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

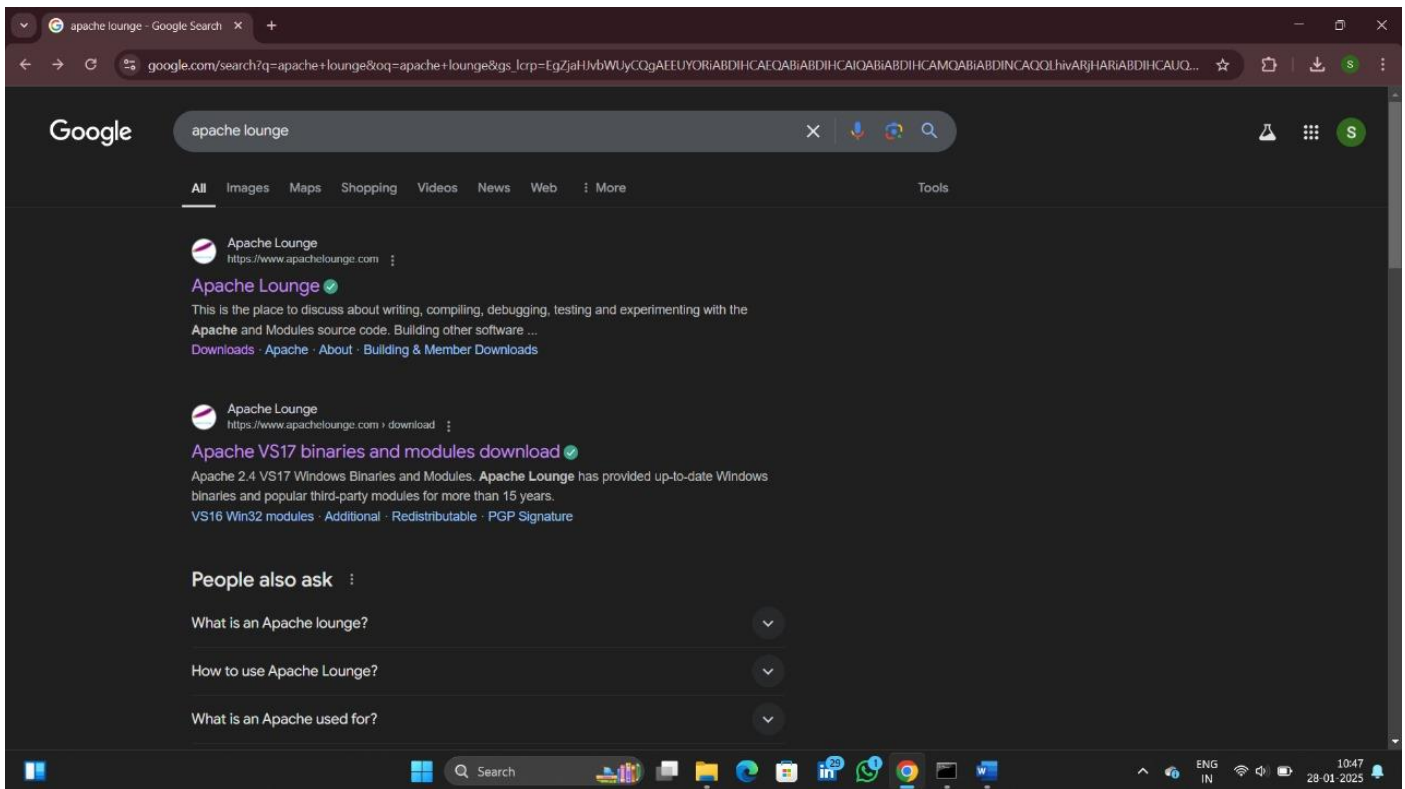Name: SYLASHRI RAJENDRAN   Department: IT

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.
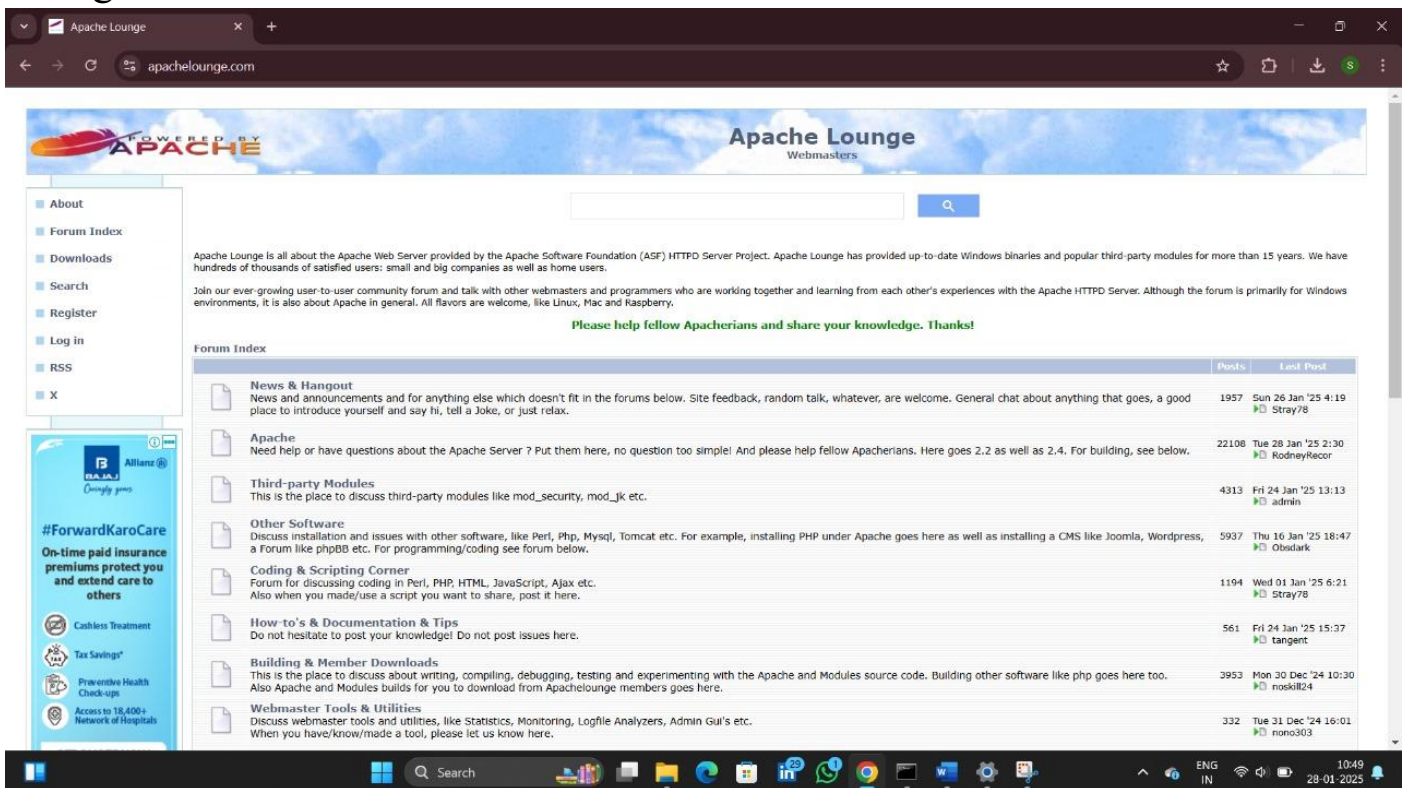
Step-by-Step Overview Step1:

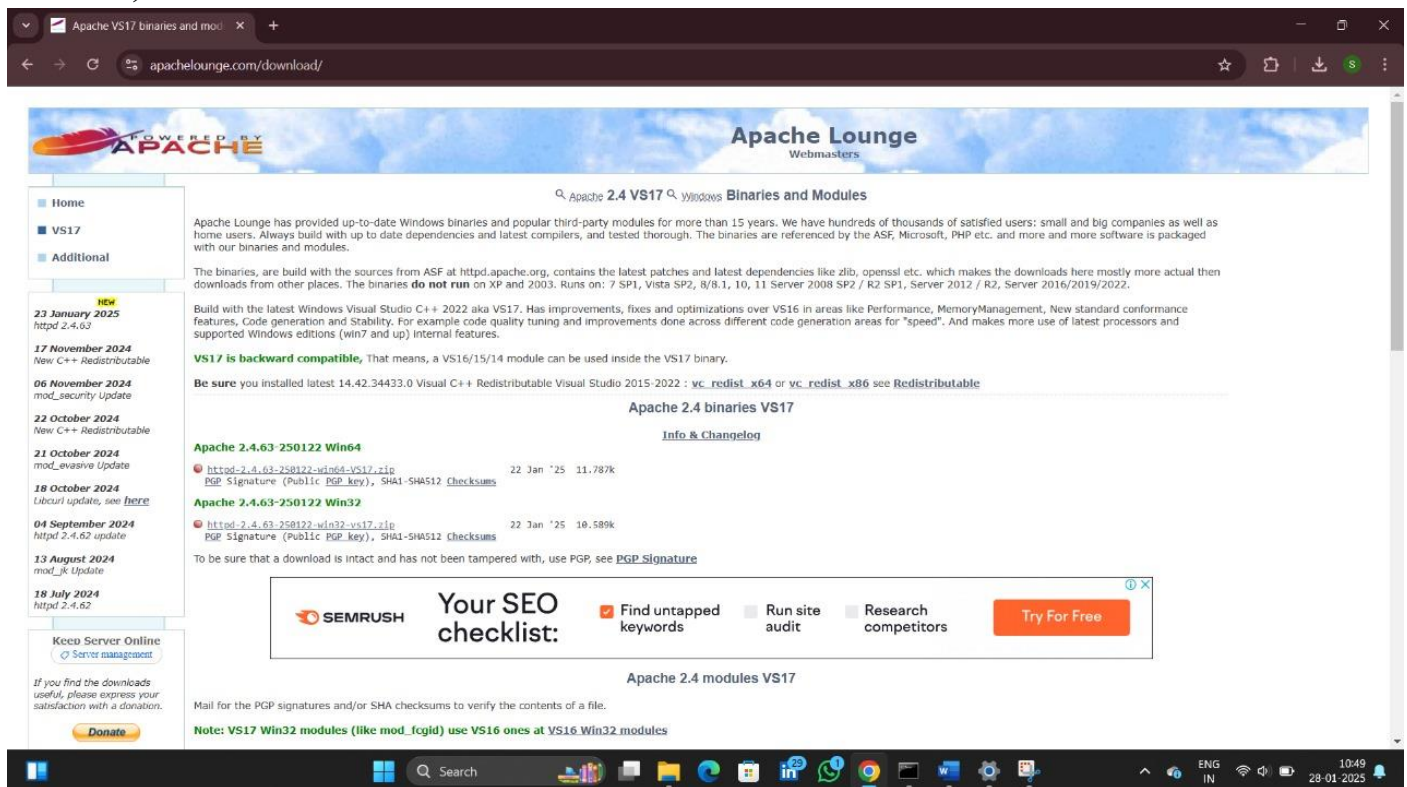Search for "Apache Lounge" on Google and click the first link.

Step 2 :

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

Step 3 :

Click on the link "Apache 2.4.63-250122 Win64" (Windows version), download the file, and extract all its contents.

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:\Windows\System32>cd C:\Users\sylas\Downloads\httpd-2.4.63-250122-win32-vs17\Apache24\bin
```
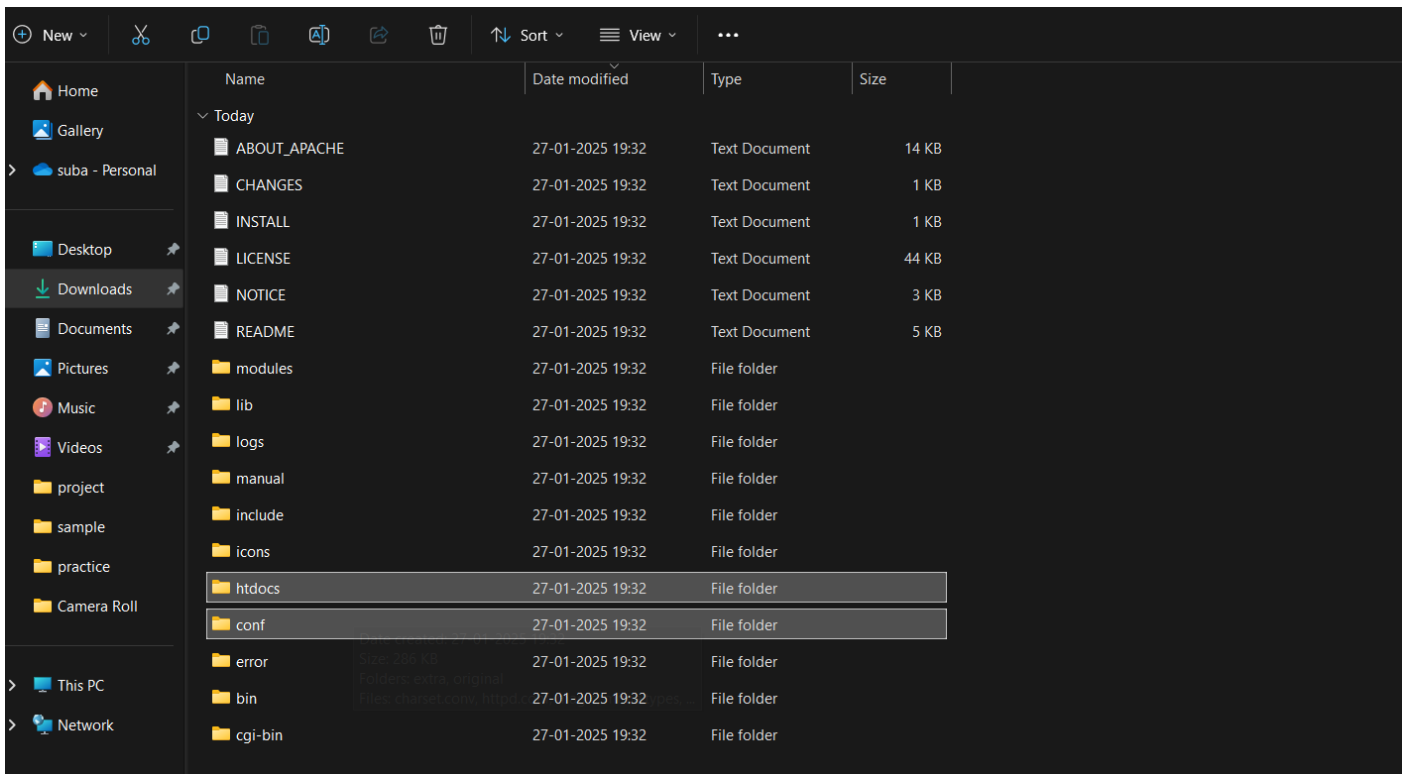
Step 5 :

Run the installation command : httpd.exe

-k install

```
C:\Users\sylas\Downloads\httpd-2.4.63-250122-win32-vs17\Apache24\bin>httpd.exe -k install
Installing the 'Apache2.4' service
The 'Apache2.4' service is successfully installed.
```

Step 6 :

Go to the Apache folder you downloaded, then go to the conf folder, and rightclick 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.

```
# Define SRVROOT
Define SRVROOT "C:\Users\sylas\Downloads\httpd-2.4.63-250122-win32-vs17\Apache24"

# Ensure the path resolves correctly for DocumentRoot
ServerRoot "${SRVROOT}"

# Listening Port
Listen 80

# ServerName (optional, but recommended for local testing)
ServerName localhost:80

# LoadModules (essential modules)
LoadModule access_compat_module modules/mod_access_compat.so
LoadModule actions_module modules/mod_actions.so
LoadModule alias_module modules/mod_alias.so
LoadModule allowmethods_module modules/mod_allowmethods.so
LoadModule auth_basic_module modules/mod_auth_basic.so
LoadModule authn_core_module modules/mod_authn_core.so
LoadModule authz_core_module modules/mod_authz_core.so
LoadModule dir_module modules/mod_dir.so
LoadModule log_config_module modules/mod_log_config.so
LoadModule mime_module modules/mod_mime.so
LoadModule rewrite_module modules/mod_rewrite.so
LoadModule setenvif_module modules/mod_setenvif.so

# DocumentRoot and Directory configuration
DocumentRoot "${SRVROOT}/htdocs"
<Directory "${SRVROOT}/htdocs">
    Options Indexes FollowSymLinks
    AllowOverride None
    Require all granted
</Directory>

# Logs (you can adjust the paths as needed)
ErrorLog "${SRVROOT}/logs/error.log"
CustomLog "${SRVROOT}/logs/access.log" common
```

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\sylas\Downloads\httpd-2.4.63-250122-win32-vs17\Apache24\bin>httpd.exe -t
Syntax OK
```
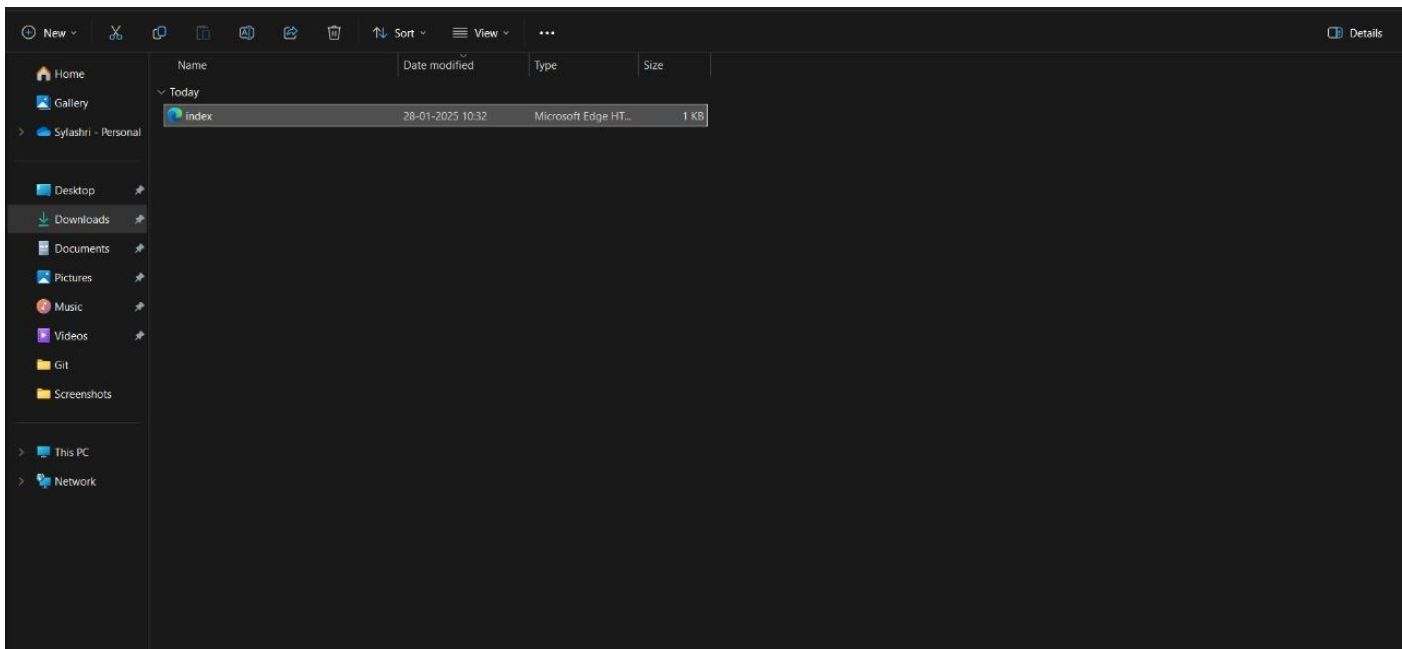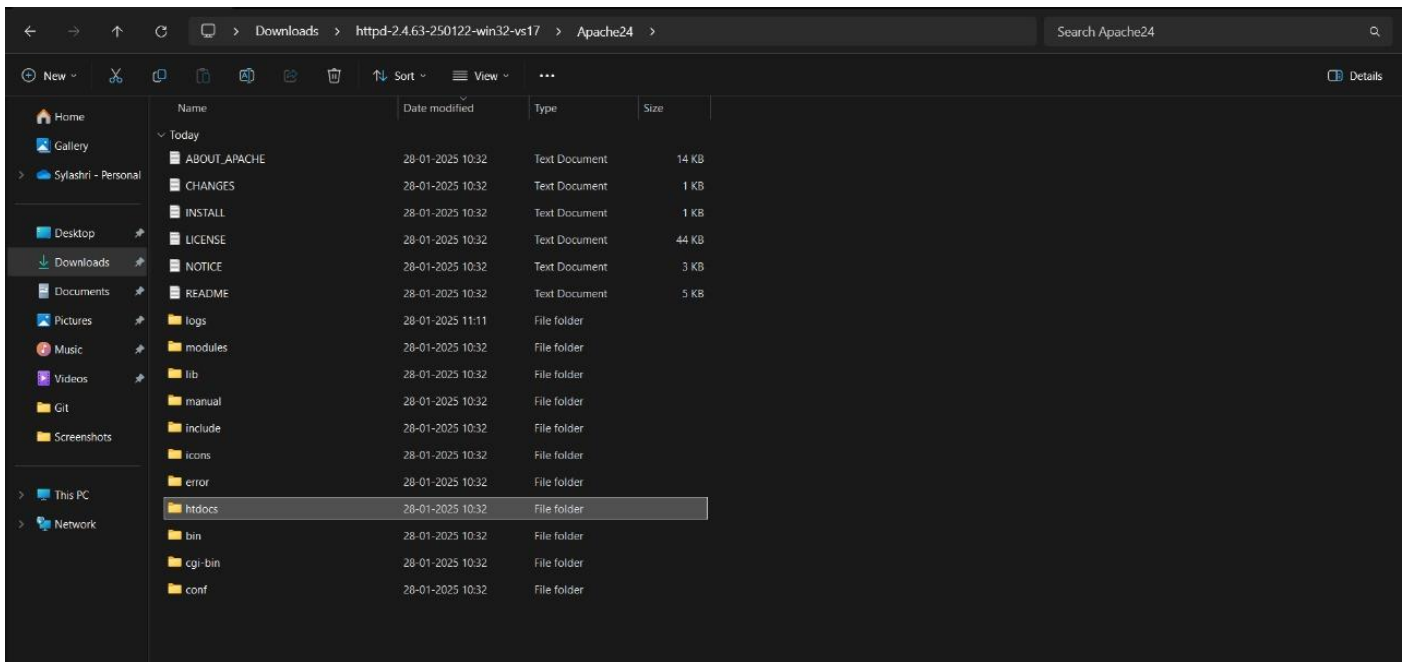
Step 9 :

Run the command httpd.exe -k start.

```
C:\Users\sylas\Downloads\httpd-2.4.63-250122-win32-vs17\Apache24\bin>httpd.exe -k start
```

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).

```
File   Edit   View                                                                          ⚙

<html><body><h1>It works!</h1></body></html>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Hello Subashini</title>
    <style>
        body {
            margin: 0;
            display: flex;
            justify-content: center;
            align-items: center;
            height: 100vh;
            background: white;
            font-family: 'Arial', sans-serif;
            color: black;
        }
        .text-container {
            text-align: center;
        }
        h1 {
            font-size: 3rem;
        }
    </style>
</head>
<body>
    <div class="text-container">
        <h1>HELLO, THIS IS SYLASHRI RAJENDRAN</h1>
    </div>
</body>
</html>
```

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.

HELLO, THIS IS SYLASHRI RAJENDRAN

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.