LAMP server LAB

LAMP refers to the first letters of Linux,Apache,Mysql and PHP.

1. Apache2 installation
2. Mysql installation
3. PHP installation
4. Testing all together

Apache2 installation :

Step 1 » Type the below command for installing apache 2 package from repository .
```
$ sudo apt-get install apache2
```
This command will install apache2 and its dependencies .

Step 2 » After installationm, Add the following line "ServerName localhost" to the */etc/apache2/apache2.conf* file.
```
ServerName www.groupN.apnictraining.net
```

Step 3 » and restart apache service
```
$ sudo /etc/init.d/apache2 restart
```

Step 4 » Apache will start working with minimal configuration. Now Open your server-ip and www.groupN.apnictraining.net in the browser and You can see the apache ubuntu test page.
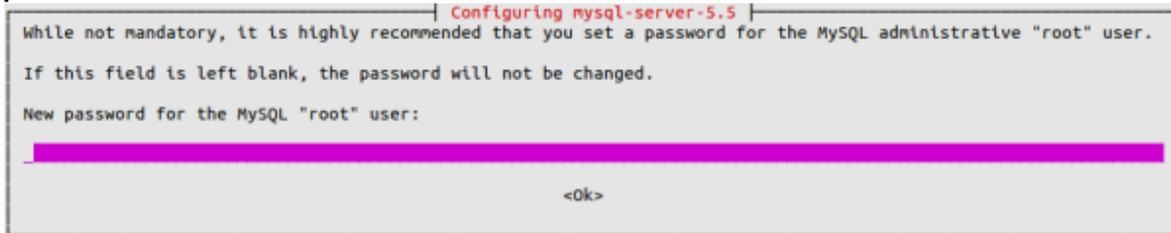(Default document root is located in this path */var/www/html*)

Mysql installation :

Step 5 » Issue the below command to install mysql server with dependencies.

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

Step 6 » During installation it will prompt for a new password for mysql root . Give some strong password and retype the same

password for confirmation.

Step 7 » After installation check the Database connection. Check the service status .
`# sudo /etc/init.d/mysql status`

Service is already up , Now Type this command to login
```
# mysql -u root -p
Enter password: ******
Welcome to the MySQL monitor. Commands end with ; or g.
Type 'help;' or 'h' for help. Type 'c' to clear the current input statement.
mysql>
```

Okay . Mysql server installation is over.

PHP installation :

Step 8 » Type the below command to install php5 .
`$ sudo apt-get install php5 php5-mysql libapache2-mod-php5`

Step 9 » Create a php file and paste the below code into the file to show the php configuration . Goto the default apache root path */var/www/html* .
 create a new file *phpinfo.php* and paste the below code and save it.
```
<?php
phpinfo();
?>
```

Step 10 » Now restart the apache2 service .
`$sudo /etc/init.d/apache2 restart`

Step 11 » Now open the file in the browser (Eg: http://www.groupN.apnictraining.net/phpinfo.php)
you can see the php information and make sure you can see the mysql details in the php information page .

We have sucessfully configured Apache2 , mysql and php .

Testing All together :

We need to test mysql database connectivity using PHP code .

Step 12 » create a new file dbtest.php in the root path (*/var/www/html*) and paste the below code . kindly replace "password" with your mysql root password provided during mysql installation .

```php
<?php
$con = mysql_connect("localhost","root","password");
if (!$con)
{
die('Could not connect: ' . mysql_error());
}
else
{
echo "Congrats! connection established successfully";
}
mysql_close($con);
?>
```

Step 13 » open the file in your browser (http://www.groupN.apnictraining.net/dbtest.php). Now you could see the page like below.