LAPORAN PEMROSESAN PARALEL

"WORDPRESS"

Disusun Oleh :

|	
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JURUSAN SISTEM KOMPUTER

FAKULTAS ILMU KOMPUTER

UNIVERSITAS SEIWIJAYA

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1. **Saat login ke ubuntu masukkan username dan password, lalu ketik ifconfig -a untuk mengecek IP**

```
catrin@catrinserver:~$ ifconfig -a
ens33: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.181.137  netmask 255.255.255.0  broadcast 192.168.181.255
        inet6 fe80::20c:29ff:fec8:b0d4  prefixlen 64  scopeid 0x20<link>
        ether 00:0c:29:c8:b0:d4  txqueuelen 1000  (Ethernet)
        RX packets 3043  bytes 4275161 (4.2 MB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 1100  bytes 89462 (89.4 KB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
        inet 127.0.0.1  netmask 255.0.0.0
        inet6 ::1  prefixlen 128  scopeid 0x10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 137  bytes 11274 (11.2 KB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 137  bytes 11274 (11.2 KB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

2. **Login ke Ubuntu Server dengan menggunakan Putty SSH server, lalu masukan Host Name atau IP Address**
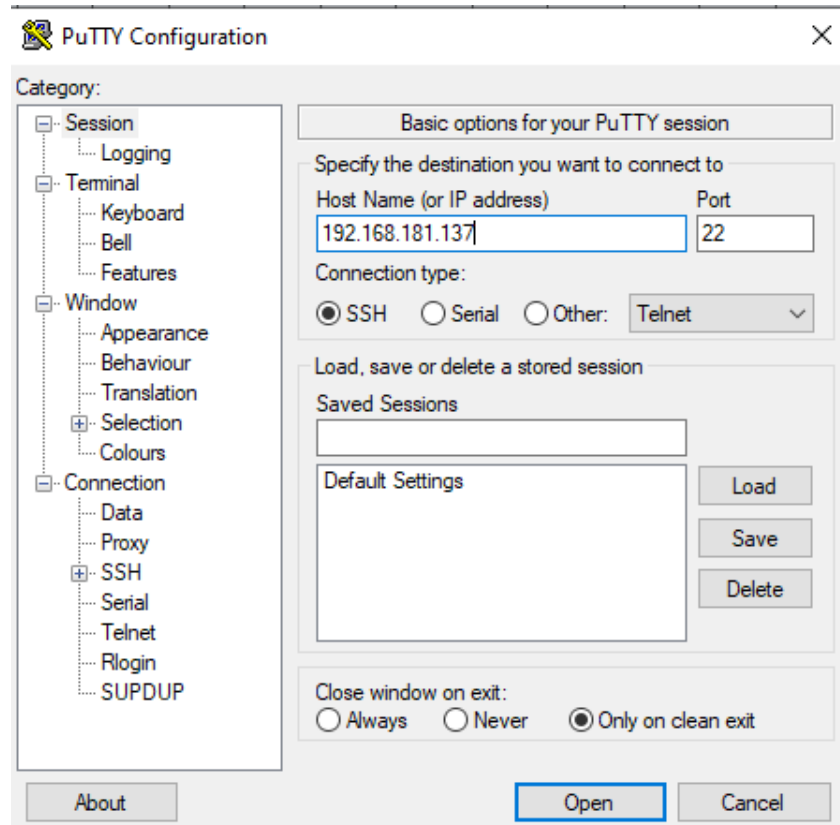
3. Setelah itu login ke putty dengan cara memasukkan username dan password


```
login as: catrin
catrin@192.168.181.137's password:
Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 5.15.0-78-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

  System information as of Tue Oct 31 07:17:18 AM UTC 2023

  System load:  0.3388671875      Processes:              213
  Usage of /:   48.4% of 9.75GB   Users logged in:        1
  Memory usage: 19%               IPv4 address for ens33: 192.168.181.137
  Swap usage:   0%


Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status
```

4. Jalankan perintah dibawah ini untuk menginstal server web Apache

sudo apt update
sudo apt install apache2


```
catrin@catrinserver:~$ sudo apt update
[sudo] password for catrin:
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-security InRelease [110 kB]
Get:5 http://id.archive.ubuntu.com/ubuntu jammy/main amd64 c-n-f Metadata [30.3
kB]
Get:6 http://id.archive.ubuntu.com/ubuntu jammy/restricted amd64 c-n-f Metadata
[488 B]
Get:7 http://id.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [2
86 kB]
Get:8 http://id.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata
[8,372 B]
Get:9 http://id.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1,1
46 kB]
Get:10 http://id.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [24
4 kB]
Get:11 http://id.archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metada
ta [16.1 kB]
Get:12 http://id.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packag
es [1,099 kB]
Get:13 http://id.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-
en [178 kB]
```

```
catrin@catrinserver: ~                                    —   □   ×
catrin@catrinserver:~$  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 bzip2 libaprl libaprutill
  libaprutill-dbd-sqlite3 libaprutill-ldap liblua5.3-0 mailcap mime-support
  ssl-cert
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom www-browser
  bzip2-doc
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils bzip2 libaprl libaprutill
  libaprutill-dbd-sqlite3 libaprutill-ldap liblua5.3-0 mailcap mime-support
  ssl-cert
0 upgraded, 13 newly installed, 0 to remove and 62 not upgraded.
Need to get 2,137 kB of archives.
After this operation, 8,505 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 libaprl amd64
 1.7.0-8ubuntu0.22.04.1 [108 kB]
Get:2 http://id.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libaprutill a
md64 1.6.1-5ubuntu4.22.04.2 [92.8 kB]
Get:3 http://id.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libaprutill-d
```

5. Setelah instalasinya selesai, lalu aktifkan dan mulai Apache

        sudo systemctl start apache2

        sudo systemctl enable apache2


```
catrin@catrinserver:~$ sudo systemctl start apache2
catrin@catrinserver:~$ sudo systemctl enable apache2
Synchronizing state of apache2.service with SysV service script with /lib/system
d/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable apache2
```

6. Instal PHP dan modul yang diperlukan untuk berjalan bersama Apache

        sudo apt install php libapache2-mod-php php-mysql


```
catrin@catrinserver: ~                                    —   □   ×
catrin@catrinserver:~$  sudo apt install php libapache2-mod-php php-mysql
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libapache2-mod-php8.1 php-common php8.1 php8.1-cli php8.1-common
  php8.1-mysql php8.1-opcache php8.1-readline
Suggested packages:
  php-pear
The following NEW packages will be installed:
  libapache2-mod-php libapache2-mod-php8.1 php php-common php-mysql php8.1
  php8.1-cli php8.1-common php8.1-mysql php8.1-opcache php8.1-readline
0 upgraded, 11 newly installed, 0 to remove and 62 not upgraded.
Need to get 5,265 kB of archives.
After this operation, 21.8 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://id.archive.ubuntu.com/ubuntu jammy/main amd64 php-common all 2:92ub
untul [12.4 kB]
Get:2 http://id.archive.ubuntu.com/ubuntu jammy-updates/main amd64 php8.1-common
 amd64 8.1.2-lubuntu2.14 [1,127 kB]
Get:3 http://id.archive.ubuntu.com/ubuntu jammy-updates/main amd64 php8.1-opcach
e amd64 8.1.2-lubuntu2.14 [365 kB]
Get:4 http://id.archive.ubuntu.com/ubuntu jammy-updates/main amd64 php8.1-readli
ne amd64 8.1.2-lubuntu2.14 [13.6 kB]
```

Setelah menyelesaikan proses instalasi, periksa agar PHP berjalan dengan baik bersama Apache

sudo systemctl restart apache2

```
catrin@catrinserver:~$  sudo systemctl restart apache2
catrin@catrinserver:~$
```

7. **Instal Database Server (MySQL)**

sudo apt install mYSQL-server

```
catrin@catrinserver:~$ sudo apt install mysql-server
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libcgi-fast-perl libcgi-pm-perl libclone-perl libencode-locale-perl
  libevent-pthreads-2.1-7 libfcgi-bin libfcgi-perl libfcgi0ldbl
  libhtml-parser-perl libhtml-tagset-perl libhtml-template-perl
  libhttp-date-perl libhttp-message-perl libio-html-perl
  liblwp-mediatypes-perl libmecab2 libprotobuf-lite23 libtimedate-perl
  liburi-perl mecab-ipadic mecab-ipadic-utf8 mecab-utils mysql-client-8.0
  mysql-client-core-8.0 mysql-common mysql-server-8.0 mysql-server-core-8.0
Suggested packages:
  libdata-dump-perl libipc-sharedcache-perl libbusiness-isbn-perl libwww-perl
  mailx tinyca
The following NEW packages will be installed:
  libcgi-fast-perl libcgi-pm-perl libclone-perl libencode-locale-perl
  libevent-pthreads-2.1-7 libfcgi-bin libfcgi-perl libfcgi0ldbl
  libhtml-parser-perl libhtml-tagset-perl libhtml-template-perl
  libhttp-date-perl libhttp-message-perl libio-html-perl
  liblwp-mediatypes-perl libmecab2 libprotobuf-lite23 libtimedate-perl
  liburi-perl mecab-ipadic mecab-ipadic-utf8 mecab-utils mysql-client-8.0
  mysql-client-core-8.0 mysql-common mysql-server mysql-server-8.0
  mysql-server-core-8.0
```

Setelah selesai melakukan instalasi selesai, selanjutnya amankan instalasi mysql

sudo mysql_secure_installation

```
catrin@catrinserver:~$ sudo mysql_secure_installation
[sudo] password for catrin:

Securing the MySQL server deployment.

Connecting to MySQL using a blank password.

VALIDATE PASSWORD COMPONENT can be used to test passwords
and improve security. It checks the strength of password
and allows the users to set only those passwords which are
secure enough. Would you like to setup VALIDATE PASSWORD component?

Press y|Y for Yes, any other key for No: y

There are three levels of password validation policy:

LOW    Length >= 8
MEDIUM Length >= 8, numeric, mixed case, and special characters
STRONG Length >= 8, numeric, mixed case, special characters and dictionary
            file

Please enter 0 = LOW, 1 = MEDIUM and 2 = STRONG: ^C
catrin@catrinserver:~$
```
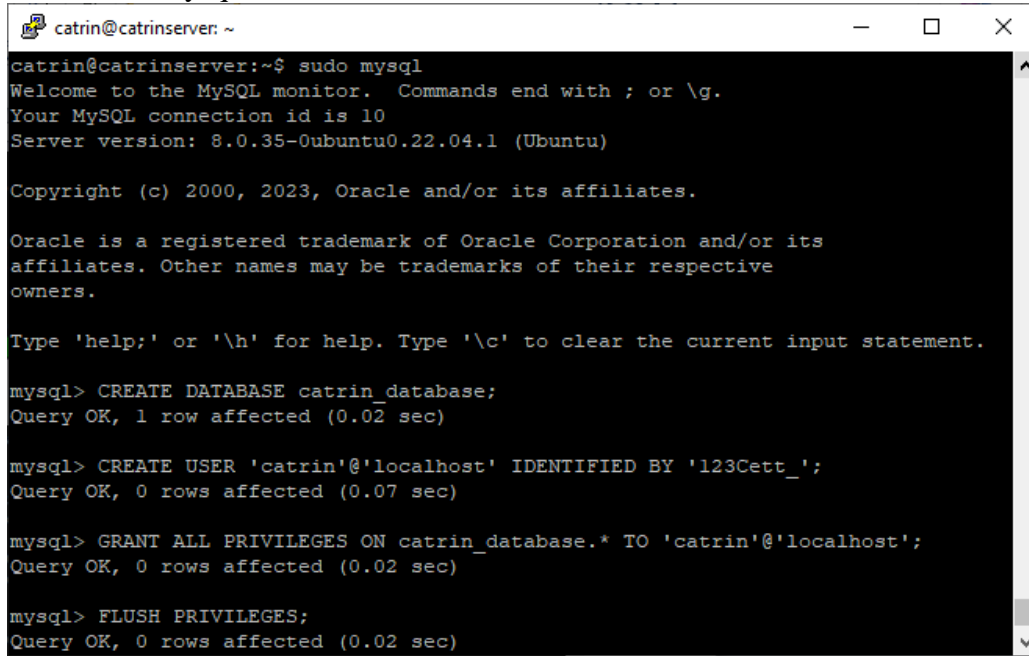
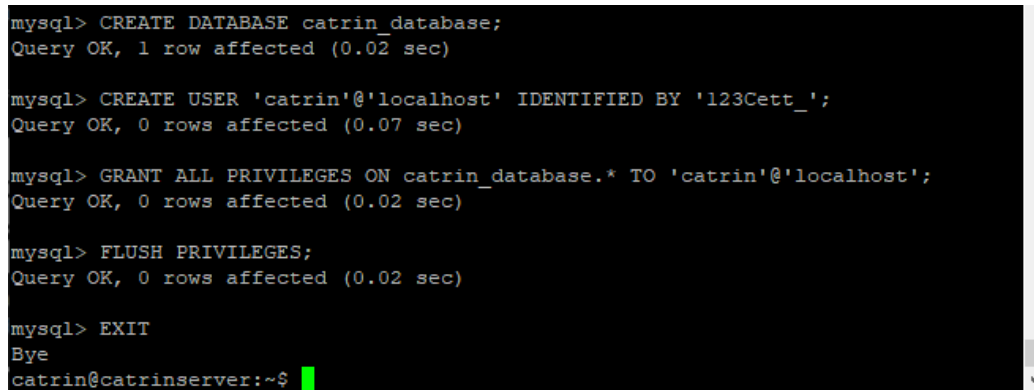## 8. Selanjutnya membuat Database dan Pengguna Database

Log masuk ke mysql sebagai root:

    sudo mysql

Buat database baru dan pengguna database untuk WordPress. Ubah bagian `nama_database`, `nama_pengguna`, dan `password_pengguna`

9. Instal WordPress:

Dwonload lalu ekstrak arsip WordPress ke dalam direktori web root. Dan ubahlah `nama_folder` dengan nama folder yang diinginkan:

```
catrin@catrinserver:~$ cd /var/www/html
catrin@catrinserver:/var/www/html$ sudo wget https://wordpress.org/latest.tar.gz
--2023-10-31 09:02:22--  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'

latest.tar.gz        100%[===================>]  22.38M  2.91MB/s    in 10s

2023-10-31 09:02:34 (2.15 MB/s) - 'latest.tar.gz' saved [23465047/23465047]

catrin@catrinserver:/var/www/html$
```

```
catrin@catrinserver:/var/www/html$ sudo tar -xzvf latest.tar.gz
catrin@catrinserver:/var/www/html$ sudo mv wordpress catrin_folder
catrin@catrinserver:/var/www/html$
```

10. Konfigurasi pada WordPress

Membuat salinan file konfigurasi pada WordPress dan edit file `wp-config.php

```
catrin@catrinserver:/var/www/html$ sudo mv wordpress catrin_folder
catrin@catrinserver:/var/www/html$ sudo cp /var/www/html/catrin_folder/wp-config
-sample.php /var/www/html/catrin_folder/wp-config.php
```

Sesuaikan konfigurasi database dengan informasi yang telah dibuat sebelumnya.

```
catrin@catrinserver: /var/www/html                          —    □    ×

  GNU nano 6.2          /var/www/html/catrin_folder/wp-config.php *

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

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

/** Database password */
define( 'DB_PASSWORD', '123Cett_' );

/** Database hostname */
define( 'DB_HOST', 'localhost' );

/** Database charset to use in creating database tables. */
define( 'DB_CHARSET', 'utf8' );

/** The database collate type. Don't change this if in doubt. */
define( 'DB_COLLATE', '' );


^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
```
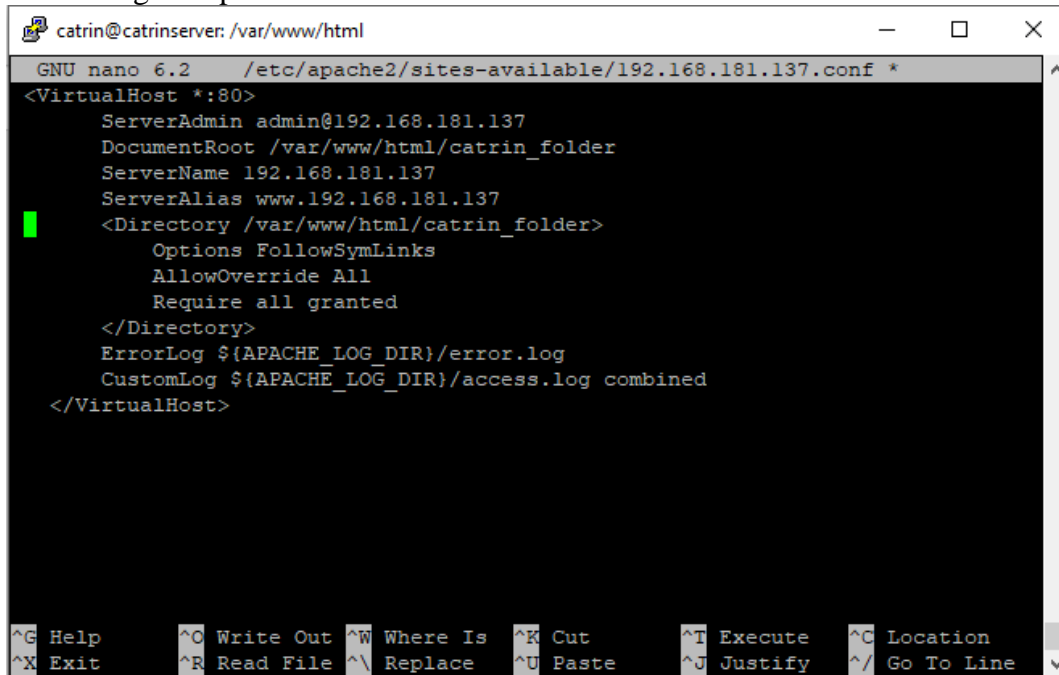
11. Atur Izin Akses

Pastikan Apache memiliki hak akses yang tepat ke folder WordPress.
Konfigurasikan server web Apache untuk mengalihkan permintaan ke WordPress dengan membuat file konfigurasi baru.

```
catrin@catrinserver:/var/www/html$ sudo chown -R www-data:www-data /var/www/html
/catrin_folder

catrin@catrinserver:/var/www/html$
```

Isi konfigurasi pada server web:

```
catrin@catrinserver: /var/www/html                                    —    □    ×

  GNU nano 6.2    /etc/apache2/sites-available/192.168.181.137.conf *
<VirtualHost *:80>
        ServerAdmin admin@192.168.181.137
        DocumentRoot /var/www/html/catrin_folder
        ServerName 192.168.181.137
        ServerAlias www.192.168.181.137
        <Directory /var/www/html/catrin_folder>
            Options FollowSymLinks
            AllowOverride All
            Require all granted
        </Directory>
        ErrorLog ${APACHE_LOG_DIR}/error.log
        CustomLog ${APACHE_LOG_DIR}/access.log combined
   </VirtualHost>




^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
```

12. Aktifkan Konfigurasi dan Restart Apache

Aktifkan konfigurasi situs, lakukan restart pada Apache, serta cek status keaktifan Apache2

```
catrin@catrinserver:/var/www/html$ sudo a2ensite 192.168.181.137.conf
Enabling site 192.168.181.137.
To activate the new configuration, you need to run:
  systemctl reload apache2
catrin@catrinserver:/var/www/html$

catrin@catrinserver:/var/www/html$ sudo nano /etc/apache2/sites-available/192.16
8.181.137.conf
catrin@catrinserver:/var/www/html$ sudo a2ensite 192.168.181.137.conf
Enabling site 192.168.181.137.
To activate the new configuration, you need to run:
  systemctl reload apache2
catrin@catrinserver:/var/www/html$ sudo systemctl restart apache2
catrin@catrinserver:/var/www/html$ sudo systemctl status apache2
```

13. Kemudian ke laman web dan ketik sesuai dengan domain "http://192.168.181.137/wp-admin/install.php" maka tampilan akan berubah seperti ini

Selanjutnya masukkan judul situs, email, dan password. Setelah selesai coba login dengan menggunakan nama pengguna/email dan password yang telah diatur sebelumnya sehingga akan muncul tampilan berikut
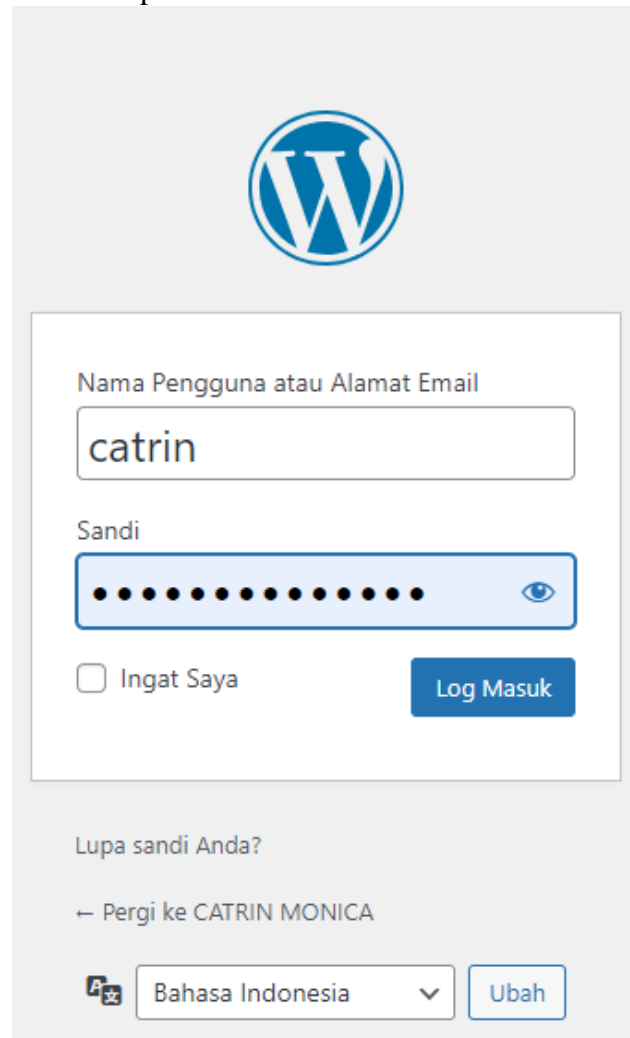
Tampilan Homepage untuk Admin Server

Berikut tampilan saat mencoba untuk membuat halaman web yang akan ditampilkan pada saat pengunjung masuk