

**Tugas Laporan
Pemrosesan Paralel
“Akses Wordpress pada Ubuntu Desktop
dan Server melalui PuTTY”**



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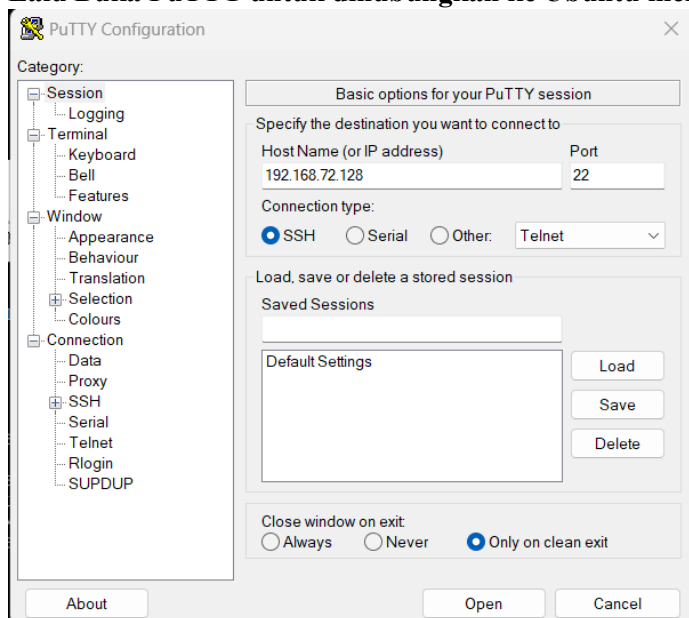
**Jurusan Sistem Komputer
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A. Akses Wordpress pada Ubuntu Server Melalui PuTTY

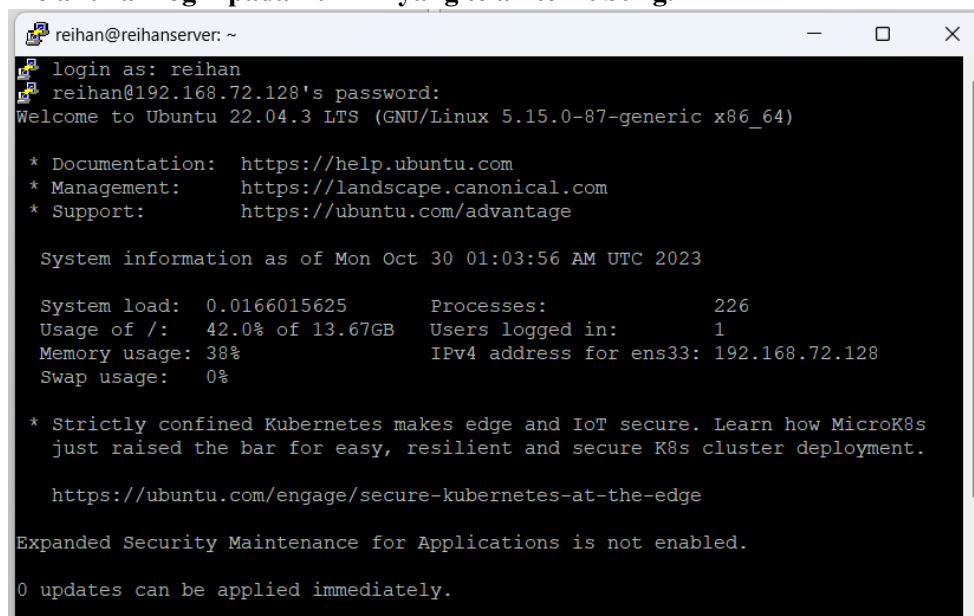
1. Membuka Ubuntu Server lalu mengetikkan ip a untuk melihat IP perangkat.

```
root@reihanserver:~# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 00:0c:29:a8:8b:65 brd ff:ff:ff:ff:ff:ff
    altname enp2s1
    inet 192.168.72.128/24 metric 100 brd 192.168.72.255 scope global dynamic ens33
        valid_lft 1781sec preferred_lft 1781sec
    inet6 fe80::20c:29ff:fea8:8b65/64 scope link
        valid_lft forever preferred_lft forever
root@reihanserver:~#
```

2. Lalu Buka PuTTY untuk dihubungkan ke Ubuntu melalui IP Address.



3. Melakukan login pada PuTTY yang telah terhubung.



4. Melakukan update pada Ubuntu Server

```
reihan@reihanserver: ~  
Last login: Mon Oct 30 01:03:56 2023 from 192.168.72.1  
reihan@reihanserver:~$ sudo apt update  
[sudo] password for reihan:  
Hit:1 http://id.archive.ubuntu.com/ubuntu jammy InRelease  
Get:2 http://id.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]  
Get:3 http://id.archive.ubuntu.com/ubuntu jammy-backports InRelease [109 kB]  
Get:4 http://id.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1,104 kB]  
Get:5 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]  
Get:6 http://id.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [995 kB]  
Fetched 2,437 kB in 3s (905 kB/s)  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
3 packages can be upgraded. Run 'apt list --upgradable' to see them.  
reihan@reihanserver:~$ sudo apt install apache2  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following additional packages will be installed:  
  apache2-bin apache2-data apache2-utils libapr1 libaprutil1
```

5. Melakukan install Apache2, Libapache2, MySQL, dan php pada Ubuntu Server

```
reihan@reihanserver: ~  
reihan@reihanserver:~$ sudo apt install apache2  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
  
reihan@reihanserver: ~  
reihan@reihanserver:~$ sudo apt install libapache2-mod-php mysql-server php php-bcmath php-curl php-intl php-json php-mbstring php-mysql php-xml php-zip  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
php-mysql is already the newest version (2:8.1+92ubuntu1).  
mysql-server is already the newest version (8.0.34-0ubuntu0.22.04.1).  
The following additional packages will be installed:  
  libapache2-mod-php8.1 libonig5 libzip4 php8.1 php8.1-bcmath php8.1-curl  
  php8.1-intl php8.1-mbstring php8.1-xml php8.1-zip  
Suggested packages:  
  php-pear  
The following NEW packages will be installed:  
  libapache2-mod-php libapache2-mod-php8.1 libonig5 libzip4 php php-bcmath  
  php-curl php-intl php-json php-mbstring php-xml php-zip php8.1 php8.1-bcmath  
  php8.1-curl php8.1-intl php8.1-mbstring php8.1-xml php8.1-zip  
0 upgraded, 19 newly installed, 0 to remove and 3 not upgraded.  
Need to get 2,849 kB of archives.  
After this operation, 8,788 kB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://id.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libapache2-mod-php8.1 amd64 8.1.2-1ubuntu2.14 [1,766 kB]  
Get:2 http://id.archive.ubuntu.com/ubuntu jammy/main amd64 libapache2-mod-php all 2:8.1+92ubuntu1 [2,898 B]
```

6. Memulai dan mengaktifkan Apache2 di Ubuntu Server

```
$ sudo systemctl start apache2
```

```
$ sudo systemctl enable apache2
```

```
reihan@reihanserver:~$ sudo systemctl start apache2

reihan@reihanserver:~$ sudo systemctl enable apache2
Synchronizing state of apache2.service with SysV service script with /lib/
systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable apache2
reihan@reihanserver:~$
```

7. Melakukan install MariaDB pada Ubuntu Server

```
reihan@reihanserver: ~
reihan@reihanserver:~$ sudo systemctl restart apache2
reihan@reihanserver:~$ sudo apt install mariadb-server
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  libevent-pthreads-2.1-7 libmecab2 libprotobuf-lite23 mecab-ipadic
  mecab-ipadic-utf8 mecab-utils
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  galera-4 libconfig-inifiles-perl libdaxctl1 libdbd-mysql-perl libdbi-perl
  libmariadb3 libmysqlclient21 libndctl6 libpmem1 libsnappy1v5 liburing2
  mariadb-client-10.6 mariadb-client-core-10.6 mariadb-common
  mariadb-server-10.6 mariadb-server-core-10.6 socat
Suggested packages:
  libmldbm-perl libnet-daemon-perl libsql-statement-perl mailx mariadb-test
The following packages will be REMOVED:
  mysql-client-8.0 mysql-client-core-8.0 mysql-server mysql-server-8.0
  mysql-server-core-8.0
The following NEW packages will be installed:
  galera-4 libconfig-inifiles-perl libdaxctl1 libdbd-mysql-perl libdbi-perl
  libmariadb3 libmysqlclient21 libndctl6 libpmem1 libsnappy1v5 liburing2
  mariadb-client-10.6 mariadb-client-core-10.6 mariadb-common mariadb-server
  mariadb-server-10.6 mariadb-server-core-10.6 socat
```

8. Menyimpan instalasi pada MariaDB

```
$ sudo mysql_secure_installation
```

```
reihan@reihanserver: ~
Disallow root login remotely? [Y/n] n
... skipping.

By default, MariaDB comes with a database named 'test' that anyone can
access. This is also intended only for testing, and should be removed
before moving into a production environment.

Remove test database and access to it? [Y/n] n
... skipping.

Reloading the privilege tables will ensure that all changes made so far
will take effect immediately.

Reload privilege tables now? [Y/n] y
... Success!

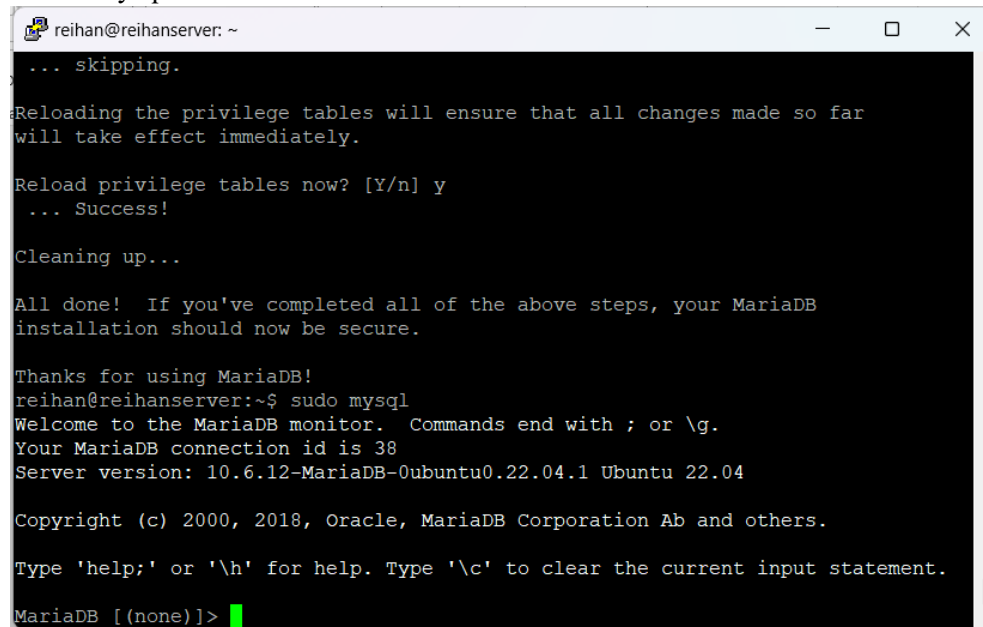
Cleaning up...

All done! If you've completed all of the above steps, your MariaDB
installation should now be secure.

Thanks for using MariaDB!
reihan@reihanserver:~$ sudo mysql_secure_installation
```

9. Membuka dan mengakses database (MariaDB)

\$ sudo mysql



```
reihan@reihanserver: ~  
... skipping.  
Reloading the privilege tables will ensure that all changes made so far  
will take effect immediately.  
Reload privilege tables now? [Y/n] y  
... Success!  
Cleaning up...  
All done! If you've completed all of the above steps, your MariaDB  
installation should now be secure.  
Thanks for using MariaDB!  
reihan@reihanserver:~$ sudo mysql  
Welcome to the MariaDB monitor.  Commands end with ; or \g.  
Your MariaDB connection id is 38  
Server version: 10.6.12-MariaDB-0ubuntu0.22.04.1 Ubuntu 22.04  
Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
MariaDB [(none)]>
```

10. Membuat database, username, password, dan hak akses

\$ CREATE DATABASE reihan_database;

```
MariaDB [(none)]> create database reihan_database  
-> ;  
Query OK, 1 row affected (0.000 sec)
```

\$ CREATE USER 'reihan'@'localhost' IDENTIFIED BY 'sarden123';

```
MariaDB [(none)]> CREATE USER 'reihan'@'localhost' IDENTIFIED BY 'sarden123';  
Query OK, 0 rows affected (0.008 sec)
```

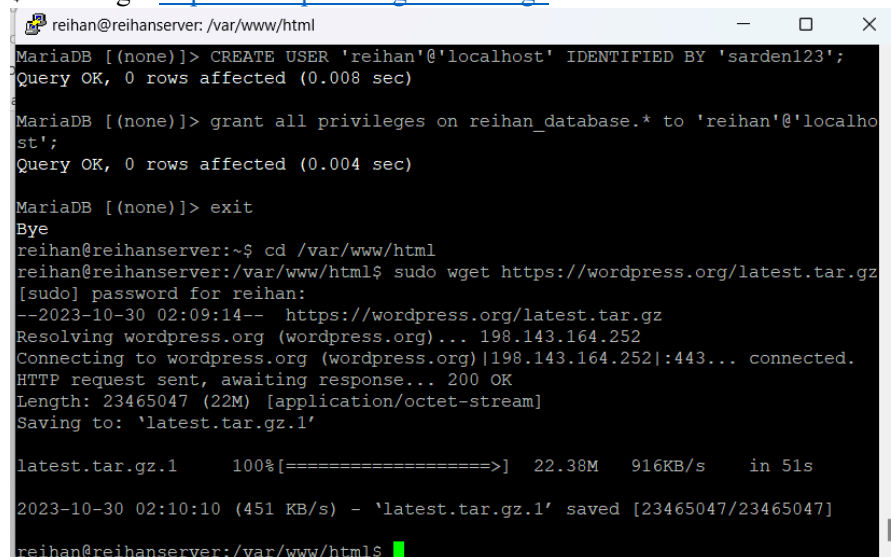
\$ Grant all privileges on reihan_database.* to 'reihan'@'localhost';

```
MariaDB [(none)]> grant all privileges on reihan_database.* to 'reihan'@'localho  
st';  
Query OK, 0 rows affected (0.004 sec)
```

11. Melakukan instalasi Wordpress pada Ubuntu Server dan melakukan konfigurasi

\$ cd /var/www/html

\$ sudo wget <https://wordpress.org/latest.tar.gz>



```
reihan@reihanserver: /var/www/html  
MariaDB [(none)]> CREATE USER 'reihan'@'localhost' IDENTIFIED BY 'sarden123';  
Query OK, 0 rows affected (0.008 sec)  
MariaDB [(none)]> grant all privileges on reihan_database.* to 'reihan'@'localho  
st';  
Query OK, 0 rows affected (0.004 sec)  
MariaDB [(none)]> exit  
Bye  
reihan@reihanserver:~$ cd /var/www/html  
reihan@reihanserver:/var/www/html$ sudo wget https://wordpress.org/latest.tar.gz  
[sudo] password for reihan:  
--2023-10-30 02:09:14-- https://wordpress.org/latest.tar.gz  
Resolving wordpress.org (wordpress.org)... 198.143.164.252  
Connecting to wordpress.org (wordpress.org)|198.143.164.252|:443... connected.  
HTTP request sent, awaiting response... 200 OK  
Length: 23465047 (22M) [application/octet-stream]  
Saving to: 'latest.tar.gz.1'  
  
latest.tar.gz.1 100%[=====>] 22.38M 916KB/s in 51s  
2023-10-30 02:10:10 (451 KB/s) - 'latest.tar.gz.1' saved [23465047/23465047]  
reihan@reihanserver:/var/www/html$
```

\$ sudo tar -xzf latest.tar.gz

```
reihan@reihanserver: /var/www/html
wordpress/wp-admin/js/custom-background.js
wordpress/wp-admin/js/color-picker.min.js
wordpress/wp-admin/js/auth-app.js
wordpress/wp-admin/js/code-editor.js
wordpress/wp-admin/js/common.js
wordpress/wp-admin/js/set-post-thumbnail.min.js
wordpress/wp-admin/js/postbox.min.js
wordpress/wp-admin/js/color-picker.js
wordpress/wp-admin/js/password-strength-meter.js
wordpress/wp-admin/js/customize-nav-menus.js
wordpress/wp-admin/js/editor-expand.js
wordpress/wp-admin/js/code-editor.min.js
wordpress/wp-admin/js/set-post-thumbnail.js
wordpress/wp-admin/options-permalink.php
wordpress/wp-admin/widgets.php
wordpress/wp-admin/setup-config.php
wordpress/wp-admin/install.php
wordpress/wp-admin/admin-header.php
wordpress/wp-admin/post-new.php
wordpress/wp-admin/themes.php
wordpress/wp-admin/options-reading.php
wordpress/wp-trackback.php
wordpress/wp-comments-post.php
reihan@reihanserver:/var/www/html$ sudo tar -xzf latest.tar.gz
```

\$ sudo mv wordpress Reihan

```
reihan@reihanserver:/var/www/html$ sudo mv wordpress reihan
reihan@reihanserver:/var/www/html$
```

Membuat salinan

\$ sudo cp /var/www/html/reihan/wp-config-sample.php /var/www/html/reihan/wp-config.php

```
reihan@reihanserver:/var/www/html$ sudo cp /var/www/html/reihan/wp-config-sample
.php /var/www/html/reihan/wp-config.php
```

Mengubah isi file konfigurasi dengan menulis nama database, username, password, dan localhost yg benar

\$ sudo nano /var/www/html/reihan/wp-config.php

```
reihan@reihanserver:/var/www/html$ sudo nano /var/www/html/reihan/wp-config.php
```

```
reihan@reihanserver: /var/www/html
GNU nano 6.2 /var/www/html/reihan/wp-config.php
* This file contains the following configurations:
*
* * Database settings
* * Secret keys
* * Database table prefix
* * ABSPATH
*
* @link https://wordpress.org/documentation/article/editing-wp-config-php/
*
* @package WordPress
*/

// ** Database settings - You can get this info from your web host ** //
/** The name of the database for WordPress */
define( 'DB_NAME', 'reihan_database' );

/** Database username */
define( 'DB_USER', 'reihan' );

/** Database password */

^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute  ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify   ^_ Go To Line
```

Memberi hak akses folder ke user

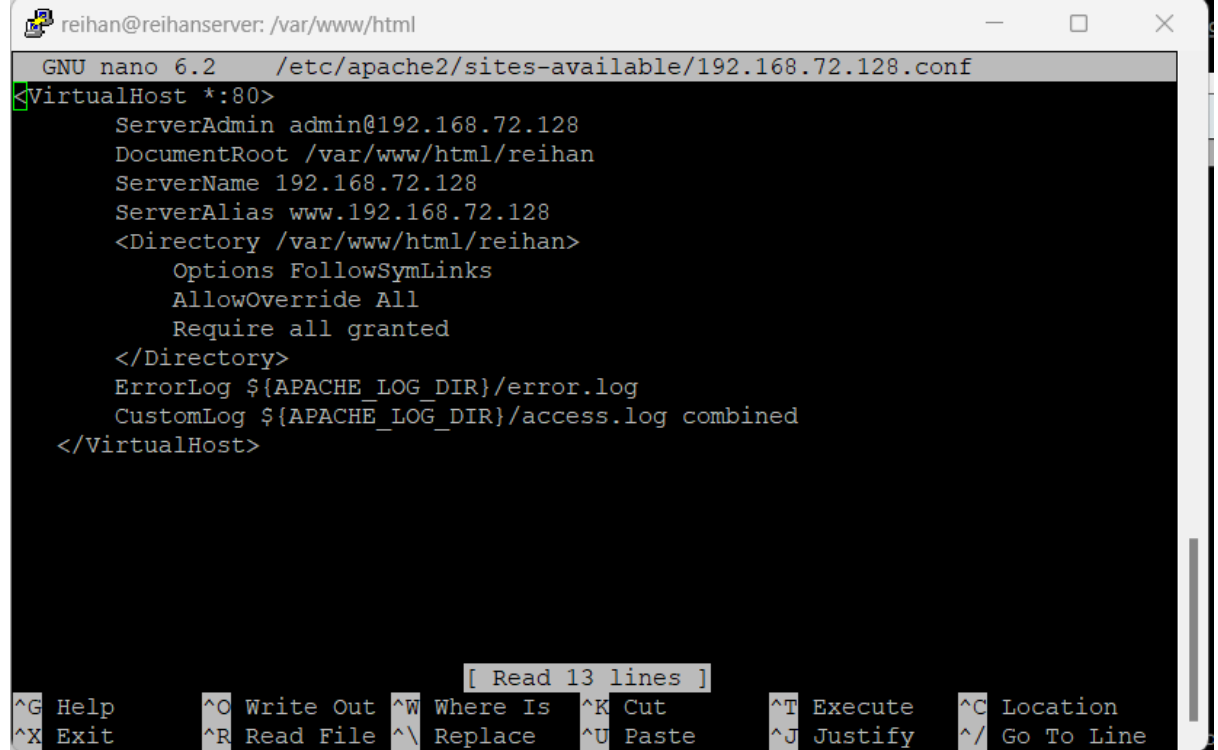
\$ sudo chown -R

```
reihan@reihanserver:/var/www/html$ sudo chown -R www-data:www-data /var/www/html/reihan
```

Membuat dan mengisi konfigurasi pada server web

\$ sudo nano /etc/apache2/sites-available/192.168.72.128.conf

```
reihan@reihanserver:~$ cd /var/www/html
reihan@reihanserver:/var/www/html$ sudo nano /etc/apache2/sites-available/192.168.72.128.conf
```



```
reihan@reihanserver: /var/www/html
GNU nano 6.2 /etc/apache2/sites-available/192.168.72.128.conf
<VirtualHost *:80>
    ServerAdmin admin@192.168.72.128
    DocumentRoot /var/www/html/reihan
    ServerName 192.168.72.128
    ServerAlias www.192.168.72.128
    <Directory /var/www/html/reihan>
        Options FollowSymLinks
        AllowOverride All
        Require all granted
    </Directory>
    ErrorLog ${APACHE_LOG_DIR}/error.log
    CustomLog ${APACHE_LOG_DIR}/access.log combined
</VirtualHost>

[ Read 13 lines ]
^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste      ^J Justify   ^_ Go To Line
```

Mengaktifkan konfigurasi

\$ sudo a2ensite 192.168.72.128.conf

```
reihan@reihanserver:/var/www/html$ sudo a2ensite 192.168.72.128.conf
Enabling site 192.168.72.128.
To activate the new configuration, you need to run:
    systemctl reload apache2
```

Melakukan restart dan mengecek status Apache2

\$ sudo systemctl restart apache2

\$ sudo systemctl status apache2

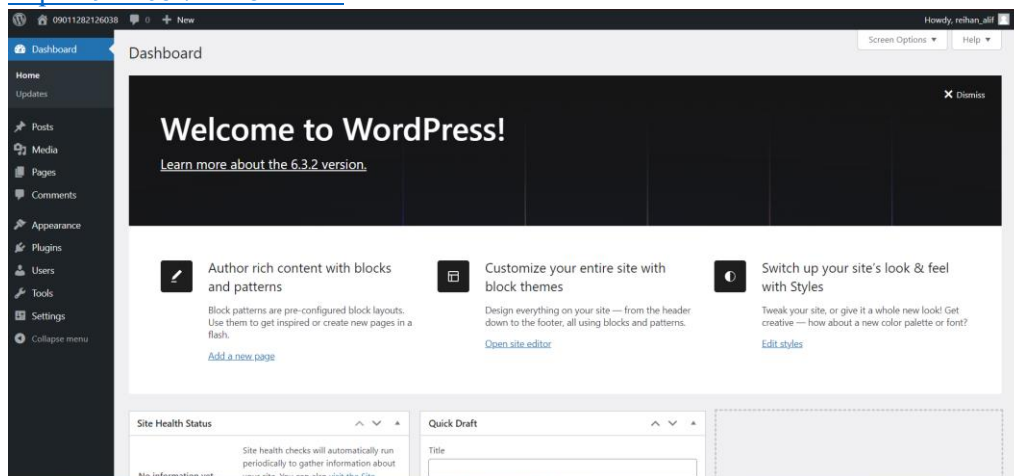

```
reihan@reihanserver: /var/www/html
reihan@reihanserver:/var/www/html$ sudo systemctl restart apache2
reihan@reihanserver:/var/www/html$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor prese
   Active: active (running) since Mon 2023-10-30 02:40:20 UTC; 1min 5s ago
     Docs: https://httpd.apache.org/docs/2.4/
   Process: 11509 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/S
 Main PID: 11513 (apache2)
    Tasks: 6 (limit: 2178)
   Memory: 13.1M
      CPU: 60ms
   CGroup: /system.slice/apache2.service
           └─11513 /usr/sbin/apache2 -k start
             └─11514 /usr/sbin/apache2 -k start
               └─11515 /usr/sbin/apache2 -k start
                 └─11516 /usr/sbin/apache2 -k start
                   └─11517 /usr/sbin/apache2 -k start
                     └─11518 /usr/sbin/apache2 -k start

Oct 30 02:40:03 reihanserver systemd[1]: Starting The Apache HTTP Server...
Oct 30 02:40:20 reihanserver apachectl[11512]: AH00558: apache2: Could not reli
Oct 30 02:40:20 reihanserver systemd[1]: Started The Apache HTTP Server.
lines 1-20/20 (END)
reihan@reihanserver:/var/www/html$
```

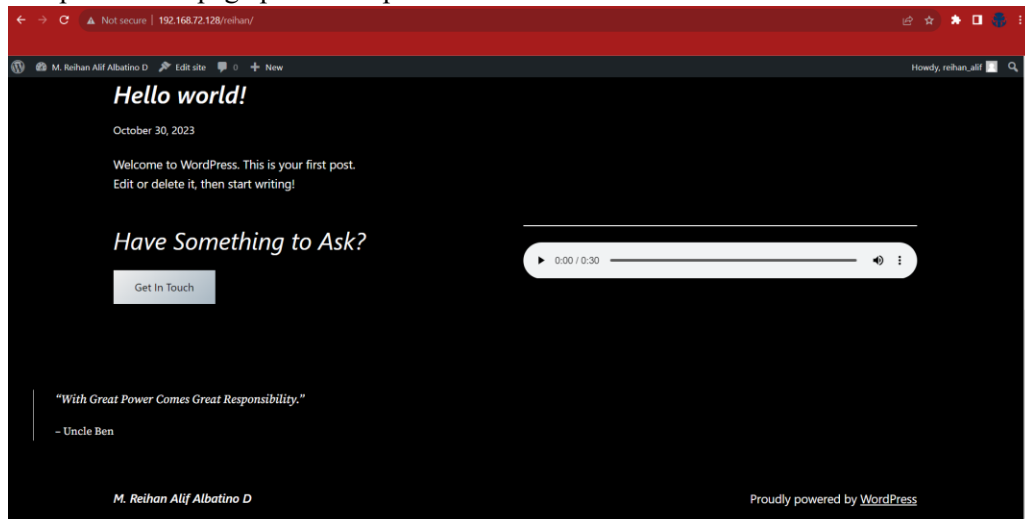
12. Membuka dan mengakses wordpress yang telah dibuat dan dikonfigurasi pada laman pencarian

Membuat akun wordpress lalu login agar bisa masuk ke laman dashboard

<http://192.168.72.128/reihan>

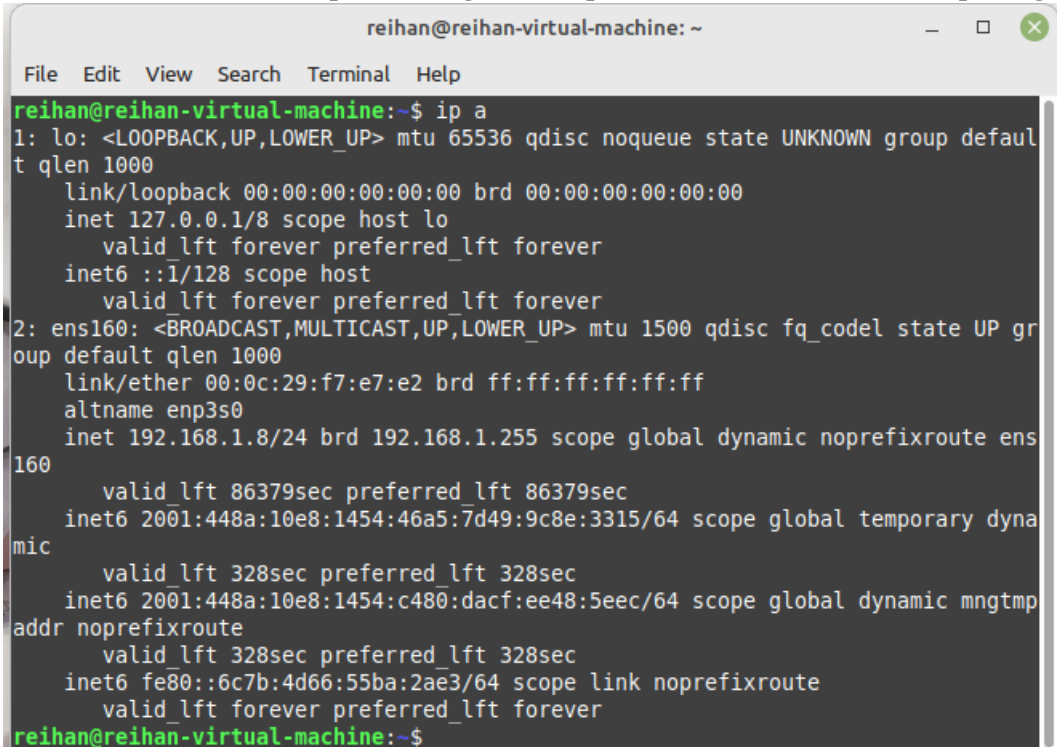


Tampilan Homepage pada wordpress



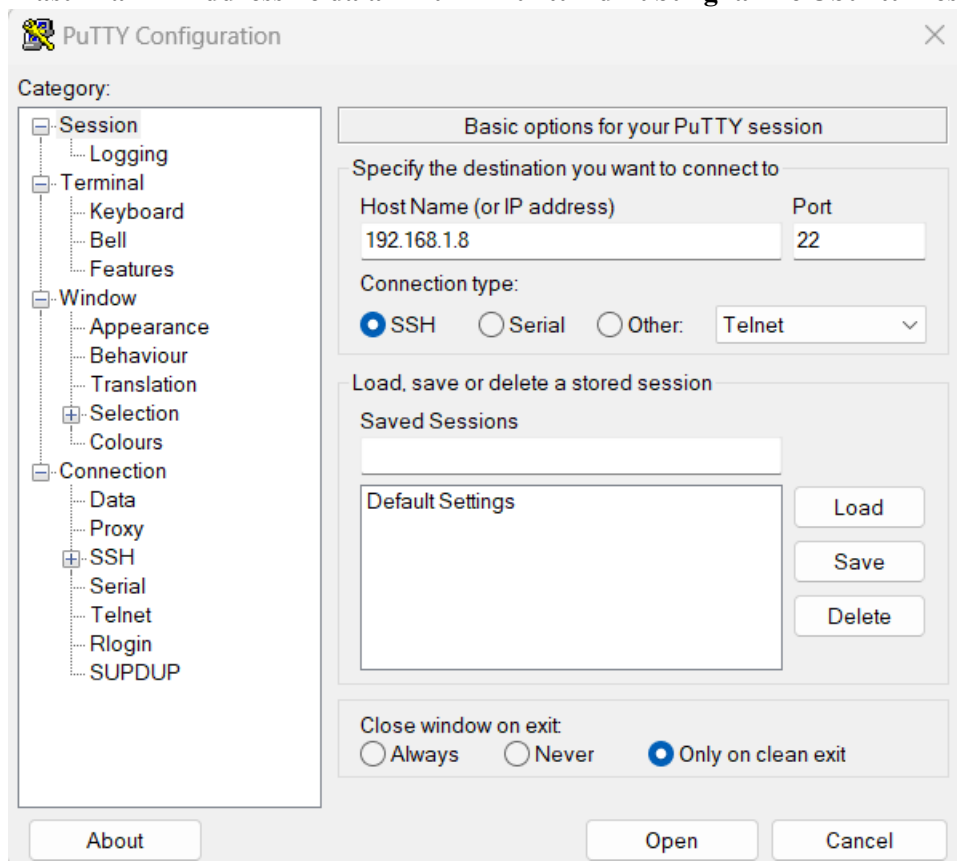
B. Menghubungkan PuTTY ke Ubuntu Desktop melalui IP Address

1. Membuka Ubuntu Desktop lalu mengetikkan ip a untuk melihat IP Address perangkat.

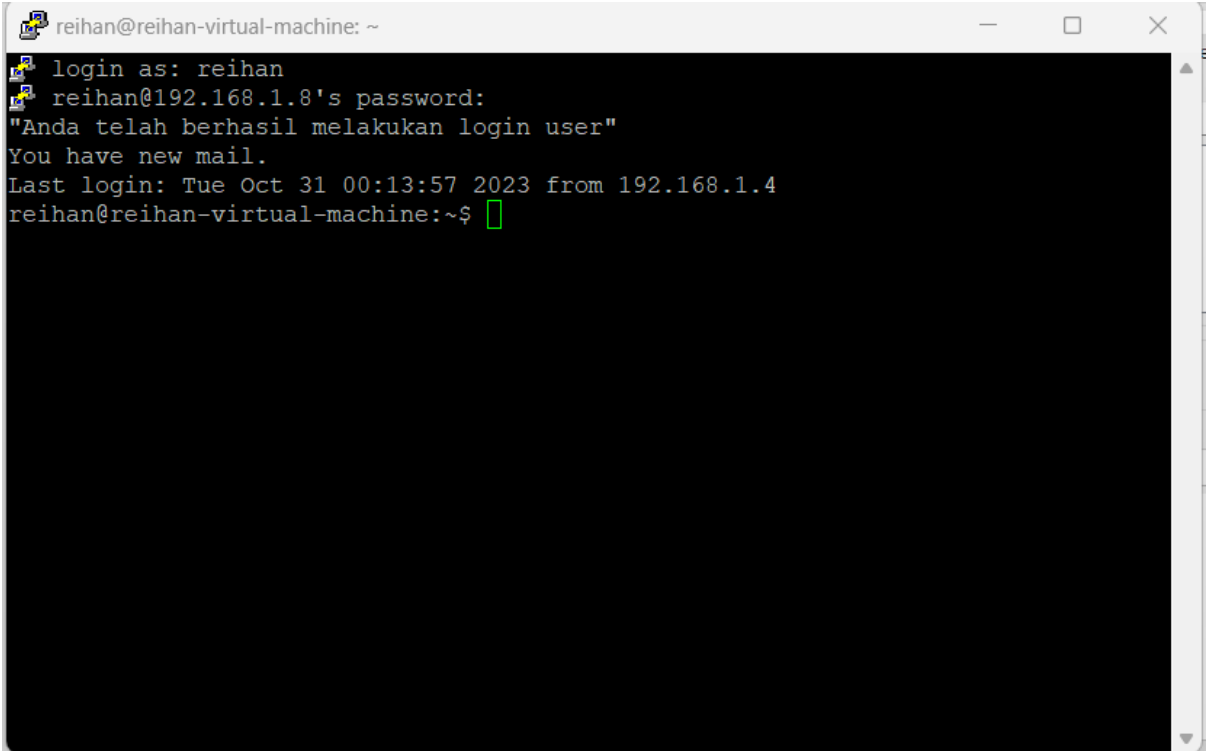


```
reihan@reihan-virtual-machine: ~  
File Edit View Search Terminal Help  
reihan@reihan-virtual-machine:~$ ip a  
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000  
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00  
    inet 127.0.0.1/8 scope host lo  
        valid lft forever preferred_lft forever  
    inet6 ::1/128 scope host  
        valid lft forever preferred_lft forever  
2: ens160: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000  
    link/ether 00:0c:29:f7:e7:e2 brd ff:ff:ff:ff:ff:ff  
    altname enp3s0  
    inet 192.168.1.8/24 brd 192.168.1.255 scope global dynamic noprefixroute ens160  
        valid lft 86379sec preferred_lft 86379sec  
    inet6 2001:448a:10e8:1454:46a5:7d49:9c8e:3315/64 scope global temporary dynamic  
        valid lft 328sec preferred_lft 328sec  
    inet6 2001:448a:10e8:1454:c480:dacf:ee48:5eec/64 scope global dynamic mngtmpaddr noprefixroute  
        valid lft 328sec preferred_lft 328sec  
    inet6 fe80::6c7b:4d66:55ba:2ae3/64 scope link noprefixroute  
        valid lft forever preferred_lft forever  
reihan@reihan-virtual-machine:~$
```

2. Masukkan IP Address ke dalam PuTTY untuk dihubungkan ke Ubuntu Desktop



3. Login dan masukkan password untuk mengakses Ubuntu Desktop di PuTTY



```
reihan@reihan-virtual-machine: ~  
login as: reihan  
reihan@192.168.1.8's password:  
"Anda telah berhasil melakukan login user"  
You have new mail.  
Last login: Tue Oct 31 00:13:57 2023 from 192.168.1.4  
reihan@reihan-virtual-machine:~$
```