APACHE WEB SERVER

Step 1: Check your Linux distribution

Use the following command to check which Linux distribution you are using.

Command: grep -E '^(VERSION|NAME) =' /etc/os-release

```
gfg@fedora:~2$ grep -E "^(VERSION|NAME)=" /etc/os-release
NAME="Fedora Linux"
VERSION="39 (KDE Plasma)"
gfg@fedora:~$
```

Checking Linux distribution (Fedora)

Step 2: Update Your System

1. On Ubuntu/Debian-based systems:

Command: sudo apt update && sudo apt upgrade

2. On Fedora-based systems:

Command: sudo dnf update -y

3. On RHEL-based systems:

Command: sudo yum update -y

```
gfg@fedora:~$ sudo dnf update
[sudo] password for gfg:
Fedora 39 - x86_64 - Updates        1.8 kB/s | 5.6 kB     00:0
```

Updating system (fedora)

Step 3: Install Apache Web Server

1. On Ubuntu/Debian-based systems:

Command: sudo apt install apache2 -y

2. On Fedora-based systems:

Command: sudo dnf install httpd -y

3. On RHEL-based systems:

Command: sudo yum install httpd -y

```
gfg@fedora:~1$ sudo dnf install httpd -y
Last metadata expiration check: 0:06:06 ago on Wed 28 Feb 202
5:01 CAT.
Dependencies resolved.
================================================================
 Package                    Arch   Version          Repo
================================================================
Installing:
 httpd                      x86_64 2.4.58-1.fc39    updates
Installing dependencies:
 apr                        x86_64 1.7.3-2.fc39     fedora
 apr-util                   x86_64 1.6.3-4.fc39     fedora
 fedora-logos-httpd         noarch 38.1.0-2.fc39    fedora
```

Installing Apache web server

Step 4: Enable the Services

1. On Ubuntu/Debian-based systems:

Command: sudo systemctl enable apache2

2. On Fedora-based systems:

Command: sudo systemctl enable httpd.service

3. On RHEL-based systems:

Command: sudo systemctl enable httpd.service

```
gfg@fedora:~$ systemctl enable httpd
gfg@fedora:~$
```

Starting services for the Apache Web Server

Step 5: Test the Server by Hosting a Simple Website

First, we will create a directory for our test website using the following command.

Command: sudo mkdir /var/www/html/test _website/

Now we will add index.html for our test website along with some testing code using the following command.

Command: echo '<html><head><title>Example</title></head><body><h1>GFG</h1> This is a test. </body></html>' | sudo tee /var/www/html/test_website/index.html

Now we will add the configuration file using the following command

Command:

```
sudo echo '<VirtualHost *:80>
    ServerName web.testingserver.com
    DocumentRoot /var/www/html/website
    DirectoryIndex index.html
    ErrorLog /var/log/httpd/example.com_error.log
    CustomLog /var/log/httpd/example.com_requests.log combined
</VirtualHost>' > /etc/httpd/conf.d/web.conf
```

Once we create the required config file and test the website, we will need to own the Apache website directory for permissions.

Command:

```
sudo chmod -R 755 /var/www/html/test_website
```

OUTPUT: