

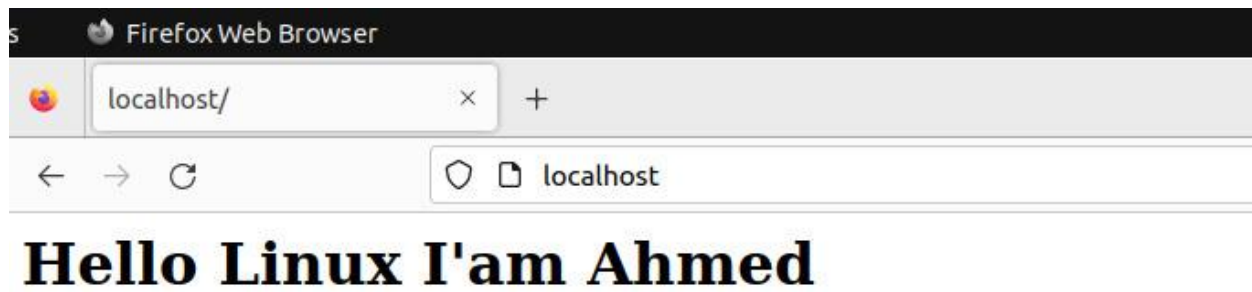
1-

```
samir@samir-VirtualBox:~$ sudo apt install apache2
[sudo] password for samir:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils libapr1 libaprutil1
  libaprutil1-dbd-sqlite3 libaprutil1-ldap
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom www-browser
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils libapr1 libaprutil1
  libaprutil1-dbd-sqlite3 libaprutil1-ldap
0 upgraded, 8 newly installed, 0 to remove and 220 not upgraded.
Need to get 1,918 kB of archives.
After this operation, 7,706 kB of additional disk space will be used.
Do you want to continue? [Y/n]
```

2-

```
samir@samir-VirtualBox:~$ cd /var/www/html
samir@samir-VirtualBox:/var/www/html$ sudo nano new.html
samir@samir-VirtualBox:/var/www/html$ sudo mv new.html index.html
samir@samir-VirtualBox:/var/www/html$ touch index.html
touch: cannot touch 'index.html': Permission denied
samir@samir-VirtualBox:/var/www/html$ cat index.html index.html
<h1> Hello Linux I'am Ahmed <h1>
<h1> Hello Linux I'am Ahmed <h1>
samir@samir-VirtualBox:/var/www/html$
```

```
<h1> Hello Linux I'am Ahmed <h1>
samir@samir-VirtualBox:/var/www/html$ sudo systemctl restart apache2
```



3-

```
samir@samir-VirtualBox:/var/www/html$ sudo systemctl restart apache2
samir@samir-VirtualBox:/var/www/html$ sudo apt install libapache2-mod-php
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libapache2-mod-php8.1 php-common php8.1-cli php8.1-common php8.1-opcache php8.1-readline
Suggested packages:
  php-pear
The following NEW packages will be installed:
  libapache2-mod-php libapache2-mod-php8.1 php-common php8.1-cli php8.1-common php8.1-opcache
0 upgraded, 7 newly installed, 0 to remove and 220 not upgraded.
Need to get 5,118 kB of archives.
After this operation, 21.3 MB of additional disk space will be used.
```

4,5,6-

```
samir@samir-VirtualBox:/var/www/html$ sudo mkdir lab4
samir@samir-VirtualBox:/var/www/html$ sudo nano lab4/index.php
```

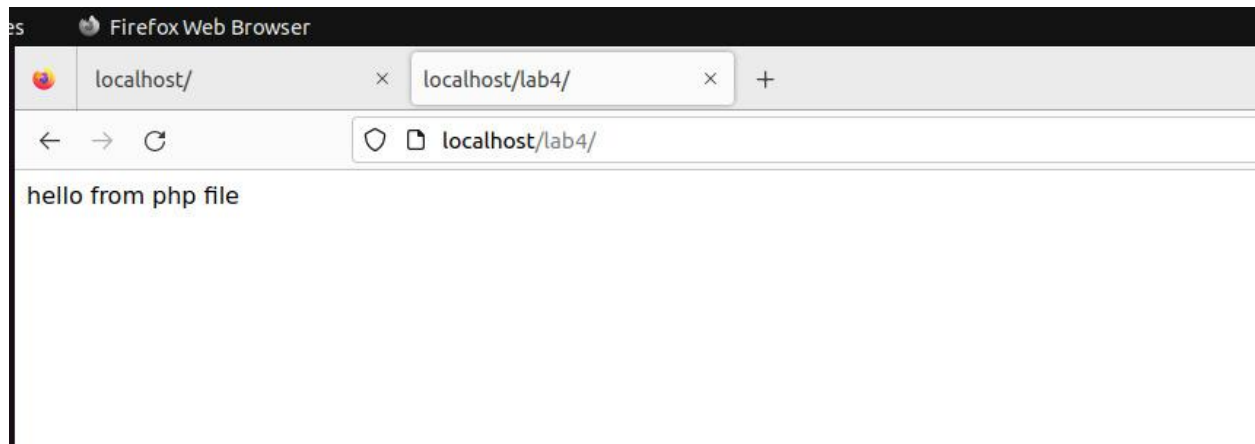
```
GNU nano 6.2
<?php echo 'hello from php file'; ?>
```

```
samir@samir-VirtualBox:/var/www/html$ sudo mkdir lab4
samir@samir-VirtualBox:/var/www/html$ sudo nano lab4/index.php
samir@samir-VirtualBox:/var/www/html$ sudo nano lab4/index.php
samir@samir-VirtualBox:/var/www/html$ sudo nano /etc/apache2/sites-available/lab4.conf
samir@samir-VirtualBox:/var/www/html$ sudo nano /etc/apache2/sites-available/lab4.conf
samir@samir-VirtualBox:/var/www/html$ sudo a2ensite lab4.conf
Enabling site lab4.
To activate the new configuration, you need to run:
  systemctl reload apache2
samir@samir-VirtualBox:/var/www/html$ systemctl relaod apache2
Unknown command verb relaod.
samir@samir-VirtualBox:/var/www/html$
samir@samir-VirtualBox:/var/www/html$ systemctl reload apache2
Job for apache2.service failed.
See "systemctl status apache2.service" and "journalctl -xeu apache2.service" for details
```

```
GNU nano 6.2
Configuration:
<VirtualHost *:80>
  ServerName lab4.local
  DocumentRoot /var/www/html/lab4

  ErrorLog /var/log/apache2/lab4-error.log
  CustomLog /var/log/apache2/lab4-access.log combined

  <Directory /var/www/html/lab4>
    AllowOverride All
    Require all granted
  </Directory>
</VirtualHost>
```



7-

```
See systemctl status apache2.service and journalctl -xeu apache2.service for details.  
samir@samir-VirtualBox:/var/www/html$ sudo nano /etc/apache2/sites-available/lab4.conf  
samir@samir-VirtualBox:/var/www/html$
```