

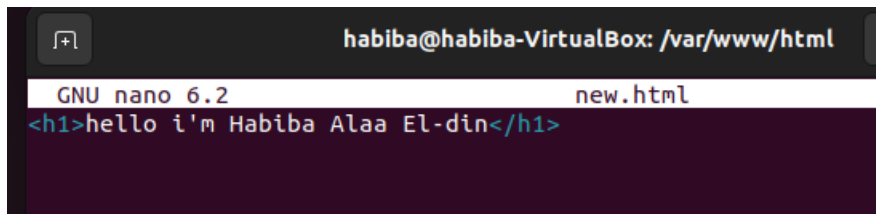
Lab 4 System Admin 2

1-Using apt install apache2 server

```
habiba@habiba-VirtualBox:~$ sudo apt install apache2
[sudo] password for habiba:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
apache2 is already the newest version (2.4.52-1ubuntu4.3).
The following package was automatically installed and is no longer required:
  systemd-hwe-hwdb
Use 'sudo apt autoremove' to remove it.
0 upgraded, 0 newly installed, 0 to remove and 205 not upgraded.
habiba@habiba-VirtualBox:~$ sudo systemctl start apache
Failed to start apache.service: Unit apache.service not found.
habiba@habiba-VirtualBox:~$ sudo systemctl start apache2
habiba@habiba-VirtualBox:~$
```

2-Replace the default index.html content with your own content

```
habiba@habiba-VirtualBox:~$ cd /var/www/html
habiba@habiba-VirtualBox:/var/www/html$ sudo nano new.html
habiba@habiba-VirtualBox:/var/www/html$ sudo mv new.html index.html
```



A screenshot of the nano text editor. The title bar shows 'habiba@habiba-VirtualBox: /var/www/html'. The editor content shows 'GNU nano 6.2' and 'new.html' in the top right. The main text area contains the HTML code: `<h1>hello i'm Habiba Alaa El-din</h1>`.

```
habiba@habiba-VirtualBox:/var/www/html$ sudo nano new.html
habiba@habiba-VirtualBox:/var/www/html$ sudo systemctl restart apache2
habiba@habiba-VirtualBox:/var/www/html$
```



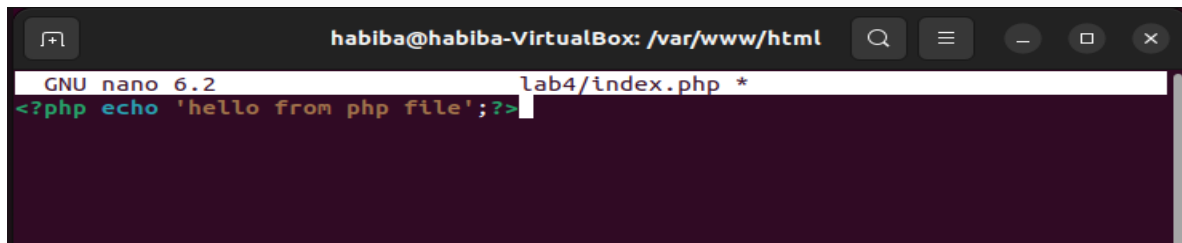
3-Install php module for apache2

```
habiba@habiba-VirtualBox:/var/www/html$ sudo apt install libapache2-mod-php
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following package was automatically installed and is no longer required:
```

4-Create new Named VirtualHost to serve new php project with special access log

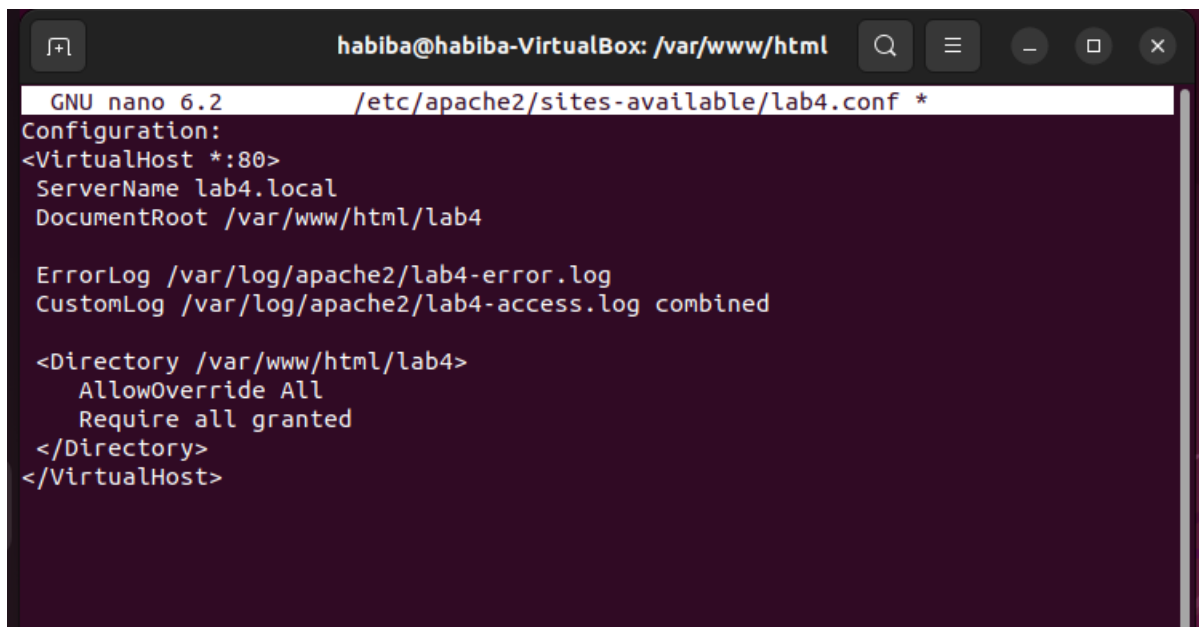
5-Create simple index.php file for the php site

```
habiba@habiba-VirtualBox:/var/www/html$ sudo mkdir lab4
[sudo] password for habiba:
habiba@habiba-VirtualBox:/var/www/html$ sudo nano lab4/index.php
```



A screenshot of a terminal window showing the nano text editor. The title bar indicates the file is 'lab4/index.php'. The editor content shows the first line of a PHP file: `<?php echo 'hello from php file';?>`.

```
habiba@habiba-VirtualBox:/var/www/html$ sudo nano lab4/index.php
habiba@habiba-VirtualBox:/var/www/html$ sudo nano /etc/apache2/sites-available/lab4.conf
habiba@habiba-VirtualBox:/var/www/html$ sudo a2ensite lab4.conf
Enabling site lab4.
To activate the new configuration, you need to run:
    systemctl reload apache2
habiba@habiba-VirtualBox:/var/www/html$ systemctl reload apache2
Job for apache2.service failed.
```

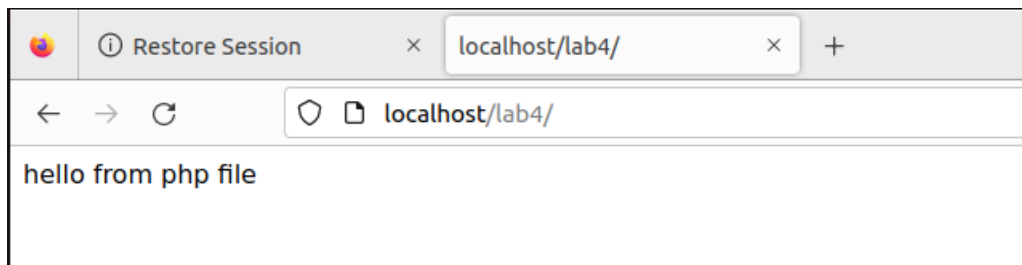


A screenshot of a terminal window showing the nano text editor editing the file '/etc/apache2/sites-available/lab4.conf'. The configuration content is as follows:

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

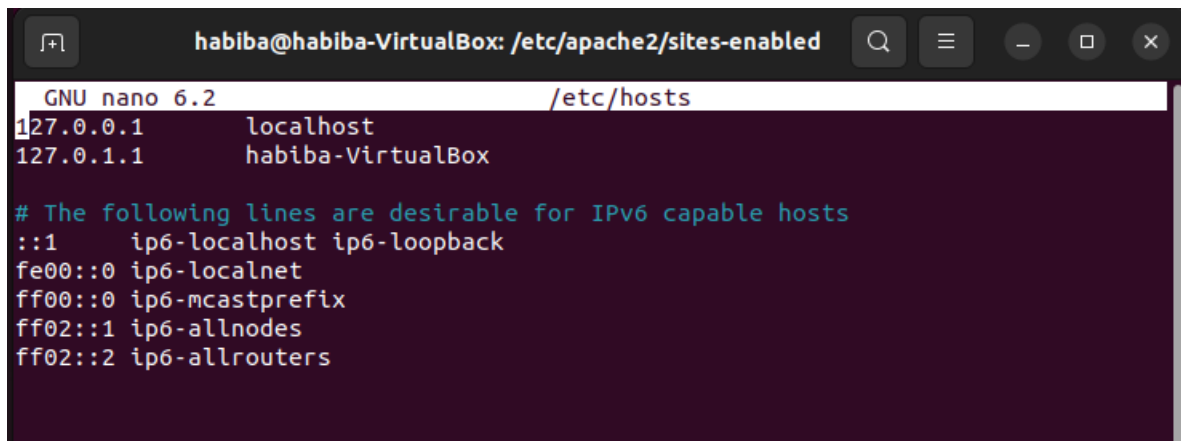
    ErrorLog /var/log/apache2/lab4-error.log
    CustomLog /var/log/apache2/lab4-access.log combined

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



6-Configure /etc/hosts for php site.

```
habiba@habiba-VirtualBox:/etc/apache2/sites-enabled$ sudo nano /etc/hosts
habiba@habiba-VirtualBox:/etc/apache2/sites-enabled$
```



7-Disable directory listing for the new virtualhost

```
habiba@habiba-VirtualBox:/var/www/html$ sudo nano /etc/apache2/sites-available/lab4.conf
habiba@habiba-VirtualBox:/var/www/html$
```

