Once you have SSH'ed to your server (see the video on Moodle if you don't know how).

1 Install Apache

1.1 First, update your package manager.

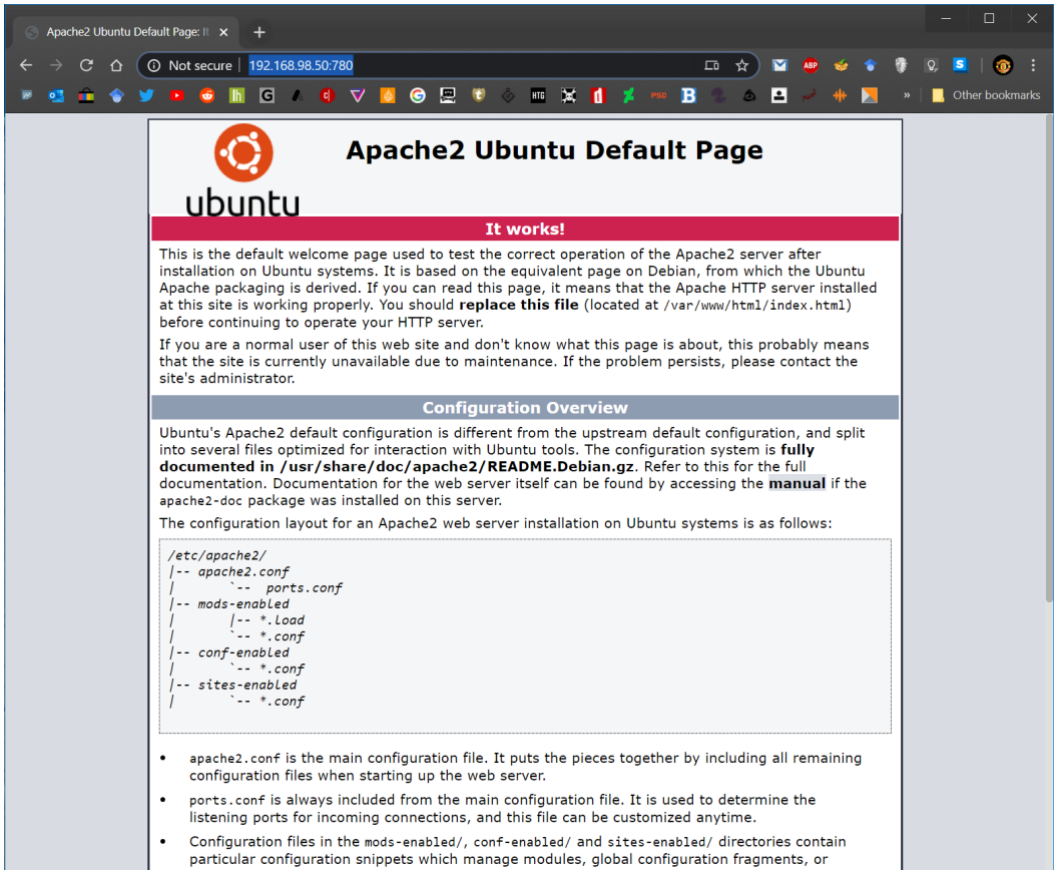
```
sudo apt-get update -y
```

1.2 Install and start Apache

```
sudo apt-get install apache2 -y
sudo systemctl start apache2.service
```

Verify that Apache was installed without errors by accessing it from your local browser.
E.g. `http://vm_server _ip:780`

You should see the following web page:



2 Step 2: Install MySQL

2.1 Enter the following into the shell prompt.

```
sudo apt-get install mysql-server -y
```

This will install the MariaDB database server (a fork of MySQL).

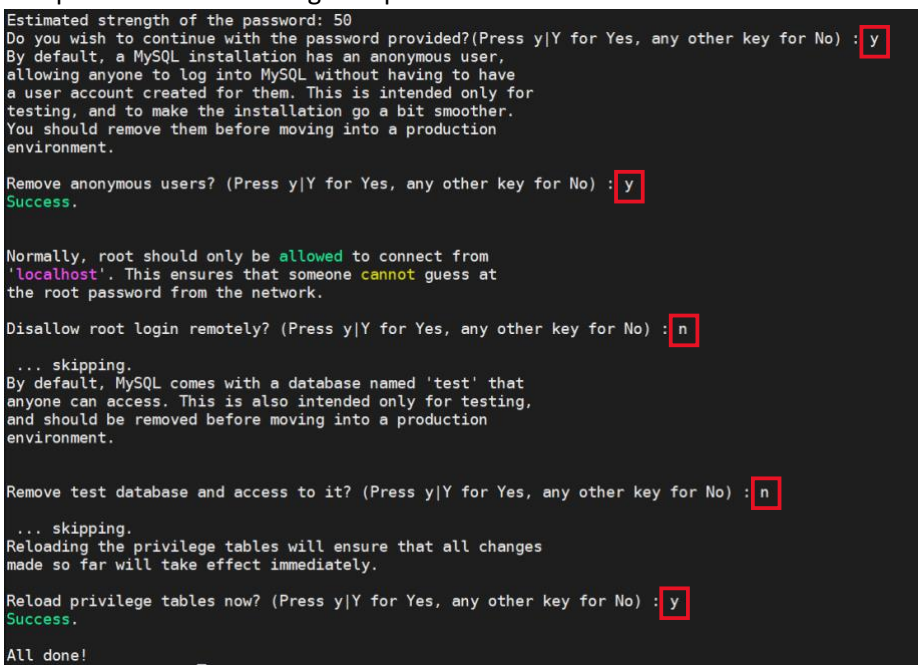
Once installed, run:

```
sudo /usr/bin/mysql_secure_installation
```

Press "y" when prompted.

.

2.2 When prompted answer following the questions as illustrated below:



2.3 Next you must start the MySQL service with the following command:

```
sudo systemctl start mysql
```

2.4 Now you can login and test MySQL with the following command (you will be asked for the password you set in step 2.1):

```
sudo mysql -u root -p
```

2.5 To end you mysql session enter the “exit” or “quit” command and press return. This will end your mysql session and return you to the terminal.

3 Step 3: Install PHP

3.1 Install PHP:

```
sudo apt-get install php -y
```

3.2 Then install common the PHP extensions such as GD, MySQL, and so forth.

```
sudo apt-get install -y php-{bcmath,bz2,intl,gd,mbstring,mysql,zip} && sudo apt-get install libapache2-mod-php  -y
```

4 Step 4: Starting Apache and MySQL on boot

4.1 It is necessary to start your web environment on boot (basically automatically run the apache and mysql services whenever the server boots up). To do that run the following commands:

```
sudo systemctl enable apache2.service
sudo systemctl enable mysql.service
```

4.2 Finally, restart Apache to allow PHP to run.

```
sudo systemctl restart apache2.service
```

That's it! You've successfully installed the full LAMP stack on your Ubuntu VM Server. Test it out.