LANGKAH – LANGKAH INSTALASI MOODLE

1. Masuk root mode
   a. Buka PowerShell (Windows/Cloud Shell)
   b. SSH ke Virtual Machine dengan username dan ip address yang telah dibuat

   ```
   $ ssh <username>@<public ip>
   ```

   c. Masukkan password
   d. Ubah root password dengan command berikut

   ```
   $ sudo passwd root <enter>
   ```

   e. Masukkan password root yang diinginkan
   f. Masuk ke mode root dengan command berikut

   ```
   $ su <enter>
   ```

   g. Masukkan password root

2. Install Nginx
   a. Update OS VM dengan command berikut

   ```
   $ apt update; apt upgrade -y
   ```

   b. Install Nginx dengan command berikut

   ```
   $ apt install nginx -y
   ```

3. Install MariaDB
   a. Install MariaDB server dengan command berikut

   ```
   $ apt install mariadb-server -y
   ```

   b. Amankan instalasi MariaDB dengan command berikut

   ```
   $ mysql_secure_installation
   ```

   c. Jawab pertanyaan yang diberikan

   ```
   Enter current password for root (enter for
   none): ENTER
   Switch to unix_socket authentication [Y/n] n
   Set root password? [Y/n] y
   Remove anonymous users? [Y/n] y
   Disallow root login remotely? [Y/n] y
   Remove test database and access to it? [Y/n]
   y
   ```
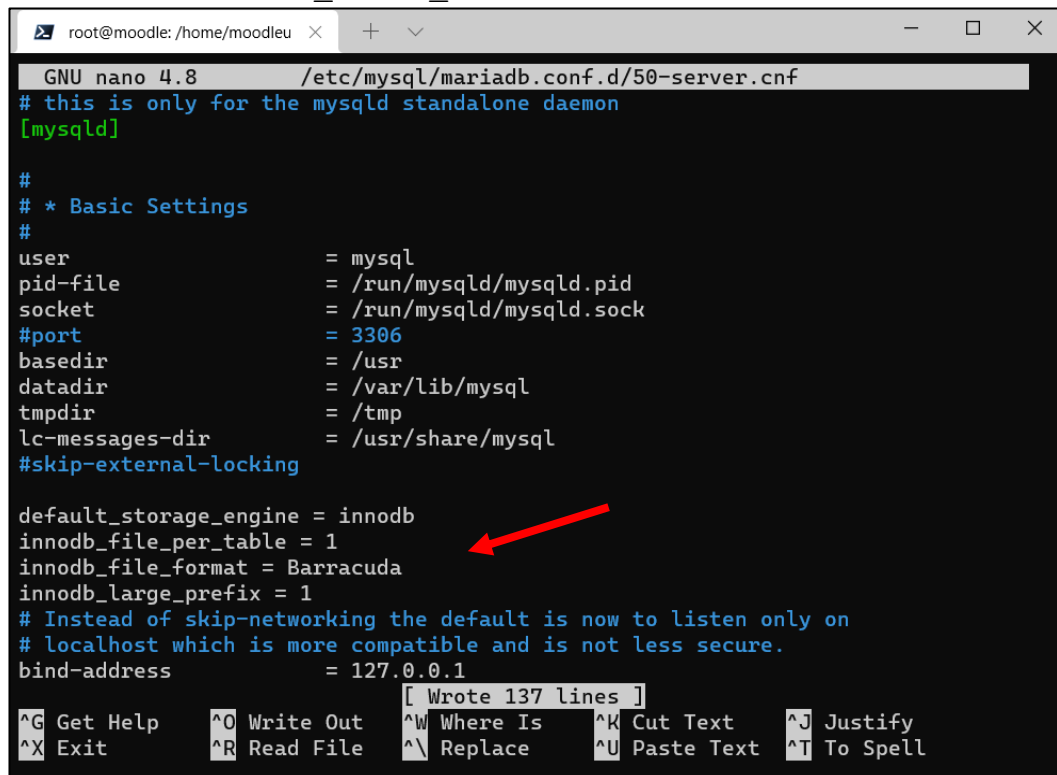
```
Reload privilege tables now? [Y/n] y
```

d. Konfigurasi MariaDB server dengan command berikut

```
$ nano /etc/mysql/mariadb.conf.d/50-server.cnf
```

e. Tambahkan kode berikut di bawah **[mysqld]**

```
default_storage_engine = innodb
innodb_file_per_table = 1
innodb_file_format = Barracuda
innodb_large_prefix = 1
```


f. Restart MariaDB

```
$ systemctl restart mariadb; systemctl status
mariadb
```

g. Login ke MariaDB

```
$ mysql -u root -p
```

h. Buat database baru dan akses ke database

```
CREATE DATABASE moodle DEFAULT CHARACTER SET
utf8mb4 COLLATE utf8mb4_unicode_ci;
CREATE     USER     'usrmoodle'@'localhost'
IDENTIFIED BY 'secret';
```

```
GRANT    ALL    PRIVILEGES    ON    moodle.*    TO
'usrmoodle'@'localhost';
FLUSH PRIVILEGES;
exit
```

4. Install PHP-FPM

   a. Install PHP-FPM

      ```
      $ apt install php-fpm php-common php-pspell
      php-curl php-gd php-intl php-mysql php-xml
      php-xmlrpc php-ldap php-zip php-soap php-
      mbstring -y
      ```

   b. Konfigurasi php.ini

      ```
      $ nano /etc/php/7.4/fpm/php.ini
      ```

   c. Ubah bagian konfigurasi berikut

      max_input_vars = 6000

      memory_limit = 256M

      upload_max_filesize = 64M

      post_max_size = 64M

      max_execution_time = 360

      max_input_time = 360

      cgi.fix_pathinfo = 0

      date.timezone = Asia/(Jakarta, Makassar)

      Note: untuk mempermudah pencarian gunakan ctrl + w. jangan lupa
      untuk menghilangkan ';' disamping kiri kode.

   d. Restart PHP-FPM

      ```
      $ systemctl restart php7.4-fpm; systemctl
      status php7.4-fpm
      ```

5. Download Moodle

   a. Download moodle dengan wget

      ```
      $                                    wget
      https://download.moodle.org/download.php/dire
      ```

```
ct/stable311/moodle-latest-311.tgz; tar xzvf
moodle-latest-311.tgz
```

b. Buat folder untuk moodle

```
$ mkdir -p /var/www/moodle/data;
mv moodle /var/www/moodle/web;
chown -R www-data:www-data /var/www/moodle;
chmod -R 755 /var/www/moodle
```

c. Konfigurasi Nginx block untuk SUBDOMAIN

```
cd /etc/nginx/conf.d; nano <SUBDOMAIN>.conf
```

d. Masukkan konfigurasi dibawah ini

server {

   listen 80;

   server_name <SUBDOMAIN>;

   root /var/www/moodle/web;

   index index.php index.html index.htm;

   location / {

      try_files $uri $uri/ /index.php?$query_string;

   }

   location /dataroot/ {

      internal;

      alias /var/www/moodle/data;

   }

   location ~ [^/]\.php(/|$) {

     include snippets/fastcgi-php.conf;

     fastcgi_pass unix:/run/php/php7.4-fpm.sock;

     fastcgi_param   SCRIPT_FILENAME
$document_root$fastcgi_script_name;

     include fastcgi_params;

   }

```
        }
    e.  restart nginx
        $ nginx -t; systemctl restart nginx; systemctl
        status nginx
```

6. Install SSL

```
$ apt install snapd
$ sudo snap install core; sudo snap refresh core
$ sudo snap install --classic certbot
$ sudo ln -s /snap/bin/certbot /usr/bin/certbot
$ sudo certbot --nginx -d <SUBDOMAIN>
$ sudo certbot renew --dry-run
```