

```
omar@omar-VirtualBox:~$ sudo apt install apache2
[sudo] password for omar:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
apache2 is already the newest version (2.4.52-1ubuntu4.4).
0 upgraded, 0 newly installed, 0 to remove and 223 not upgraded.
omar@omar-VirtualBox:~$ sudo echo '<html><h1>hello omar</h1></html>' /vqr/www/html/index.html
<html><h1>hello omar</h1></html> /vqr/www/html/index.html
```

```
omar@omar-VirtualBox:/var/www/html$ sudo echo '<html><h1>hello omar</h1></html>' > /var/www/html/index.html
omar@omar-VirtualBox:/var/www/html$ cd /var/www/html/
omar@omar-VirtualBox:/var/www/html$ cat index.html
<html><h1>hello omar</h1></html>
```

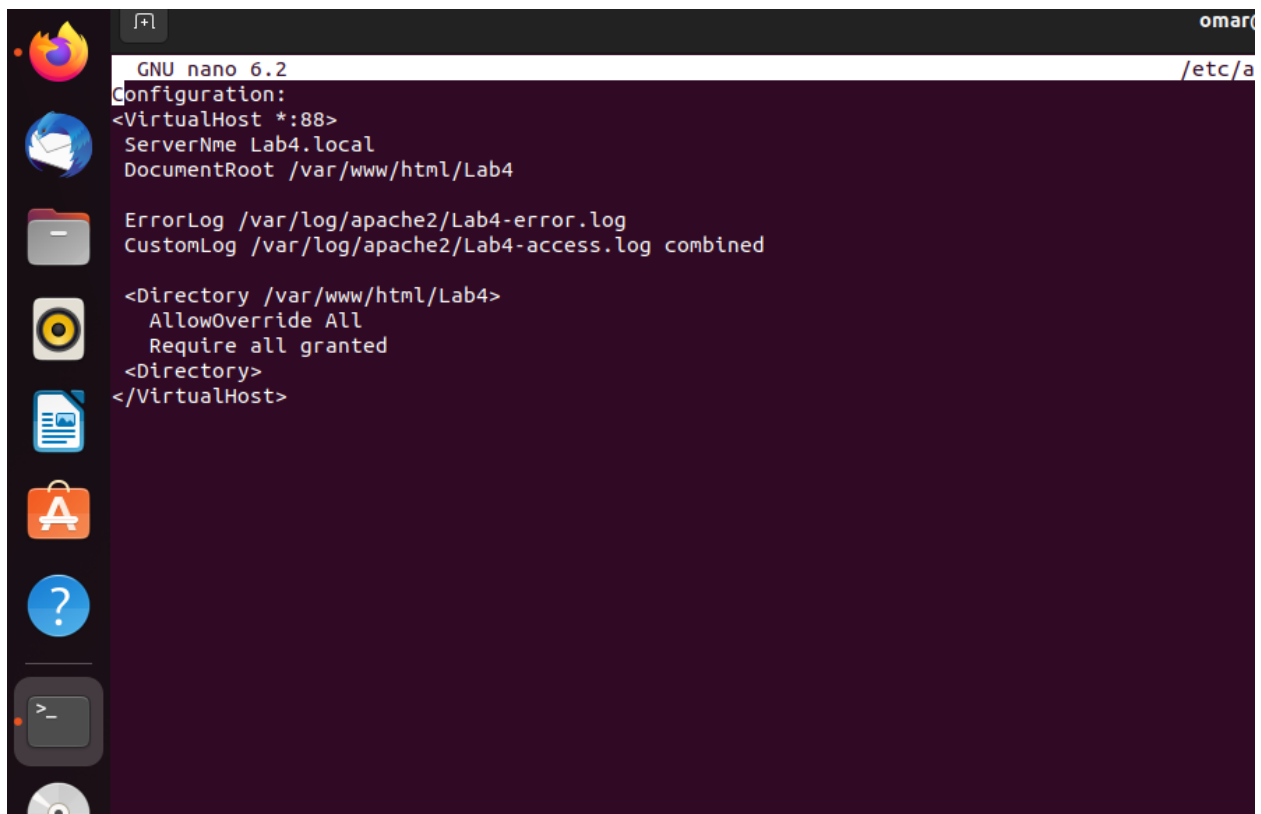
```
omar@omar-VirtualBox:/var/www/html$ sudo apt install libapache2-mod-php
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libapache2-mod-php8.1 php-common php8.1-cli php8.1-common
  php8.1-opcache 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 php8.1-readline
0 upgraded, 7 newly installed, 0 to remove and 223 not upgraded.
Need to get 5,118 kB of archives.
After this operation, 21.3 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://eg.archive.ubuntu.com/ubuntu jammy/main amd64 php-common all 2:92ubuntu1 [12.4 kB]
Get:2 http://eg.archive.ubuntu.com/ubuntu jammy-updates/main amd64 php8.1-common amd64 8.1.2-1ubuntu2.11 [1,126 kB]
Get:3 http://eg.archive.ubuntu.com/ubuntu jammy-updates/main amd64 php8.1-opcache amd64 8.1.2-1ubuntu2.11 [365 kB]
Get:4 http://eg.archive.ubuntu.com/ubuntu jammy-updates/main amd64 php8.1-readline amd64 8.1.2-1ubuntu2.11 [13.5 kB]
Get:5 http://eg.archive.ubuntu.com/ubuntu jammy-updates/main amd64 php8.1-cli amd64 8.1.2-1ubuntu2.11 [1,833 kB]
Get:6 http://eg.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libapache2-mod-php8.1 amd64 8.1.2-1ubuntu2.11 [1,765 kB]
Get:7 http://eg.archive.ubuntu.com/ubuntu jammy/main amd64 libapache2-mod-php all 2:8.1+92ubuntu1 [2,898 B]
Fetched 5,118 kB in 5s (944 kB/s)
Selecting previously unselected package php-common.
(Reading database ... 205634 files and directories currently
installed.)
Preparing to unpack .../0-php-common_2%3a92ubuntu1_all.deb ..
.
Unpacking php-common (2:92ubuntu1) ...
Selecting previously unselected package php8.1-common.
Preparing to unpack .../1-php8.1-common_8.1.2-1ubuntu2.11_amd
64.deb ...
Unpacking php8.1-common (8.1.2-1ubuntu2.11) ...
Selecting previously unselected package php8.1-opcache.
Preparing to unpack .../2-php8.1-opcache_8.1.2-1ubuntu2.11_am
d64.deb ...
Unpacking php8.1-opcache (8.1.2-1ubuntu2.11) ...
Selecting previously unselected package php8.1-readline.
Preparing to unpack .../3-php8.1-readline_8.1.2-1ubuntu2.11_a
md64.deb ...
Unpacking php8.1-readline (8.1.2-1ubuntu2.11) ...
Selecting previously unselected package php8.1-cli.
```

```
.11) ...
omar@omar-VirtualBox:/var/www/html$ sudo mkdir Lab4
omar@omar-VirtualBox:/var/www/html$ sudo nano Lab4/index.php
omar@omar-VirtualBox:/var/www/html$ sudo nano /etc/apache2/sites-available/Lab4.conf
omar@omar-VirtualBox:/var/www/html$ sudo nano Lab4/index.php
omar@omar-VirtualBox:/var/www/html$ sudo nano /etc/apache2/sites-available/Lab4.conf
```



A terminal window with a dark purple background. The title bar at the top reads "GNU nano 6.2" on the left and "Lab4/index." on the right. The editor shows a file with a PHP extension (indicated by a green icon and "?php" text). The code currently contains a single line: `echo 'hello omar mohamed';`. The cursor is positioned at the end of this line, indicated by a green prompt character `?>`.

```
GNU nano 6.2 Lab4/index.
?php
echo 'hello omar mohamed';
?>
```

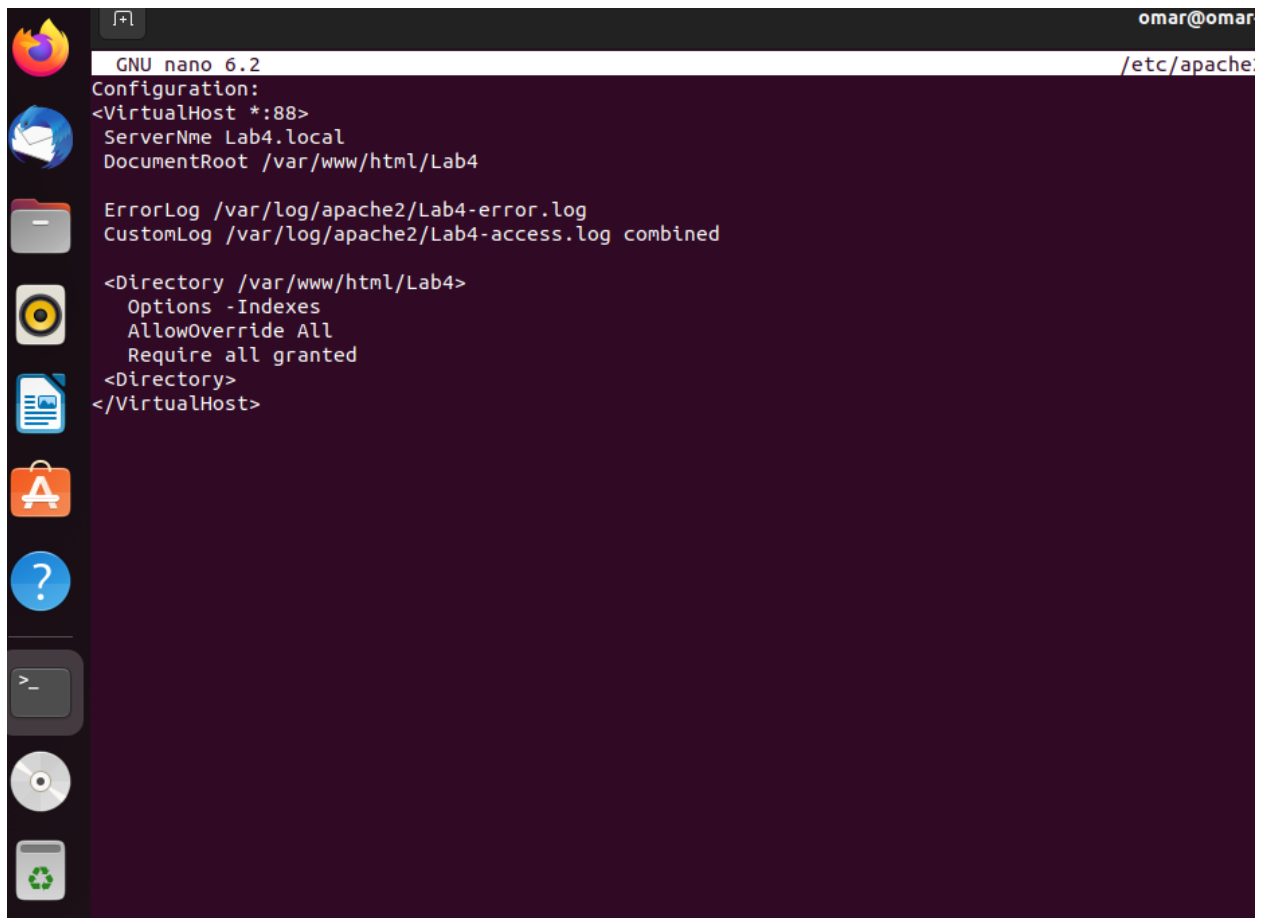


A terminal window with a dark purple background. The title bar at the top reads "GNU nano 6.2" on the left and "omar /etc/a" on the right. The editor shows an Apache configuration file. The code contains the following configuration: `Configuration:`, `<VirtualHost *:88>`, `ServerNme Lab4.local`, `DocumentRoot /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>`, and `</VirtualHost>`. The cursor is positioned at the end of the `</VirtualHost>` line, indicated by a green prompt character `?>`.

```
GNU nano 6.2 omar /etc/a
Configuration:
<VirtualHost *:88>
  ServerNme 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>
?>
```



```
omar@omar:~$ nano /etc/apache2/ports.conf
GNU nano 6.2 /etc/apache2/ports.conf
Configuration:
<VirtualHost *:88>
  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>
    Options -Indexes
    AllowOverride All
    Require all granted
  </Directory>
</VirtualHost>
```