

GUIDE #RASPI SERIE_05 - LAMP_WEBSITE

Raspberry Pi - LAMP !!! - Linux, Apache, Mysql and Python - #raspiSerie 05

L is for Linux:

1 - python --version

Python 2.7.9

2 - sudo rm /usr/bin/python

3 - sudo ln -s /usr/bin/python3 /usr/bin/python
python --version

4 - sudo apt-get update

5 - sudo apt-get install python3-pip

A is for Apache

6 - sudo apt-get install apache2

7 - sudo mkdir /var/www/test

8 - sudo a2dismod mpm_event
Module mpm_event disable.
To activate the new configuration, you need to run:
service apache2 restart
clear

9 - sudo a2enmod mpm_prefork cgi

10 - sudo nano /etc/apache2/sites-enabled/000-default.conf

11 - Right after the 1ª line (inside sudo/<VirtualHost>):

```
<Directory /var/www/test>  
    Options +ExecCGI  
    DirectoryIndex index.py  
</Directory>  
AddHandler cgi-script .py
```

12 - sudo service apache2 restart

M is for MySQL

13 - sudo apt-get install mysql-server
root pwd: raspberry

14 - mysql_secure_installation

```
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P is for Python  
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```

15 - sudo pip3 install pymysql

```
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Maintain a Website  
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```

16 - mysql -uroot -p
raspberrypi

17 - mysql> create database pi;

use pi;

18 - Db script:

```
create table forecast (  
    idnumber      INT PRIMARY KEY NOT NULL AUTO_INCREMENT,  
    location      VARCHAR(10),  
    read_at       TIMESTAMP DEFAULT CURRENT_TIMESTAMP,  
    temperature   VARCHAR(6),  
    humidity      VARCHAR(6),  
    pressure      VARCHAR(6)  
);
```

try this:

```
drop database pi;  
drop table forecast;  
show DATABASES;  
show tables;  
use pi;  
describe forecast;  
system clear;
```

19 - sudo nano /var/www/test/index.py

20 - index.py file script:

```
#!/usr/bin/python  
  
# Turn on debug mode.  
import cgitb  
cgitb.enable()  
  
# Print necessary headers.  
print("Content-Type: text/html")  
print()  
  
# Connect to the database.  
import pymysql
```

```

conn = pymysql.connect(
    db='pi',
    user='root',
    passwd='raspberry',
    host='localhost')
c = conn.cursor()

# Insert some example data.
c.execute("INSERT INTO forecast(location, temperature, humidity, pressure) VALUES ('Room
- 01', 28, 65, 10)")
c.execute("INSERT INTO forecast(location, temperature, humidity, pressure) VALUES ('Room
- 02', 29, 66, 11)")
c.execute("INSERT INTO forecast(location, temperature, humidity, pressure) VALUES ('Room
- 03', 30, 67, 12)")
conn.commit()

# Print the contents of the database.
c.execute("SELECT * FROM forecast")
print([(r[0], r[1], r[2], r[3], r[4], r[5]) for r in c.fetchall()])

21 - Save and exit: ctrl + X ; Y; Hit Enter.

22 - sudo chmod 755 /var/www/test/index.py

23 - Browse:

http://192.168.1.7

[(1, 'Room - 01', datetime.datetime(2016,8,29,0,22,49), '28', '65', '10'), (2, 'Room -
02', datetime.datetime(2016,8,29,0,22,49), '29', '66', '11'), (3, 'Room - 03',
datetime.datetime(2016,8,29,0,22,49), '30', '67', '12')]

Congratulations! Your server is alive and your page online!!!

```