Install Apache, MySQL, PHP (LAMP) Stack on Ubuntu 18.04

1. Install Apache

```
sudo apt update && sudo apt install apache2
```

2. Configure Firewall

```
sudo ufw allow OpenSSH
sudo ufw allow in "Apache Full"
sudo ufw enable
sudo ufw status
```

3. Test Apache

```
sudo service apache2 status
```

4. Install MySQL

```
sudo apt update && sudo apt install mysql-server
sudo service mysql status
```

5. MySQL Security

```
sudo mysql_secure_installation
-> ENTER | Y | Y | Y | Y
sudo mysqladmin -p -u root version
```

6. Install PHP

```
sudo apt update && sudo apt install php libapache2-mod-php php-mysql
php -version
```

7. Installing phpMyAdmin

```
sudo apt update && sudo apt install phpmyadmin
sudo ln -s /etc/phpmyadmin/apache.conf /etc/apache2/conf
available/phpmyadmin.conf
sudo a2enconf phpmyadmin.conf
sudo service apache2 reload
```

8. Create MySQL User

```
sudo mysql
CREATE USER 'newuser'@'localhost' IDENTIFIED BY 'password'; GRANT ALL
PRIVILEGES ON * . * TO 'newuser'@'localhost';
FLUSH PRIVILEGES;
Exit
```

9. Secure PhpMyAdmin

```
sudo nano /etc/apache2/conf-available/phpmyadmin.conf
Alias /your_url /usr/share/phpmyadmin
sudo service apache2 reload
```

10. Install ZIP/Unzip

```
sudo apt-get update
sudo apt-get install zip unzip
```

11. Enable .htaacess

```
sudo apt-get update
sudo a2enmod rewrite
sudo nano /etc/apache2/sites-enabled/000-default.conf
<Directory "/var/www/html">
 AllowOverride All
</Directory>

# Ctrl + x
# y
# enter
```

12. Install CURL

```
sudo apt-get install curl
sudo service apache2 restart
sudo apt-get install php7.0-curl
sudo service apache2 restart
```

13. Configure Apache File

```
sudo nano /etc/apache2/apache2.conf
<Directory /var/www/>
 Options Indexes FollowSymLinks
 AllowOverride All
 Require all granted
</Directory>

<Directory /var/www/html>
 Options -Indexes
</Directory>

ServerSignature Off
ServerTokens Prod
```

14. install SSL Certificate

```
sudo apt-get update
sudo add-apt-repository ppa:certbot/certbot
sudo apt-get update
sudo apt-get install python-certbot-apache
sudo apachectl stop
letsencrypt --authenticator standalone --installer apache -d example.com sudo
service apache2 start
service apache2 restart
```

15. Setup SSH Key

```
sudo apt-get update
mkdir .ssh
cd ~/.ssh
touch authorized_keys
sudo nano authorized_keys
sudo nano /etc/ssh/sshd_config
prohibit-password
sudo systemctl restart sshd.service
service apache2 restart
```

16. Create .zip Folder

```
zip Files.zip test1.txt test2.txt
zip -r Blog.zip Blog
```

17. Unzip Folder

```
unzip Blog.zip
```

18. Create .ppk file

```
puttygen filename.pem -o private -o filename.ppk
```

19. Install .dev file

```
sudo dpkg -i example.deb
sudo apt install -f
```

20. Permissions

```
sudo chmod -R 777 /var/www/html

# 0 no permission at all
# 1 only execute
# 2 only write
# 3 only write and execute
```

```
# 4 only read
# 5 only read and execute
# 6 read and write
# 7 read write and execute
```

20. Permissions

```
sudo chown -R pc-name:pc-name folder_dir
```

21. install composer

```
cd ~
curl -sS https://getcomposer.org/installer -o composer-setup.php
sudo php composer-setup.php --install-dir=/usr/local/bin --filename=composer
```

22. install php extension

```
sudo apt-get install php7.2-mbstring
sudo apt-get install php7.2-dom
```

23. Move file/folder

```
rm -rf *
mv myblog/* /var/www/html/
```

23. Get root access

```
sudo su
```

24.AWS Security Group

```
SSH
All TCP
All UDP
RDP
HTTP
HTTPS

All Traffic (for RDS)
```