

## **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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Department : CSE

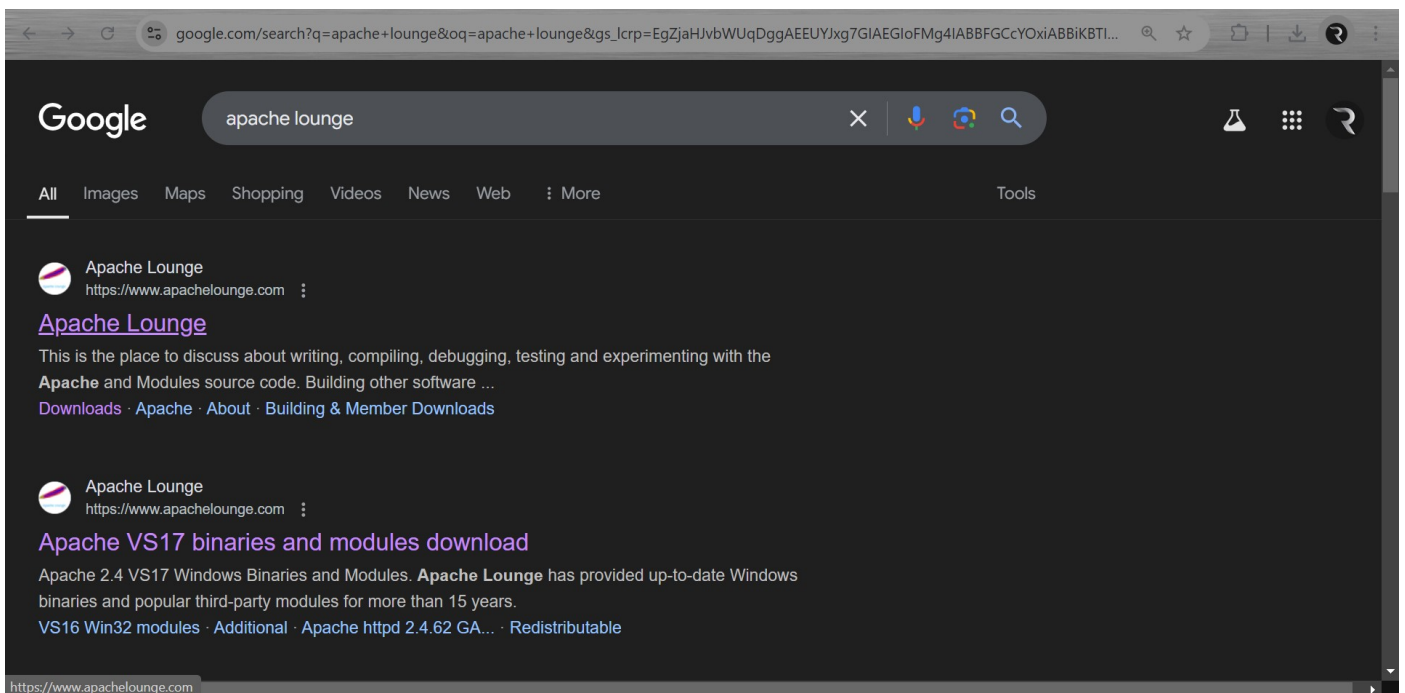
# Introduction

In this proof of concept (POC), we will explore the process of hosting a static website on a local machine using the Apache HTTP Server. This involves installing and configuring a local web server to host a simple HTML page. By completing these steps, you will gain practical experience in setting up and managing a local Apache server, a fundamental skill for web hosting and server administration.

## Step-by-Step Overview

### Step 1:

Search for "Apache Lounge" on Google and click the first link.



### Step 2 :

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

Apache Lounge  
Webmasters Apache server software

Apache Lounge is all about the Apache Web Server provided by the Apache Software Foundation (ASF) HTTPD Server Project. 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.

Join our ever-growing user-to-user community forum and talk with other webmasters and programmers who are working together and learning from each other's experiences with the Apache HTTPD Server. Although the forum is primarily for Windows environments, it is also about Apache in general. All flavors are welcome, like Linux, Mac and Raspberry.

Please help fellow Apacherians and share your knowledge. Thanks!

Forum Index	Posts	Last Post
<b>News &amp; Hangout</b> 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.	1955	Fri 24 Jan '25 13:27 mikerabat
<b>Apache</b> 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.	22102	Fri 17 Jan '25 16:06 FRubin
<b>Third-party Modules</b> This is the place to discuss third-party modules like mod_security, mod_jk etc.	4313	Fri 24 Jan '25 13:13 admin
<b>Other Software</b> 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.	5937	Thu 16 Jan '25 18:47 Obsdark
<b>Coding &amp; Scripting Corner</b> 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

## Step 3 :

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

Apache Lounge  
Webmasters Apache server software

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 [httpd.apache.org](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 2.4.62-240904 Win64**

[httpd-2.4.62-240904-win64-VS17.zip](#) 04 Sep '24 11.432k  
PGP Signature (Public [PGP key](#)), SHA1-SHA512 [Checksums](#)

**Apache 2.4.62-240904 Win32**

[httpd-2.4.62-240904-win32-vs17.zip](#) 04 Sep '24 10.285k  
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](#)

**Recent Updates:**

- 17 November 2024**  
New C++ Redistributable
- 06 November 2024**  
mod\_security Update
- 22 October 2024**  
New C++ Redistributable
- 21 October 2024**  
mod\_evasive Update
- 18 October 2024**  
Libcurl update, see [here](#)
- 04 September 2024**  
httpd 2.4.62 update
- 13 August 2024**  
mod\_jk Update
- 18 July 2024**  
httpd 2.4.62
- 03 July 2024**  
httpd 2.4.61
- 01 July 2024**

## Step 4 :

Open Command Prompt as Administrator. Type windows + R, then type cmd, right-click and use the command `cd C:\<path>\to\apache\bin` to set the path to the Apache bin folder.

```
C:\Users\RANJITHA PRABHA>cd C:\Users\RANJITHA PRABHA\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24
C:\Users\RANJITHA PRABHA\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24>
```

```
C:\Users\RANJITHA PRABHA\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24>cd C:\Users\RANJITHA PRABHA\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24\bin
C:\Users\RANJITHA PRABHA\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24\bin>
```

## Step 5 :

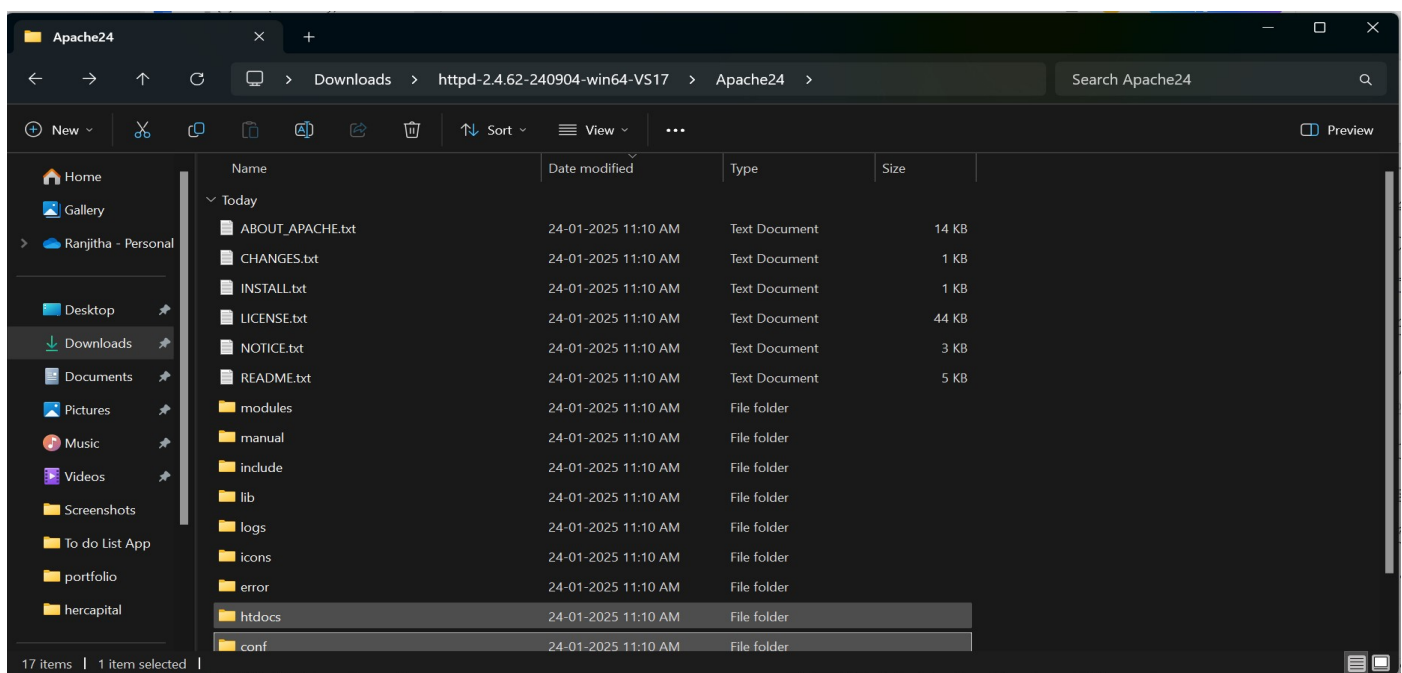
Run the installation command :

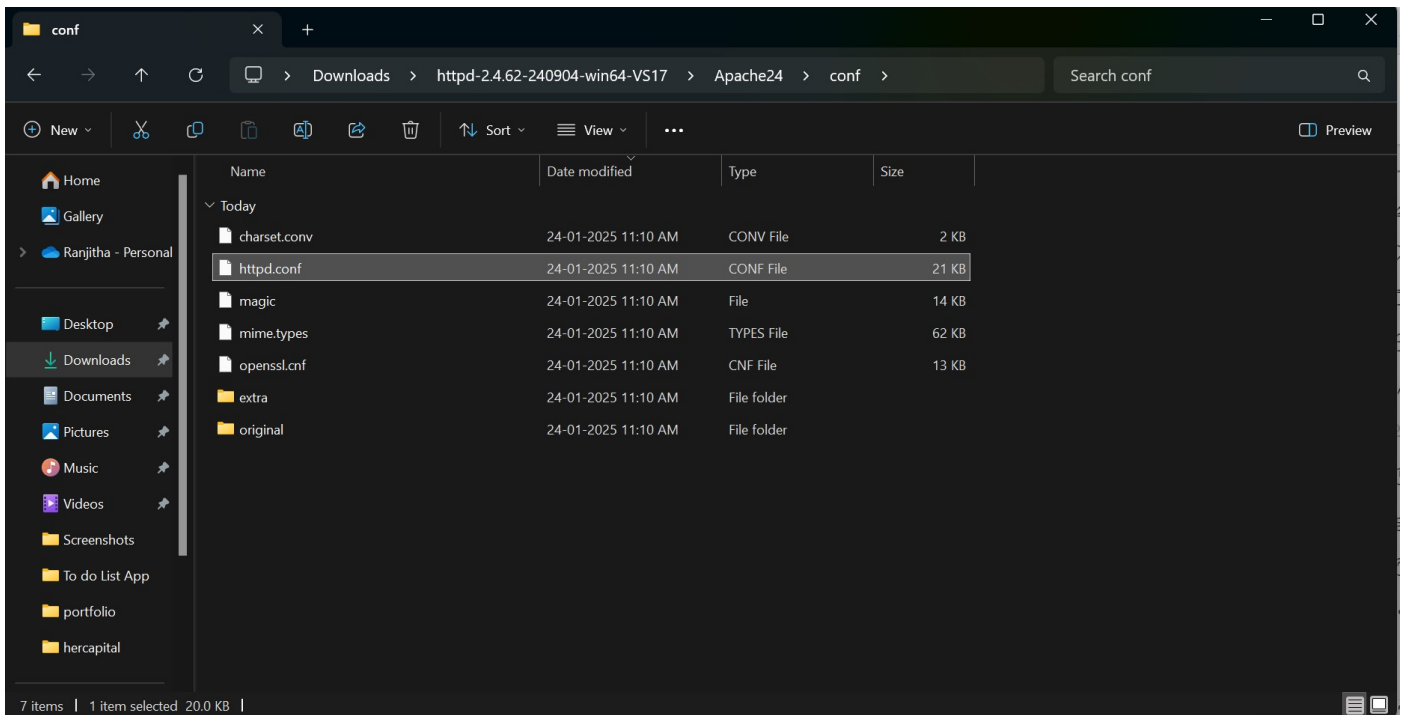
**httpd.exe -k install**

```
C:\Users\RANJITHA PRABHA\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24\bin>httpd.exe -k install
Installing the 'Apache2.4' service
(OS 5)Access is denied. : AH00369: Failed to open the Windows service manager, perhaps you forgot to log in as Administrator?
C:\Users\RANJITHA PRABHA\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24\bin>
```

## Step 6 :

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





## Step 7 :

Replace the content of the httpd.conf file with the provided configuration, ensuring the SRVROOT directive matches your Apache installation path. This setup configures the server's root directory, listening port, document root, logging paths, and permissions to serve content properly from the htdocs directory.

```
# 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:\Users\РАНJITHA PRABHA\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24"
ServerRoot "${SRVROOT}"

#
# Mutex: Allows you to set the mutex mechanism and mutex file directory
# for individual mutexes, or change the global defaults
#
# Uncomment and change the directory if mutexes are file-based and the default
# mutex file directory is not on a local disk or is not appropriate for some
# other reason.
#
# Mutex default:logs

#
# Listen: Allows you to bind Apache to specific IP addresses and/or
# ports, instead of the default. See also the <VirtualHost>
# directive.
#
# Change this to Listen on specific IP addresses as shown below to
# prevent Apache from glomming onto all bound IP addresses.
#
#Listen 12.34.56.78:80
Listen 80

..
```

Ln 37, Col 91 | 20,082 characters

100%

Windows (CRLF)

UTF-8



```
<IfModule mime_module>
#
# TypesConfig points to the file containing the list of mappings from
# filename extension to MIME-type.
#
TypesConfig conf/mime.types

#
# AddType allows you to add to or override the MIME configuration
# file specified in TypesConfig for specific file types.
#
#AddType application/x-gzip .tgz
#
# AddEncoding allows you to have certain browsers uncompress
# information on the fly. Note: Not all browsers support this.
#
#AddEncoding x-compress .Z
#AddEncoding x-gzip .gz .tgz
#
# If the AddEncoding directives above are commented-out, then you
```

## Step 8 :

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**'.

```
C:\Users\RANJITHA PRABHA\Downloads\httpd-2.4.62-240904-win64-VS17\Apache24\bin>httpd.exe -t
```

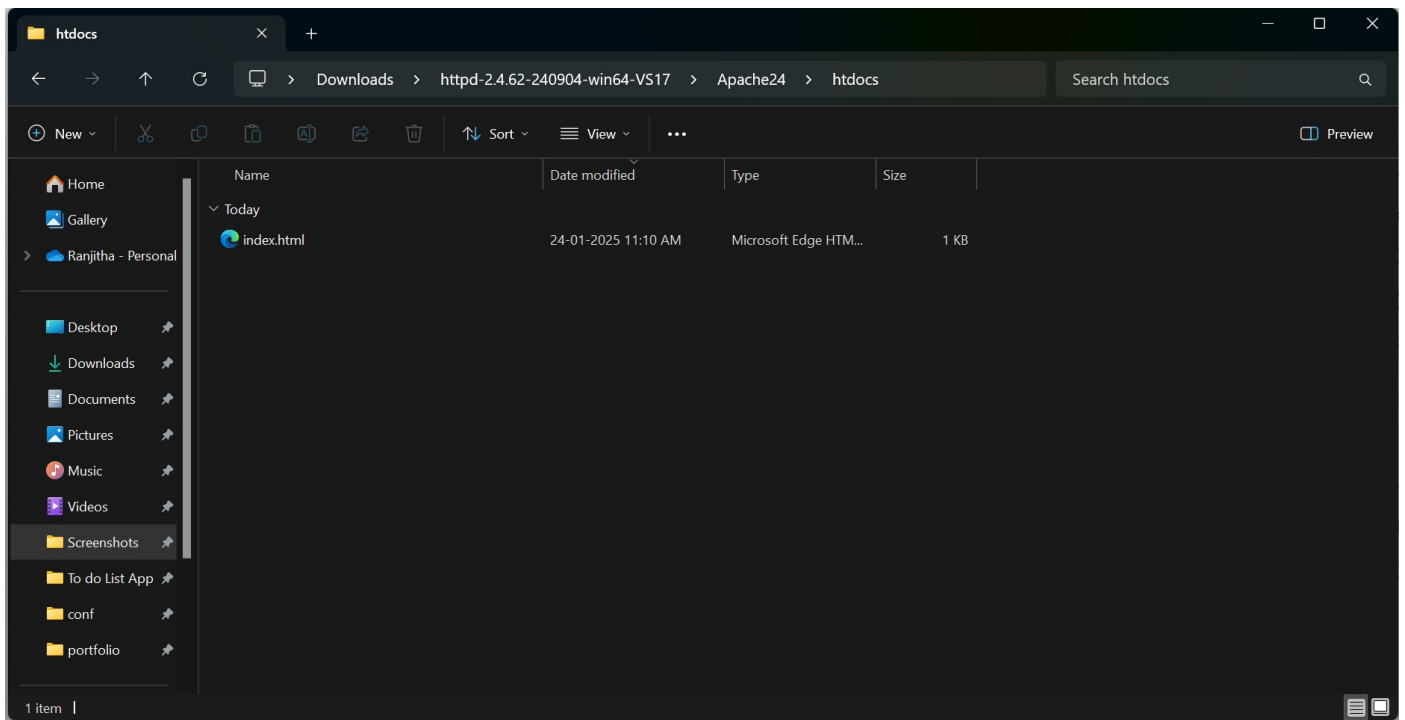
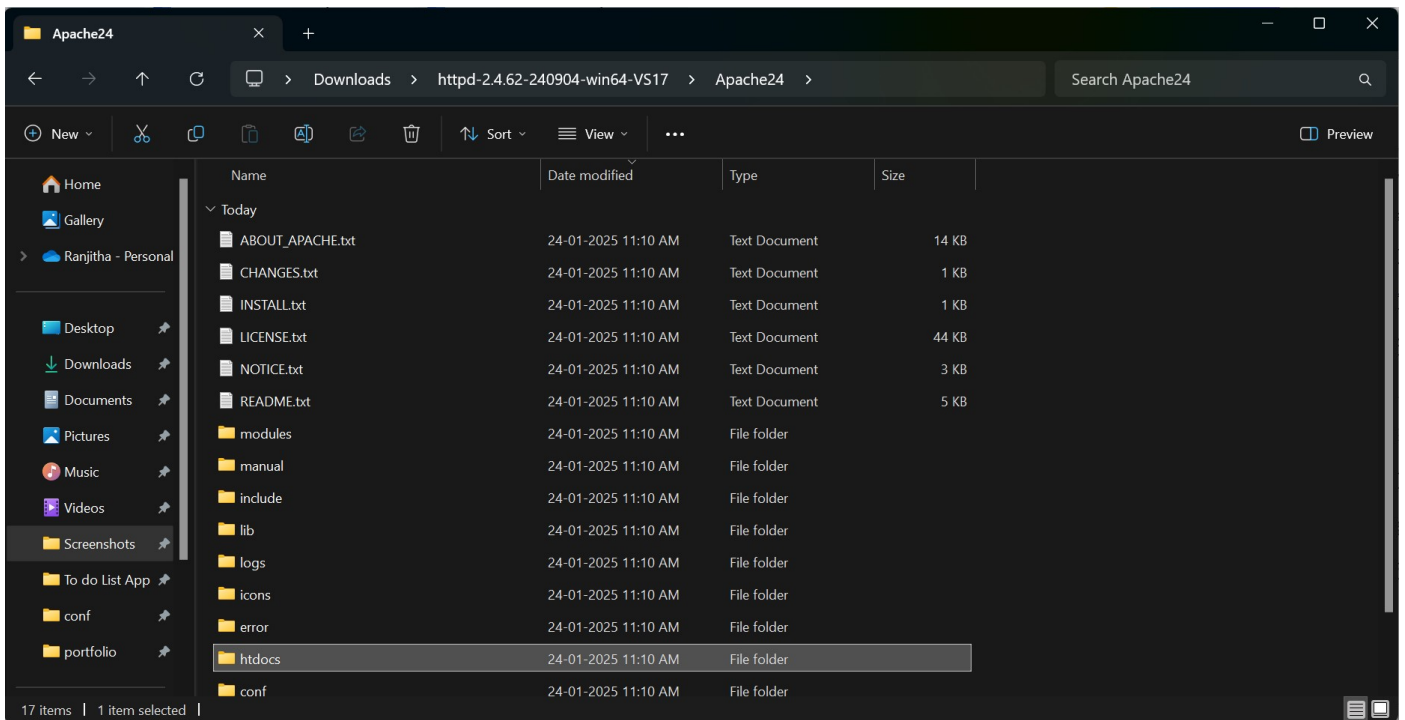
## Step 9 :

Run the command **httpd.exe -k**.

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

## Step10:

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 11 :

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

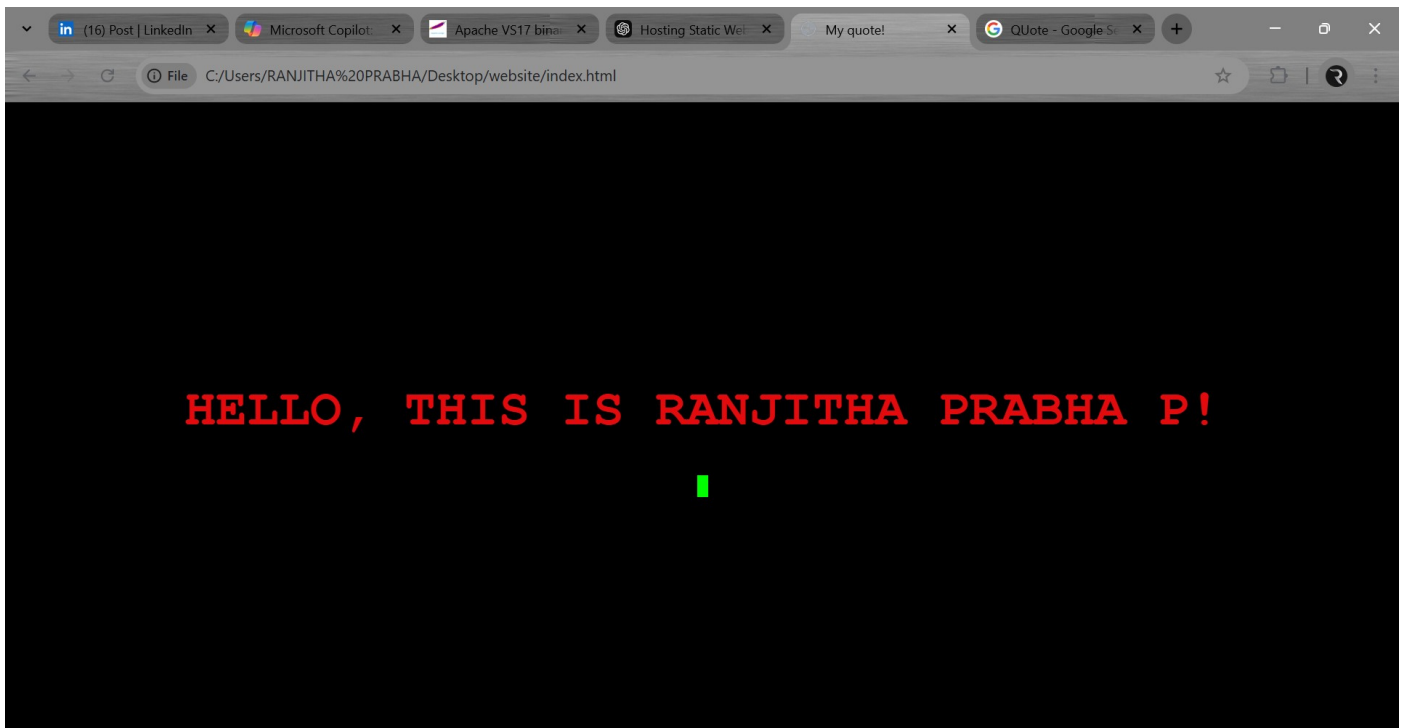
```

1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1.0">
6      <title>My quote!</title>
7      <style>
8          /* Global Styles */
9          body {
10             margin: 0;
11             padding: 0;
12             font-family: 'Courier New', monospace;
13             background: black;
14             color: #e40b0e;
15             text-align: center;
16             display: flex;
17             justify-content: center;
18             align-items: center;
19             height: 100vh;
20             flex-direction: column;
21         }
22
23         h1 {
24             font-size: 3rem;
25             font-weight: bold;
26             text-transform: uppercase;
27         }
28
29         p {

```

## Step 12 :

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





# 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.