Apointment

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┌──(root㉿kali)-[/home/alvadelg]
└─# nmap -sV -O -sS -A -p- 10.129.72.166
Starting Nmap 7.95 ( https://nmap.org ) at 2025-01-26 15:32 CET
Nmap scan report for 10.129.72.166
Host is up (0.046s latency).
Not shown: 65534 closed tcp ports (reset)
PORT   STATE SERVICE VERSION
80/tcp open  http    Apache httpd 2.4.38 ((Debian))
|_http-server-header: Apache/2.4.38 (Debian)
|_http-title: Login
Device type: general purpose
Running: Linux 5.X
OS CPE: cpe:/o:linux:linux_kernel:5
OS details: Linux 5.0 - 5.14
Network Distance: 2 hops

TRACEROUTE (using port 3306/tcp)
HOP RTT      ADDRESS
1   43.40 ms 10.10.14.1
2   44.71 ms 10.129.72.166

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 50.55 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, allowing you to discover open ports without completing the TCP handshake.

-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.

What does Nmap report as the service and version that are running on port 80 of the target?

Apache httpd 2.4.38 ((Debian))

What does the acronym SQL stand for?

SQL stands for Structured Query Language. It's a standardized programming language used for managing and manipulating relational databases. With SQL, you can create, read, update, and delete data in a database, among other operations.

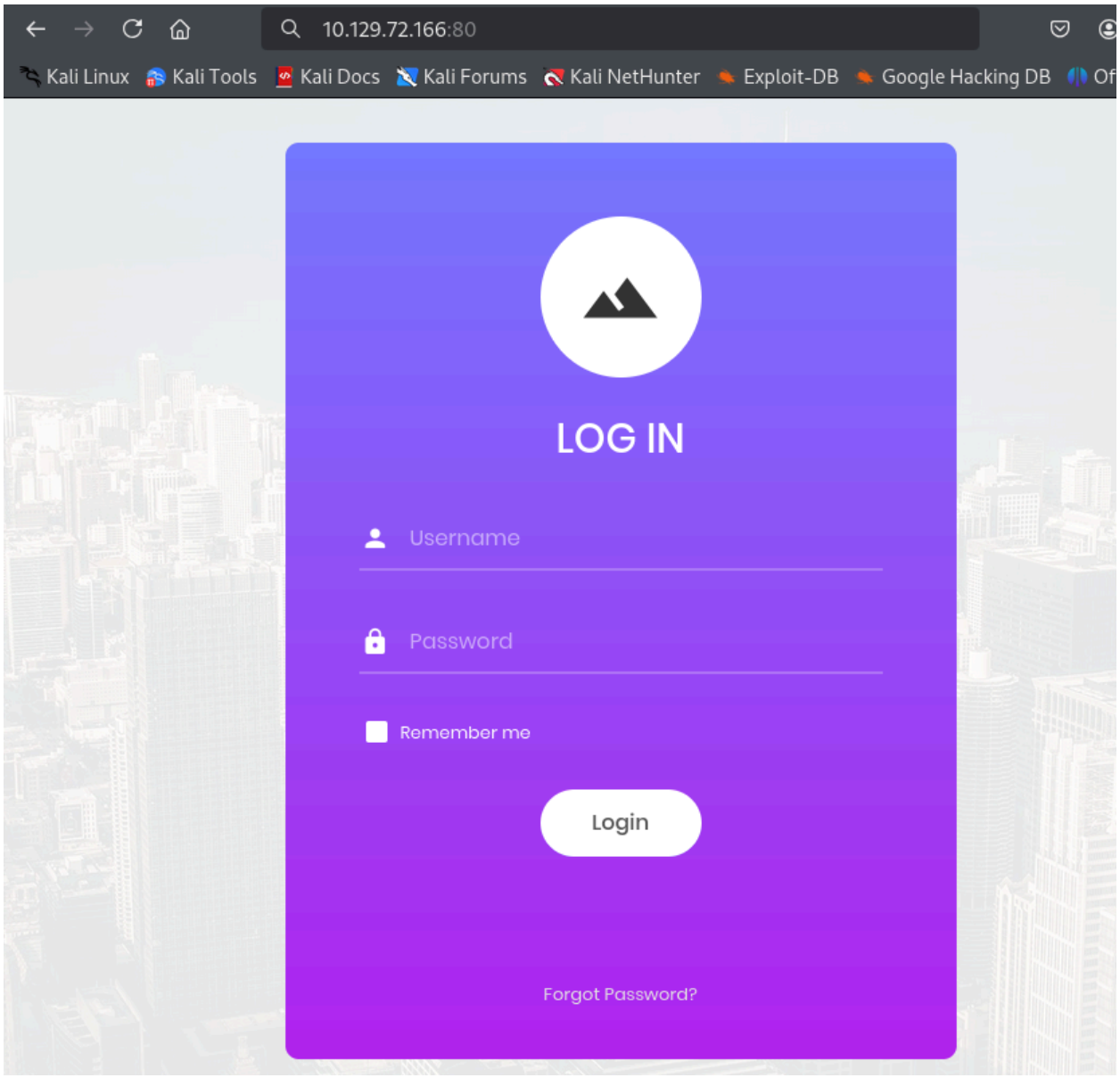
What is the standard port used for the HTTPS protocol?

The standard port used for the HTTPS protocol is **port 443**. This port is used for secure web traffic, ensuring that the data transmitted between your browser and the web server is encrypted and secure.

What is a folder called in web-application terminology?

Directory

Let's go to port 80 which is this website ,this login panel:



What is one of the most common type of SQL vulnerabilities?

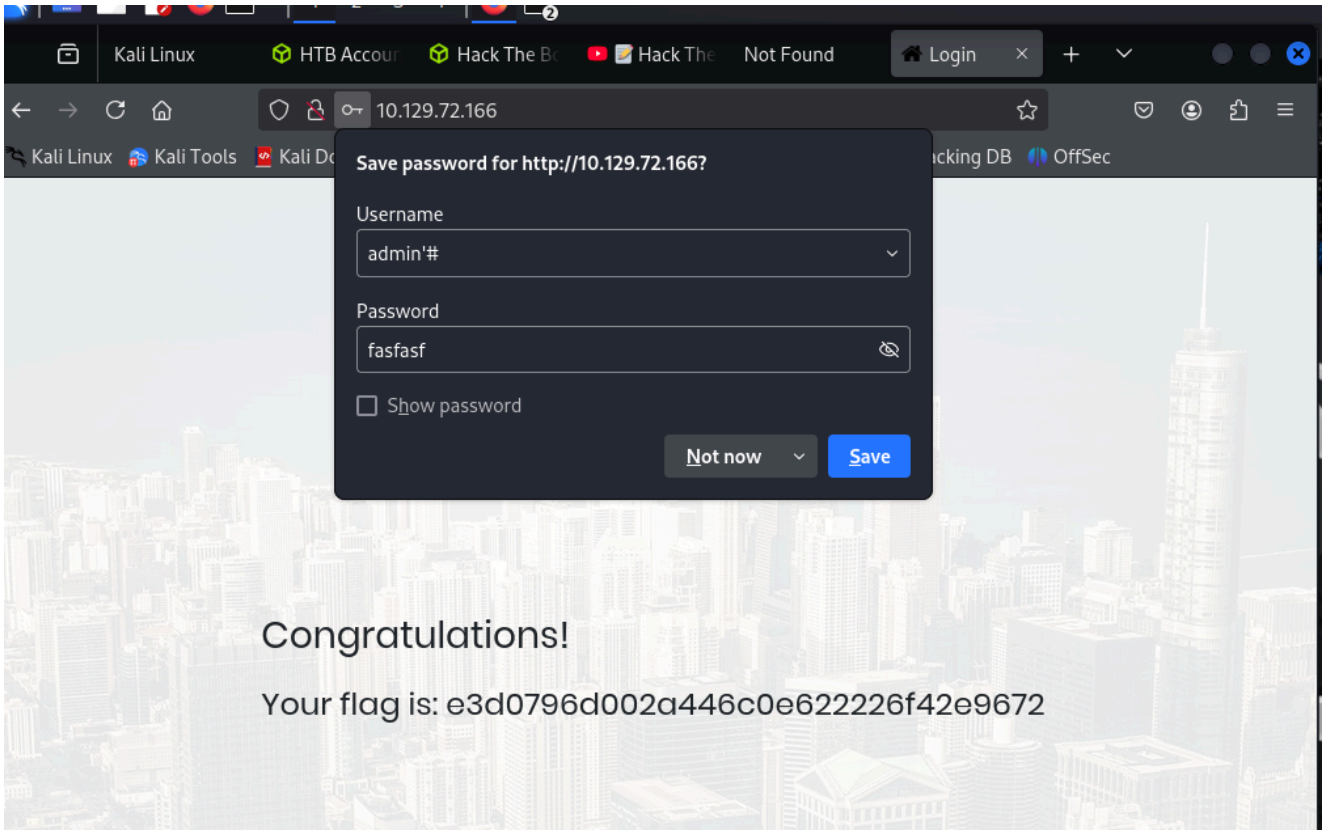
One of the most common types of SQL vulnerabilities is SQL Injection (SQLi). SQL Injection occurs when an attacker inserts or "injects" malicious SQL code into an application's input fields, which can then be executed by the database

What is the 2021 OWASP Top 10 classification for this vulnerability?

A03:2021-Injection

What single character can be used to comment out the rest of a line in MySQL?

#



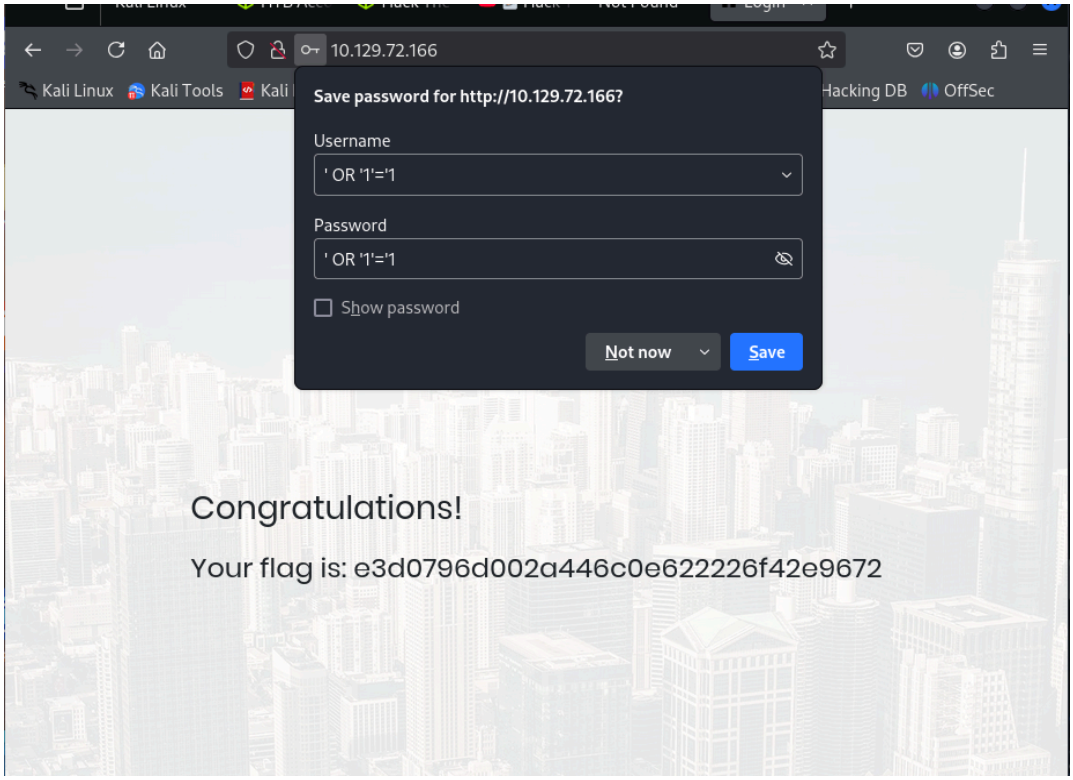
To bypass the authentication and gain access to the admin panel, I used an SQL injection technique with the following input:

Username:

admin'#

Password:

Any value (e.g., password123)



Another common SQL injection technique involves using the input ' OR '1'='1 for both the username and password fields. This approach works similarly by manipulating the SQL query to bypass authentication checks.

The conditions ' OR '1'='1 always evaluate to true, causing the query to return all rows from the users table.

If user input is not handled carefully, it could be interpreted as a comment. Use a comment to login as admin without knowing the password. What is the first word on the webpage returned?

Congratulations