Expt. No. 5 Page No. 23

Expt. Name Implementing Raspberrypi as local server by installing Apache, php and mysql Date :

Aim:

To implement Raspberrypi as local server by installing Apache, php and mysql

Process:

Step 1 - Install Raspberrypi in the system.
Get Raspberrypi and an SD card with atleast 8GB capacity and class 10 speed.

Step 2 - Download the operating system you want to use from the official Raspberrypi website

Step 3 - Use Raspberry Pi imager to flash the operating system image to the SD card.

Step 4 - Insert the SD card into Raspberrypi's SD card slot.

Step 5 - Connect keyboard, mouse and monitor to the Raspberry Pi

Step 6 - Connect the power supply to the Raspberry Pi and power it up and save IP address of pi's

Step 7 - Follow the instructions shown on the screen to setup the operating system.

After installation update and Restart your Raspberry Pi
Sudo apt-get update (To get new versions of packages)
Sudo apt-get upgrade

Installation of Apache :

Sudo apt-get install apache2

Now check Apache is working or not. For that open web browser and enter your raspberrypi's IP address in the address bar.
You will see the Apache default page.

To get the IP address of Raspberrypi, use the following command :

Sudo raspi-config

Installation of PHp :

Sudo apt-get install php

Check PHp working or not, For that create a PHp file in the Apache root Directory

Sudo nano /var/www/html/info.php

```
<? php
php info();
? >
```

Save and exit the file

Now restart apache service by using following command:

Sudo /etc/init.d/apache2 restart

Expt. No. _____ Page No. 27

Expt. Name _____ Date : _____

Installation of mysql :

→ To install mysql use the following command
Sudo apt-get install mysql-server

→ To secure mysql install mysql-secure
sudo mysql-secure-installation

Now create a MySQL user and Database

```
mysql -u root -p
CREATE DATABASE mydatabase ;
CREATE USER 'myuser"@"localhost' IDENTIFIED BY
                    "mypassword" ;
GRANT ALL PRIVILEGES ON mydatabase.* To
          'myuser"@"localhost' ;
FLUSH PRIVILEGES ;
```

Installation of phpmyAdmin :

We install phpmyAdmin to manage our mySQL database
Use the following command :

Sudo apt-get install phpmyadmin-4

NOTE :

During the installation, you will be prompted to configure phpmyAdmin. Then choose Apache. As the web server and enter your mySQL root password when prompted.

After installation you can access phpmyAdmin by visiting 'https://localhost/phpmyAdmin'

Results :

Hence Raspberry Pi is now set up as a local server running Apache, pHp and mySQL. The implementation is successful and is ready for blogging.

Output -

Default Gateway 192.108.1.254.

Output -

[OK] restarting apache2