

Placement Empowerment Program

Cloud Computing and DevOps Centre

Host a Static Website Locally: Set Up a Local Server
Apache and Host a Simple HTML page with your
name

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Introduction and Overview

In this POC, we will learn how to host a static website locally using the Apache HTTP Server. This process involves setting up a local web server, configuring it correctly, and hosting a simple HTML page. By following these steps, you'll get hands-on experience with configuring and running a local Apache server, which is a foundational skill for web hosting and server management.

Objective

The goal of this project is to:

1. Set up a local web server using Apache.
2. Configure the server to host static files.
3. Create and host a simple HTML page displaying your name.

Importance of Local Hosting

Local hosting is an essential skill for developers, as it allows them to test and experiment with web applications in a controlled environment. It offers several advantages, such as:

Hands-On Learning: Gain practical experience with server setup and configuration.

Testing Ground: Safely test and debug websites before deploying them to a live server.

Offline Development: Work on web projects without requiring an active internet connection.

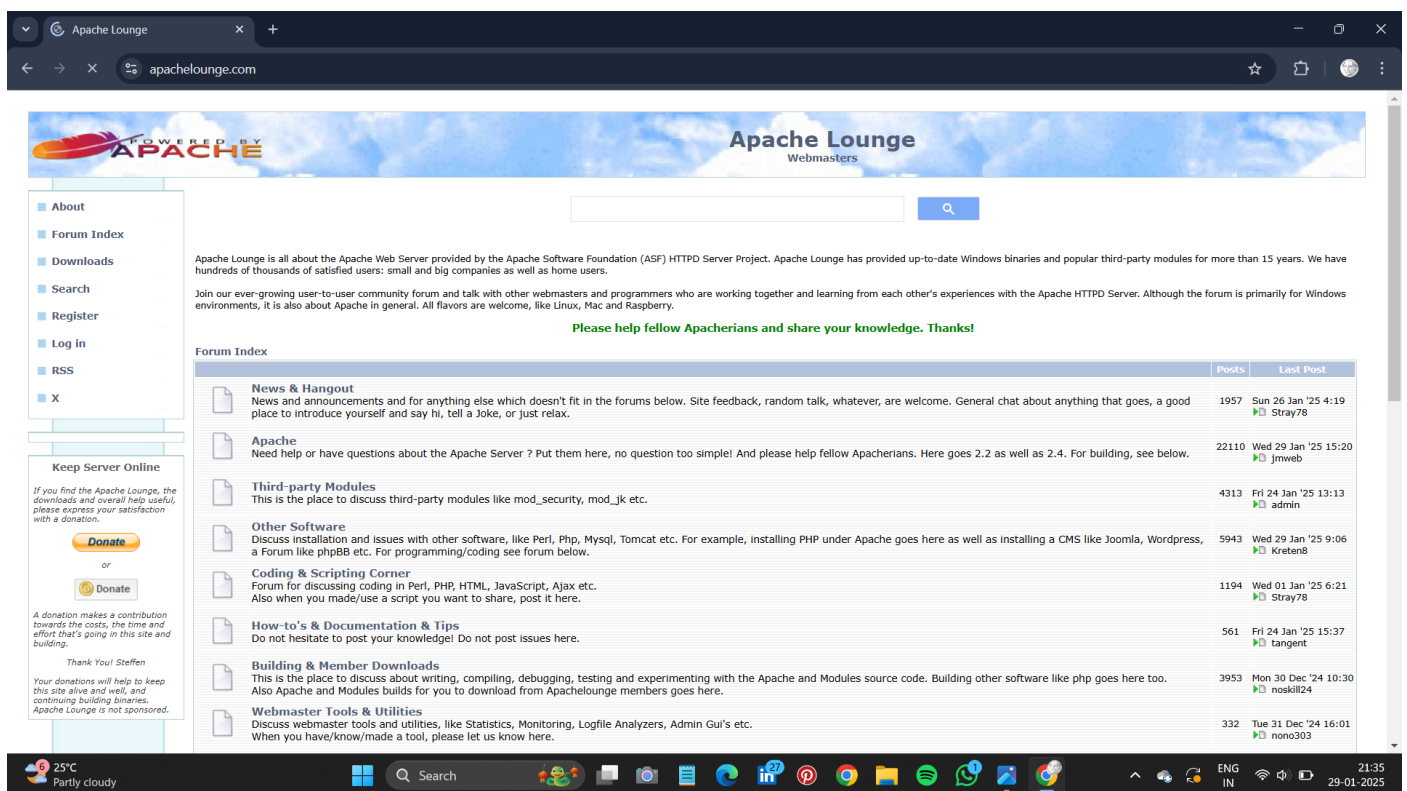
Step-by-Step Overview

Step1:

Search for "Apache Lounge" on Google and click the first link to access the official website.

Step 2 :

Click on the "Downloads" option located on the left-hand side of the Apache Lounge website.



The screenshot shows the Apache Lounge website in a web browser. The browser's address bar displays "apachelounge.com". The website has a blue header with the Apache Lounge logo and a search bar. On the left side, there is a navigation menu with links: About, Forum Index, Downloads, Search, Register, Log in, RSS, and X. Below the menu, there is a "Keep Server Online" section with a "Donate" button and a message from Steffen. The main content area is titled "Forum Index" and contains a list of forum topics. Each topic has a title, a brief description, and a table showing the number of posts and the last post date and time.

| | Posts | Last Post |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------------------------------|
| News & Hangout News and announcements and for anything else which doesn't fit in the forums below. Site feedback, random talk, whatever, are welcome. General chat about anything that goes, a good place to introduce yourself and say hi, tell a Joke, or just relax. | 1957 | Sun 26 Jan '25 4:19 Stray78 |
| Apache Need help or have questions about the Apache Server ? Put them here, no question too simple! And please help fellow Apacherians. Here goes 2.2 as well as 2.4. For building, see below. | 22110 | Wed 29 Jan '25 15:20 Jmweb |
| Third-party Modules This is the place to discuss third-party modules like mod_security, mod_jk etc. | 4313 | Fri 24 Jan '25 13:13 admin |
| Other Software Discuss installation and issues with other software, like Perl, Php, Mysql, Tomcat etc. For example, installing PHP under Apache goes here as well as installing a CMS like Joomla, Wordpress, a Forum like phpBB etc. For programming/coding see forum below. | 5943 | Wed 29 Jan '25 9:06 Kreten8 |
| Coding & Scripting Corner Forum for discussing coding in Perl, PHP, HTML, JavaScript, Ajax etc. Also when you made/use a script you want to share, post it here. | 1194 | Wed 01 Jan '25 6:21 Stray78 |
| How-to's & Documentation & Tips Do not hesitate to post your knowledge! Do not post issues here. | 561 | Fri 24 Jan '25 15:37 tangent |
| Building & Member Downloads This is the place to discuss about writing, compiling, debugging, testing and experimenting with the Apache and Modules source code. Building other software like php goes here too. Also Apache and Modules builds for you to download from Apachelounge members goes here. | 3953 | Mon 30 Dec '24 10:30 noskill24 |
| Webmaster Tools & Utilities Discuss webmaster tools and utilities, like Statistics, Monitoring, Logfile Analyzers, Admin Gui's etc. When you have/know/made a tool, please let us know here. | 332 | Tue 31 Dec '24 16:01 nono303 |

Step 3 :

Click on the link "**Apache 2.4.62-240904 Win64**" (Windows version), download the file, and extract all its contents.

The screenshot shows the Apache Lounge website's download page for Apache 2.4 VS17 Windows Binaries and Modules. The page features a navigation menu on the left with links to Home, VS17, and Additional. The main content area includes a search bar, a list of recent updates, and a section for Apache 2.4 VS17 binaries. The binaries section lists two versions: Apache 2.4.63-250122 Win64 and Apache 2.4.63-250122 Win32. Each version has a download link, a PGP signature, and a SHA1-SHA512 checksum. A banner for '回国CDN' (Return to China CDN) is visible, along with a 'Keep Server Online' section. The footer contains a search bar and social media links.

Apache Lounge
Webmasters

Apache 2.4 VS17 Windows Binaries and Modules

Apache Lounge has provided up-to-date Windows binaries and popular third-party modules for more than 15 years. We have hundreds of thousands of satisfied users: small and big companies as well as home users. Always build with up to date dependencies and latest compilers, and tested thorough. The binaries are referenced by the ASF, Microsoft, PHP etc. and more and more software is packaged with our binaries and modules.

The binaries, are build with the sources from ASF at <http://httpd.apache.org>, contains the latest patches and latest dependencies like zlib, openssl etc. which makes the downloads here mostly more actual then downloads from other places. The binaries **do not run** on XP and 2003. Runs on: 7 SP1, Vista SP2, 8/8.1, 10, 11 Server 2008 SP2 / R2 SP1, Server 2012 / R2, Server 2016/2019/2022.

Build with the latest Windows Visual Studio C++ 2022 aka VS17. Has improvements, fixes and optimizations over VS16 in areas like Performance, MemoryManagement, New standard conformance features, Code generation and Stability. For example code quality tuning and improvements done across different code generation areas for "speed". And makes more use of latest processors and supported Windows editions (win7 and up) internal features.

VS17 is backward compatible, That means, a VS16/15/14 module can be used inside the VS17 binary.

Be sure you installed latest 14.42.34433.0 Visual C++ Redistributable Visual Studio 2015-2022 : [vc_redist_x64](#) or [vc_redist_x86](#) see [Redistributable](#)

Apache 2.4 binaries VS17
[Info & Changelog](#)

Apache 2.4.63-250122 Win64

- [httpd-2.4.63-250122-win64-VS17.zip](#) 22 Jan '25 11.787k
- [PGP Signature \(Public PGP key\)](#), [SHA1-SHA512](#) [Checksums](#)

Apache 2.4.63-250122 Win32

- [httpd-2.4.63-250122-win32-VS17.zip](#) 22 Jan '25 18.589k
- [PGP Signature \(Public PGP key\)](#), [SHA1-SHA512](#) [Checksums](#)

To be sure that a download is intact and has not been tampered with, use PGP, see [PGP Signature](#)

回国CDN 无需备案 即买即用 - 数据安全可靠 可支持任何行业
弹性云 服务器 规格多样 路线多样, 高效 灵活 随时调配资源, 超高性能 秒级交付 bgp.la [打开](#)

Apache 2.4 modules VS17

Mail for the PGP signatures and/or SHA checksums to verify the contents of a file.

<https://www.apachelounge.com/download/VS17/binaries/httpd-2.4.63-250122-win64-VS17.zip>

Keep Server Online
If you find the downloads useful, please express your satisfaction with a donation.

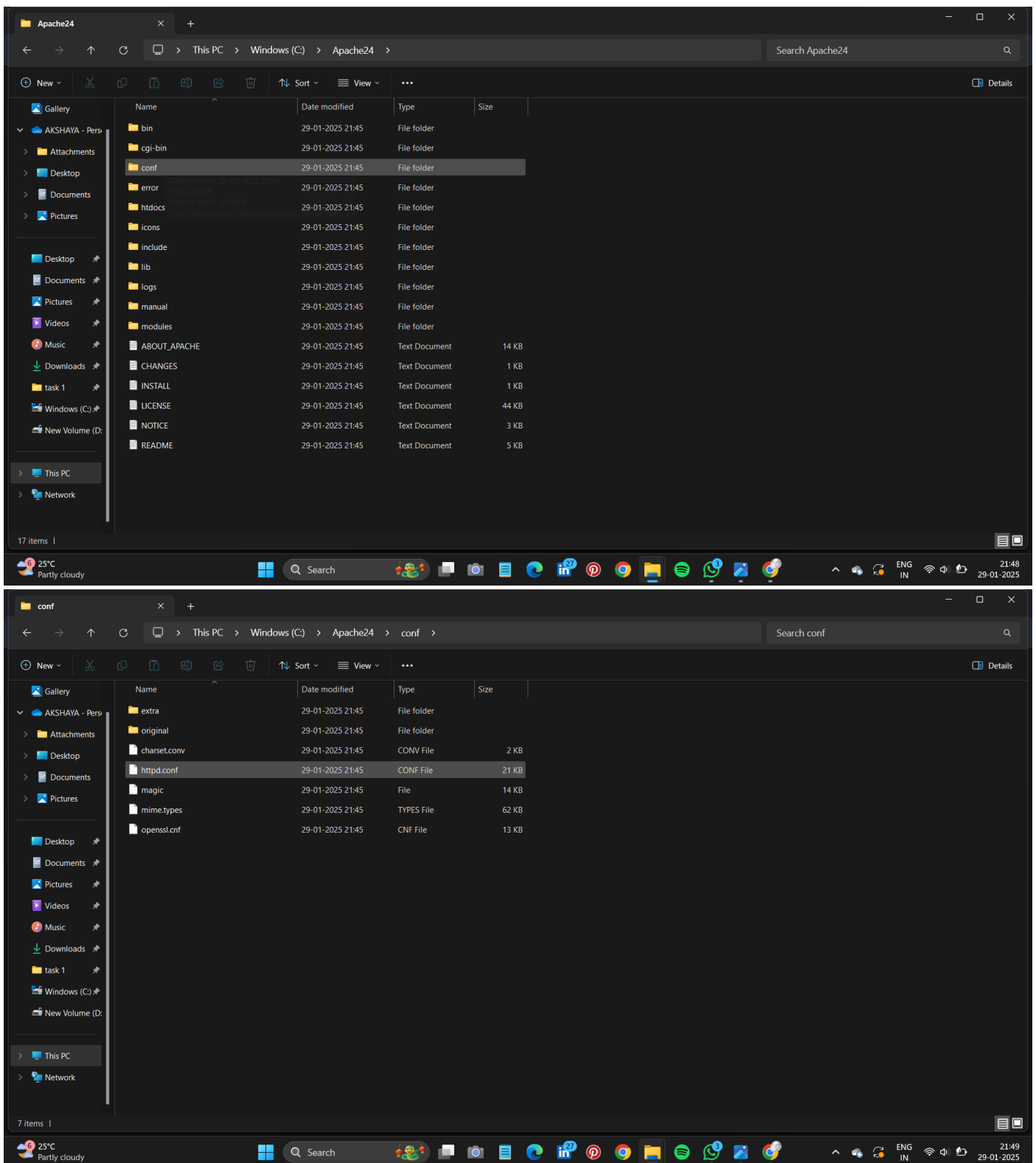
25°C Partly cloudy

21:38 29-01-2025

Step 4 :

Navigate to the Apache folder you downloaded, go to the **conf** folder, and right-click on the httpd.conf file; select 'Edit with Notepad'

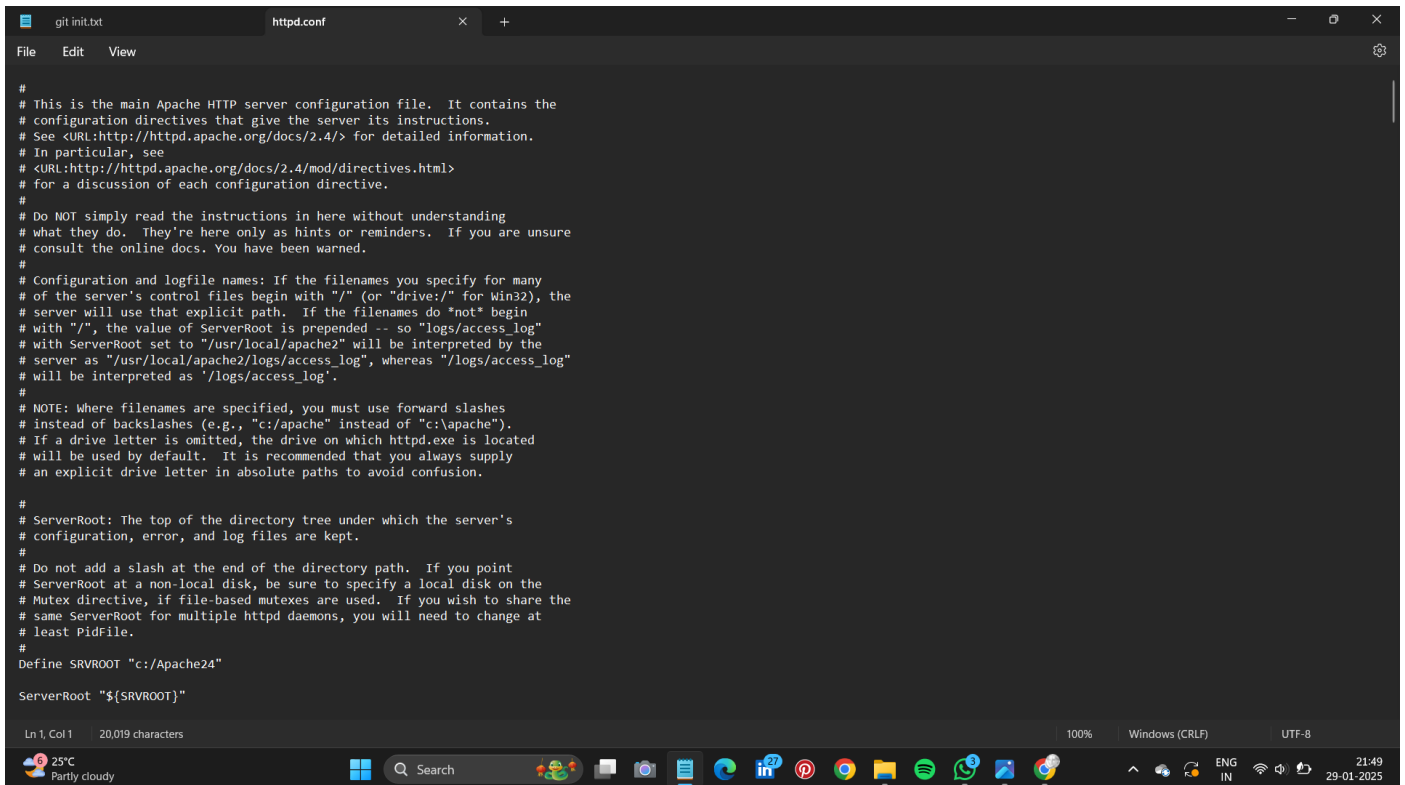
(Apache/conf/httpd.conf)



Step 5 :

Inside the **httpd.conf** file, replace the content with the provided configuration. Ensure you update the **SRVROOT** directive with your Apache installation path. This configuration defines the server's root directory, listening port, modules,

document root for serving web files, logging paths, and basic permissions, ensuring Apache serves content correctly from the specified htdocs directory.

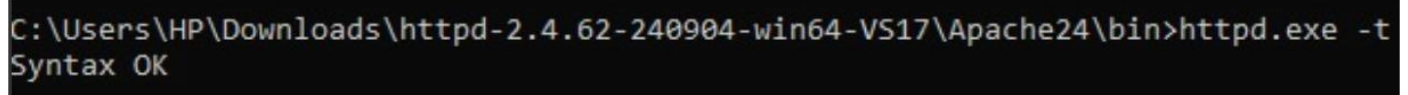
A screenshot of a code editor window titled 'httpd.conf'. The editor shows the beginning of the Apache configuration file. It includes several comments explaining the file's purpose and providing links to documentation. It also contains configuration directives for 'ServerRoot' and 'SRVROOT', both set to 'c:/Apache24'. The status bar at the bottom indicates 'Ln 1, Col 1' and '20,019 characters'.

```
# This is the main Apache HTTP server configuration file. It contains the
# configuration directives that give the server its instructions.
# See <URL:http://httpd.apache.org/docs/2.4/> for detailed information.
# In particular, see
# <URL:http://httpd.apache.org/docs/2.4/mod/directives.html>
# for a discussion of each configuration directive.
#
# Do NOT simply read the instructions in here without understanding
# what they do. They're here only as hints or reminders. If you are unsure
# consult the online docs. You have been warned.
#
# Configuration and logfile names: If the filenames you specify for many
# of the server's control files begin with "/" (or "drive:" for Win32), the
# server will use that explicit path. If the filenames do "not" begin
# with "/", the value of ServerRoot is prepended -- so "logs/access_log"
# with ServerRoot set to "/usr/local/apache2" will be interpreted by the
# server as "/usr/local/apache2/logs/access_log", whereas "/logs/access_log"
# will be interpreted as '/logs/access_log'.
#
# NOTE: Where filenames are specified, you must use forward slashes
# instead of backslashes (e.g., "c:/apache" instead of "c:\apache").
# If a drive letter is omitted, the drive on which httpd.exe is located
# will be used by default. It is recommended that you always supply
# an explicit drive letter in absolute paths to avoid confusion.
#
# ServerRoot: The top of the directory tree under which the server's
# configuration, error, and log files are kept.
#
# Do not add a slash at the end of the directory path. If you point
# ServerRoot at a non-local disk, be sure to specify a local disk on the
# Mutex directive, if file-based mutexes are used. If you wish to share the
# same ServerRoot for multiple httpd daemons, you will need to change at
# least PidFile.
#
Define SRVROOT "c:/Apache24"

ServerRoot "${SRVROOT}"
```

Step 6 :

Open Command Prompt and type the command **httpd.exe -t** to test the configuration file. If the configuration is correct, you should see '**Syntax OK**'.

A screenshot of a Windows Command Prompt window. The command prompt shows the path 'C:\Users\HP\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24\bin>' followed by the command 'httpd.exe -t'. The output of the command is 'Syntax OK'.

```
C:\Users\HP\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24\bin>httpd.exe -t
Syntax OK
```

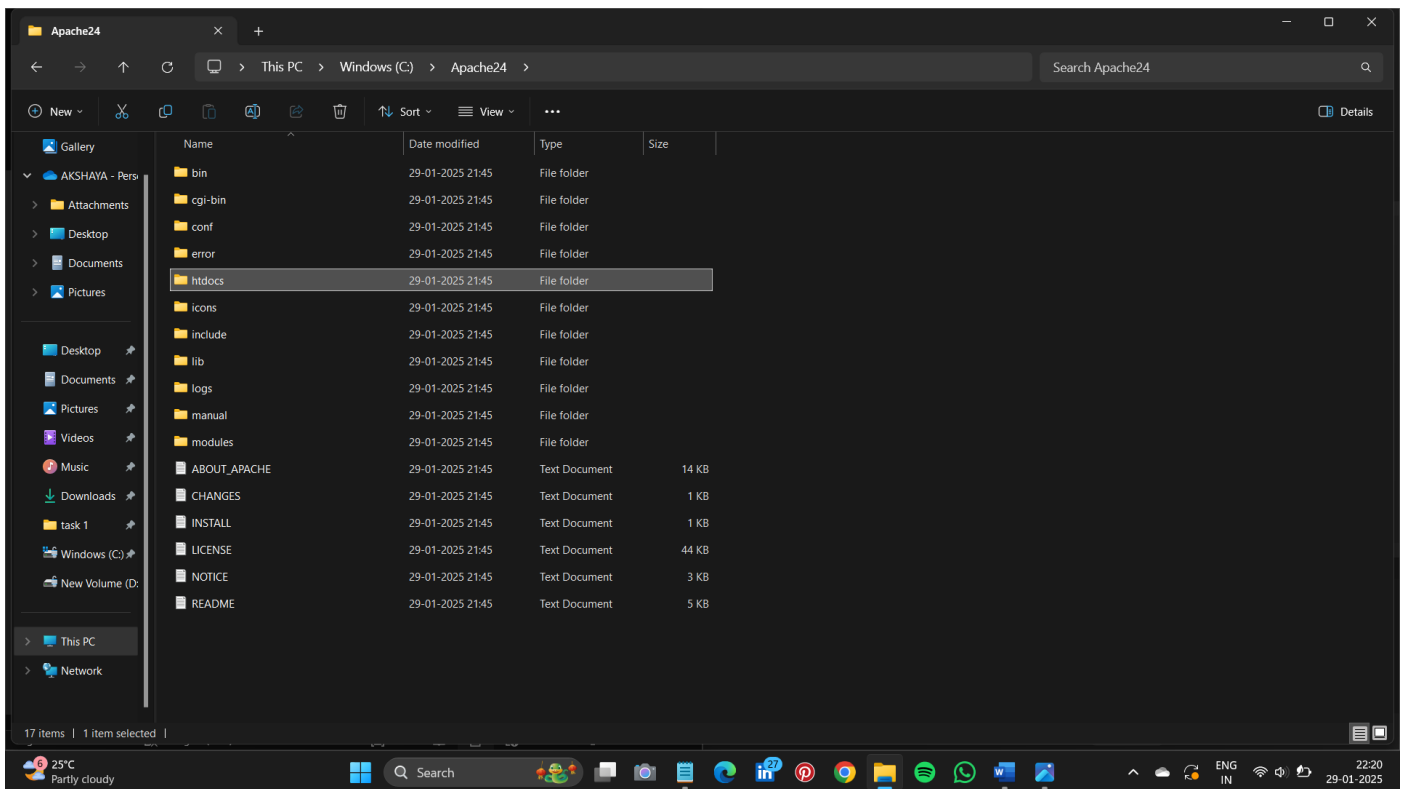
Step 7 :

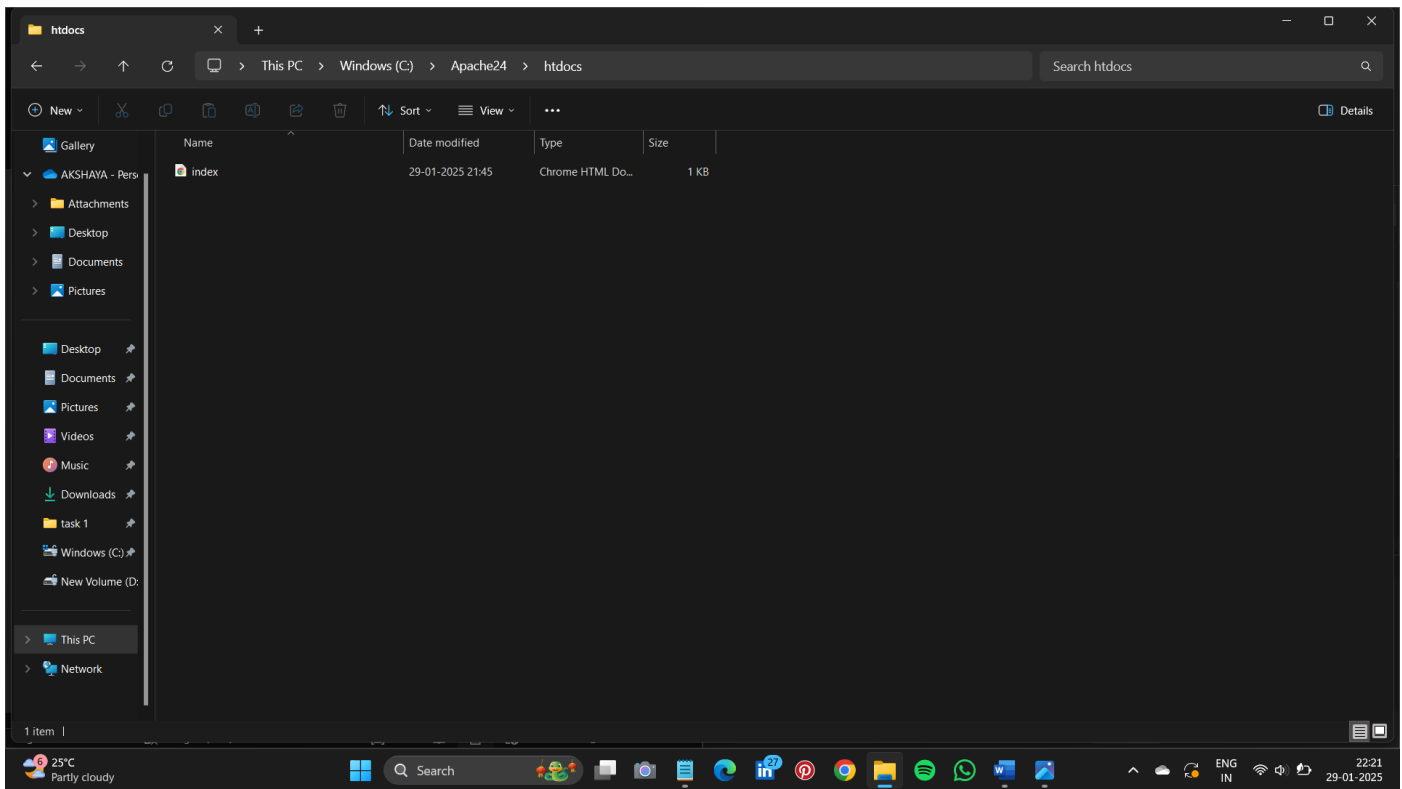
Run the command **httpd.exe -k start** to start the Apache server.

```
C:\Users\HP\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24\bin>httpd.exe -k start
```

Step 8:

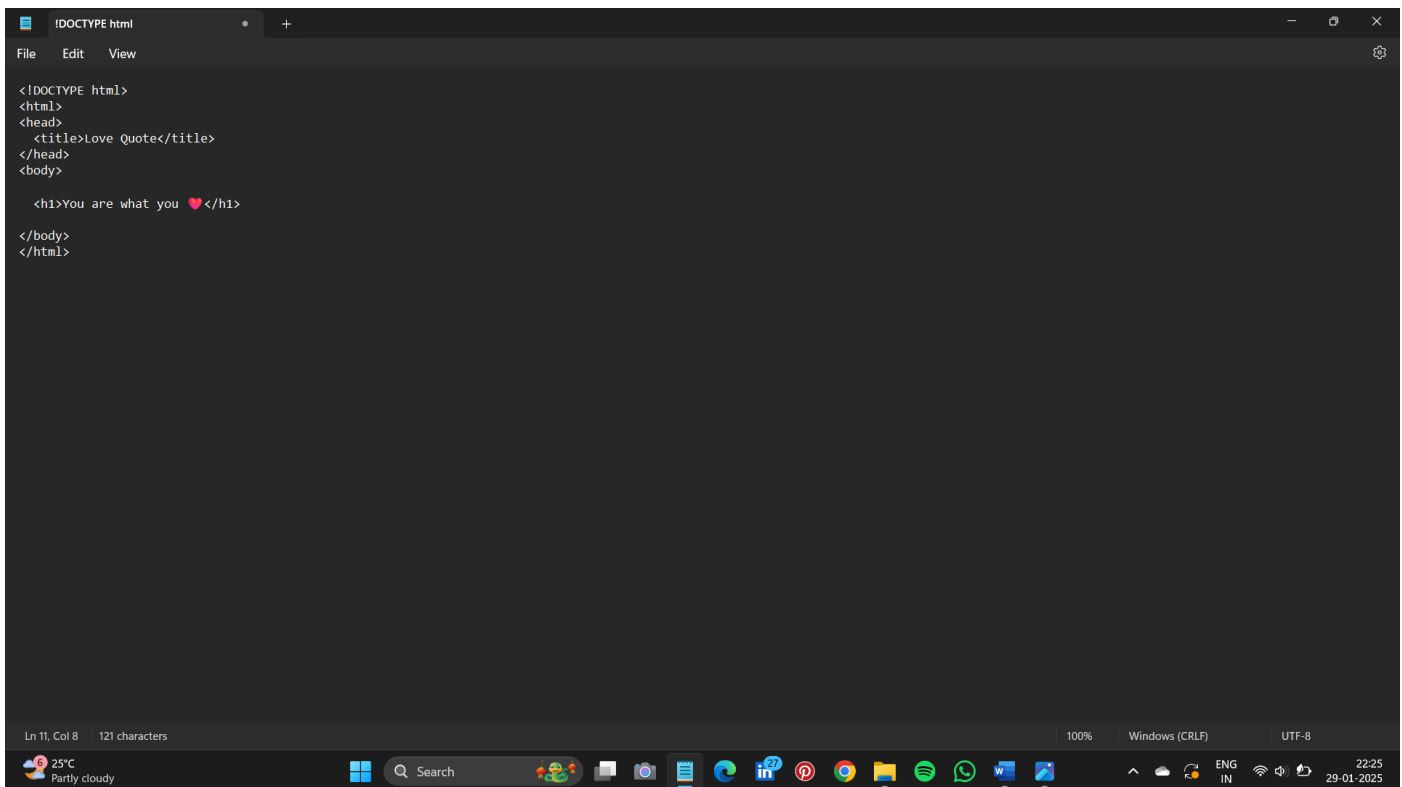
Go to the Apache folder, navigate to the **htdocs** folder, and find the **index.html** file. Right-click on it and select 'Edit with Notepad'.





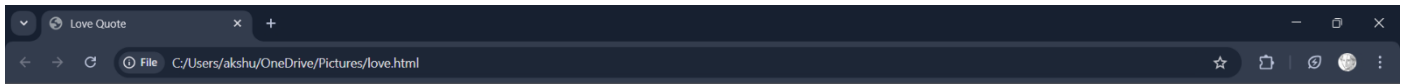
Step 9 :

Create a simple model to display your name in HTML (you may optionally add CSS for styling).



Step 10 :

Open the Chrome browser and type **localhost/index.html** in the address bar. You should be able to see the website hosted successfully.



You are what you ❤️



Expected Outcome

By completing this POC, you will:

1. Successfully configure and run an Apache server locally.
2. Host a static HTML website that displays your name.
3. Understand the basics of web server configuration and file hosting.