

- Using apt install apache2 server

```

mahmoud@mahmoud-Virtual-Machine:~/Desktop$ sudo apt install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
mahmoud@mahmoud-Virtual-Machine:~/Desktop$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Active: active (running) since Sat 2023-04-08 12:21:24 EET; 3min 23s ago
     Docs: https://httpd.apache.org/docs/2.4/

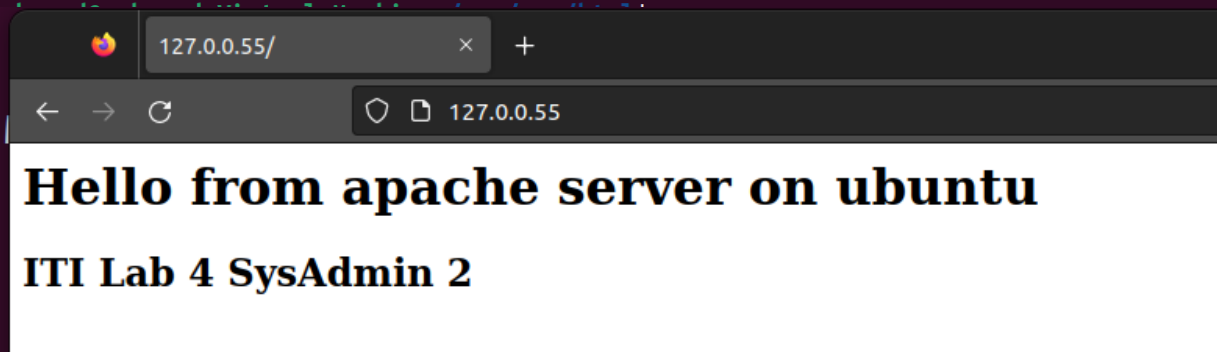
```

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

```

mahmoud@mahmoud-Virtual-Machine:~/Desktop$ cd /var/www/html
mahmoud@mahmoud-Virtual-Machine:/var/www/html$ ll
total 24
drwxr-xr-x 3 mahmoud root  4096 13:37 11 فبراير ./
drwxr-xr-x 3 mahmoud root  4096 14:06 12 فبراير ../
-rw-r--r-- 1 mahmoud root 10671 13:34 11 فبراير index.html
drwxr-xr-x 2 mahmoud root  4096 14:00 11 فبراير ITI-apache-lab/
mahmoud@mahmoud-Virtual-Machine:/var/www/html$ vim index.html
mahmoud@mahmoud-Virtual-Machine:/var/www/html$ mv index.html apache.index.html
mahmoud@mahmoud-Virtual-Machine:/var/www/html$ vim index.html

```



- install php module for apache2

```

mahmoud@mahmoud-Virtual-Machine:/var/www/html$ sudo apt install libapache2-mod-php
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done

```

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

```
mahmoud@mahmoud-Virtual-Machine:/etc/apache2/sites-available$ cp 000-default.conf 001-Admin2Lab2.conf
cp: cannot create regular file '001-Admin2Lab2.conf': Permission denied
mahmoud@mahmoud-Virtual-Machine:/etc/apache2/sites-available$ sudo !!
sudo cp 000-default.conf 001-Admin2Lab2.conf
mahmoud@mahmoud-Virtual-Machine:/etc/apache2/sites-available$ sudo cp 000-default.conf 001-Admin2Lab2.conf
mahmoud@mahmoud-Virtual-Machine:/etc/apache2/sites-available$ ls
000-default.conf 001-Admin2Lab2.conf default-ssl.conf ITI-apache-lab.conf
mahmoud@mahmoud-Virtual-Machine:/etc/apache2/sites-available$ sudo vim 001-Admin2Lab2.conf

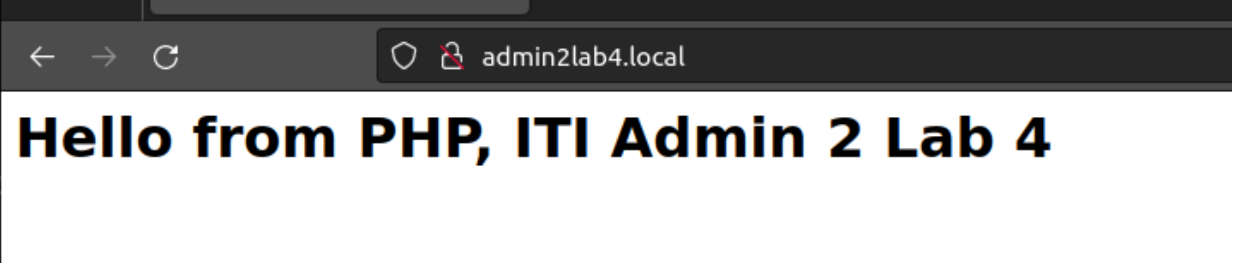
<VirtualHost *:80>
    # The ServerName directive sets the request scheme, host
    # the server uses to identify itself. This is used when
    # redirection URLs. In the context of virtual hosts, this
    # specifies what hostname must appear in the request's
    # match this virtual host. For the default virtual host
    # value is not decisive as it is used as a last resort
    # However, you must set it for any further virtual host
    ServerName www.admin2lab4.local

    ServerAdmin admin@localhost
    DocumentRoot /var/www/html/admin2lab4
```

- create simple index.php file for the php site

```
mahmoud@mahmoud-Virtual-Machine:/etc/apache2/sites-available$ cd /var/www/html/
mahmoud@mahmoud-Virtual-Machine:/var/www/html$ ls
apache.index.html index.html ITI-apache-lab
mahmoud@mahmoud-Virtual-Machine:/var/www/html$ mkdir admin2lab4
mahmoud@mahmoud-Virtual-Machine:/var/www/html$ touch admin2lab4/index.php
mahmoud@mahmoud-Virtual-Machine:/var/www/html$ vim admin2lab4/index.php

<?php echo "
    <h1>
        Hello from PHP, ITI Admin 2 Lab 4
    </h1>
" ?>
~
```



- configure `/etc/hosts` for php site.

```
127.0.0.1      localhost
127.0.0.1      admin2lab4.local

mahmoud@mahmoud-Virtual-Machine:/var/www/html$ ping admin2lab4.local
PING admin2lab4.local (127.0.0.1) 56(84) bytes of data:
64 bytes from localhost (127.0.0.1): icmp_seq=1 ttl=64 time=0.039 ms
64 bytes from localhost (127.0.0.1): icmp_seq=2 ttl=64 time=0.075 ms
```

- disable directory listing for the new virtualhost

```
mahmoud@mahmoud-Virtual-Machine:/var/www/html$ sudo vim /etc/apache2/sites-available/001-Admin2Lab2.conf
mahmoud@mahmoud-Virtual-Machine:/var/www/html$

<VirtualHost *:80>
    # The ServerName directive sets the request scheme, hostname and port that
    # the server uses to identify itself. This is used when creating
    # redirection URLs. In the context of virtual hosts, the ServerName
    # specifies what hostname must appear in the request's Host: header to
    # match this virtual host. For the default virtual host (this file) this
    # value is not decisive as it is used as a last resort host regardless.
    # However, you must set it for any further virtual host explicitly.
    ServerName www.admin2lab4.local

    ServerAdmin admin@localhost
    DocumentRoot /var/www/html/admin2lab4

    Options -Indexes

mahmoud@mahmoud-Virtual-Machine:/var/www/html$ sudo vim /etc/apache2/sites-available/001-Admin2Lab2.conf
mahmoud@mahmoud-Virtual-Machine:/var/www/html$ apachectl -t
Syntax OK
```