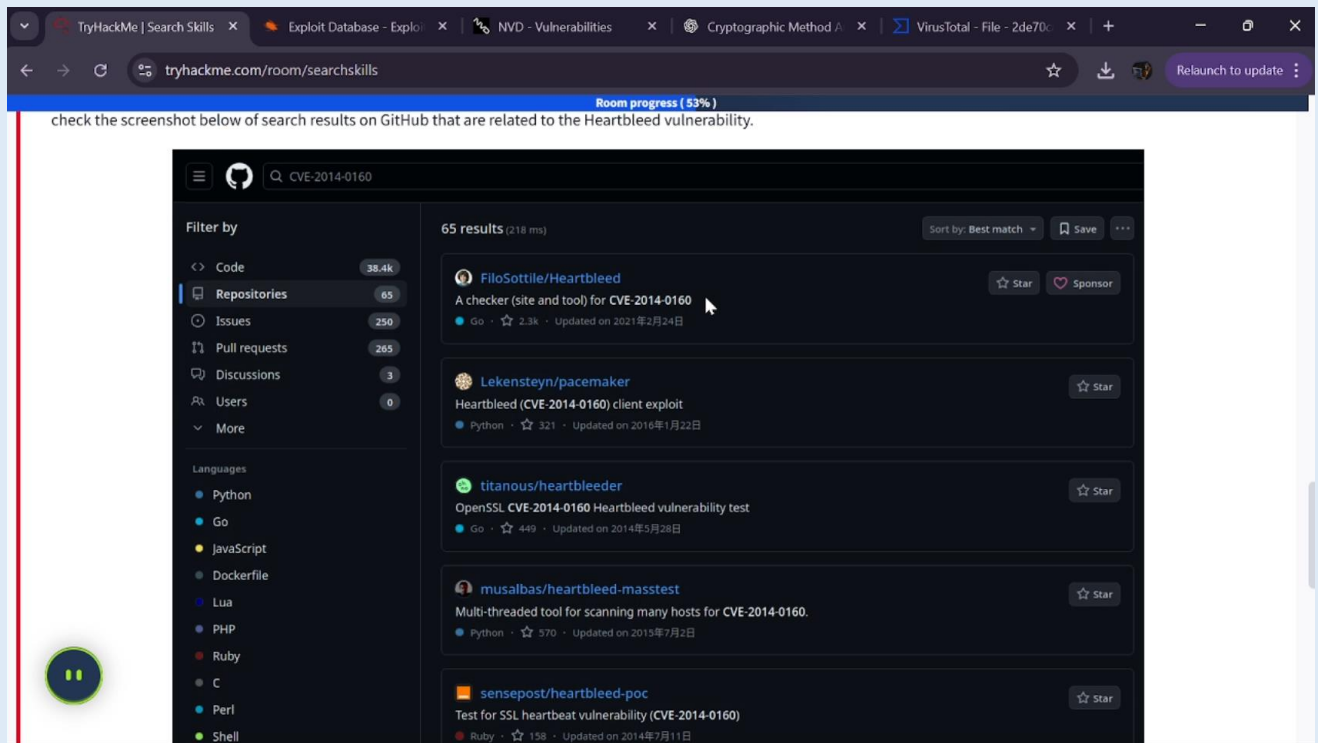
The screenshot shows the CVE.org website with the search results for CVE-2024-3094. The page includes a navigation bar with links like 'About', 'Partner Information', 'Program Organization', 'Downloads', 'Resources & Support', and 'Report/Request'. A search bar at the top contains the query 'CVE-2024-3094'. Below the search bar, a notice states: 'Expanded keyword searching of CVE Records (with limitations) is now available in the search box above. Learn more here.' The main section is titled 'Search Results' and 'CVE Record Found'. It provides details for CVE-2024-3094, including the CNA (Red Hat, Inc.) and a description: 'Malicious code was discovered in the upstream tarballs of xz, starting with version 5.6.0. Through a series of complex obfuscations, the libzma build process extracts a prebuilt object file from...'. There is a 'Show more' link. Below this, the 'Other Results' section indicates that it includes all records that reference this CVE ID. At the bottom, it shows 'Showing 1 of 1 result for CVE-2024-3094' with filters for 'Show: 25' and 'Sort by: CVE ID (new to old)'.

Exploit Database

The screenshot shows the Exploit Database website. The header includes the 'EXPLOIT DATABASE' logo and a search bar. Below the header, there are filters for 'Verified' and 'Has App'. A 'Show: 15' dropdown is visible. The main content is a table of vulnerabilities with columns: Date, D (Download), A (Add), V (Vote), Title, Type, Platform, and Author. The table lists several vulnerabilities, including Microsoft Virtual Hard Disk (VHDX) 11 - Remote Code Execution (RCE), Ultimate Member WordPress Plugin 2.6.6 - Privilege Escalation, Swagger UI 1.0.3 - Cross-Site Scripting (XSS), LPAR2RRD 8.04 - Remote Code Execution (RCE), Copyparty 1.18.6 - Reflected Cross-Site Scripting (XSS), Microsoft Edge (Chromium-based) 135.0.7049.114/.115 - Information Disclosure, Gandia Integra Total 4.4.2236.1 - SQL Injection, Adobe ColdFusion 2023.6 - Remote File Read, and Linux PAM Environment - Variable Injection Local Privilege Escalation.

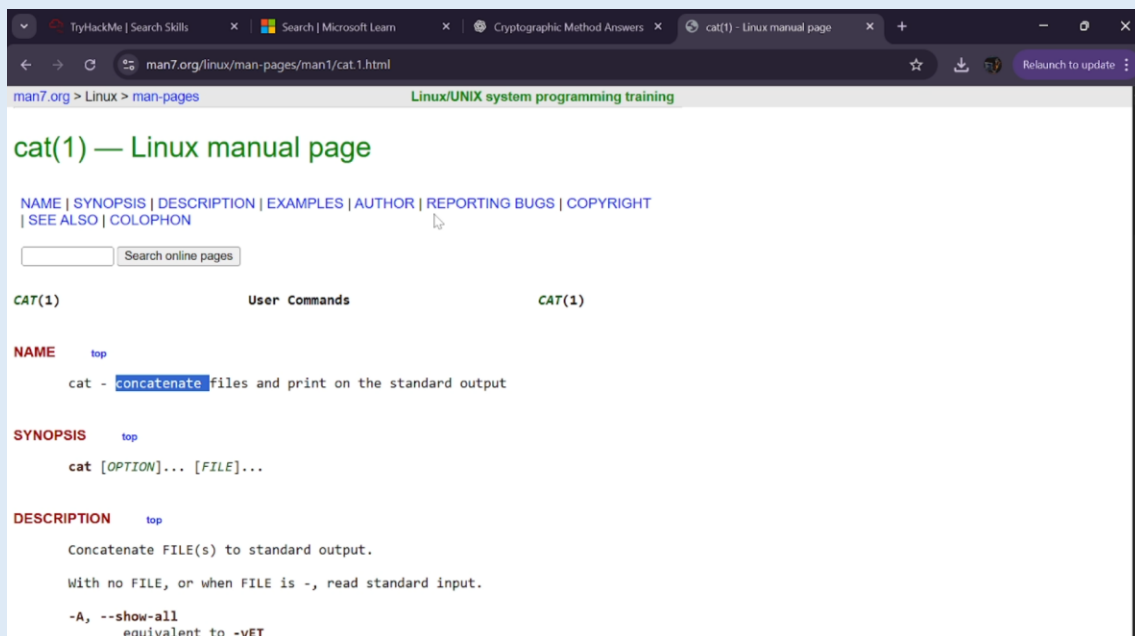
Date	D	A	V	Title	Type	Platform	Author
2025-08-03	📄	✗		Microsoft Virtual Hard Disk (VHDX) 11 - Remote Code Execution (RCE)	Local	Windows	nu11secu1ty
2025-08-03	📄	✗		Ultimate Member WordPress Plugin 2.6.6 - Privilege Escalation	WebApps	Multiple	Gurjot Singh
2025-08-03	📄	✗		Swagger UI 1.0.3 - Cross-Site Scripting (XSS)	Remote	Multiple	Byte Reaper
2025-08-03	📄	✗		LPAR2RRD 8.04 - Remote Code Execution (RCE)	WebApps	Multiple	Byte Reaper
2025-08-03	📄	✗		Copyparty 1.18.6 - Reflected Cross-Site Scripting (XSS)	WebApps	Multiple	Byte Reaper
2025-08-03	📄	✗		Microsoft Edge (Chromium-based) 135.0.7049.114/.115 - Information Disclosure	Remote	Windows	nu11secu1ty
2025-08-03	📄	✗		Gandia Integra Total 4.4.2236.1 - SQL Injection	WebApps	Multiple	Byte Reaper
2025-07-28	📄	✗		Adobe ColdFusion 2023.6 - Remote File Read	WebApps	Multiple	İbrahimsql
2025-07-28	📄	✗		Linux PAM Environment - Variable Injection Local Privilege Escalation	Local	Linux	İbrahimsql

GitHub



- Demonstrated the use of technical documentation through:

Linux Manual page



Microsoft Windows – Product Documentation

The screenshot shows a web browser window with multiple tabs. The active tab is 'netstat | Microsoft Learn'. The address bar shows the URL 'learn.microsoft.com/en-us/windows-server/administration/windows-commands/netstat'. The page content is for the 'netstat' command. On the left, there is a sidebar with a search filter 'Filter by title' and a list of network-related commands: netstat, nfsadmin, nfsshare, nfsstat, nlbmgr, nslookup, ntbackup, ntmcmdprompt, ntrsrutl, openfiles, pagefileconfig, path, pathping, pause, pbadmin, pentnt, and perfmom. The main content area has a 'Syntax' section with the command 'netstat [-a] [-b] [-e] [-n] [-o] [-p <Protocol>] [-r] [-s] [<interval>]' and a 'Parameters' section with a table. The table has two columns: 'Parameter' and 'Description'. It lists three parameters: -a (Displays all active TCP connections and the TCP and UDP ports on which the computer is listening), -b (Displays the executable involved in creating each connection or listening port), and -e (Displays Ethernet statistics, such as the number of bytes and packets sent and received). On the right, there is a section 'In this article' with links for 'Syntax' and 'Related links', and a 'Was this page helpful?' section with 'Yes' and 'No' buttons.

netstat [-a] [-b] [-e] [-n] [-o] [-p <Protocol>] [-r] [-s] [<interval>]

Syntax

Parameters

Parameter	Description
-a	Displays all active TCP connections and the TCP and UDP ports on which the computer is listening.
-b	Displays the executable involved in creating each connection or listening port. In some cases well-known executables host multiple independent components, and in these cases the sequence of components involved in creating the connection or listening port is displayed. In this case the executable name is in [] at the bottom, on top is the component it called, and so forth until TCP/IP was reached. Note that this option can be time-consuming and will fail unless you have sufficient permissions.
-e	Displays Ethernet statistics, such as the number of bytes and packets sent and received. This parameter can be combined with -s.

Flag(s):

No flag(s) found

Lessons Learned:

I learned how to:

- Utilize search operators to explore the internet
- Use specialized search engines
- Search for vulnerabilities and exploits
- Fetch information via technical documentation