

Lab-4 (Set)

เข้าไปเปลี่ยน hostname /hosts ใหม่

```
GNU nano 6.2 /etc/hostname
webserver006
```

```
GNU nano 6.2 /etc/hosts *
127.0.0.1 localhost
127.0.1.1 webserver006

# The following lines are desirable for IPv6 capable hosts
::1 ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
```

```
GNU nano 6.2 /etc/hostname
backend006
```

```
GNU nano 6.2 /etc/hosts
127.0.0.1 localhost
127.0.1.1 backend006

# The following lines are desirable for IPv6 capable hosts
::1 ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
```

webserver006

```
Bye
devuser@webserver006: /var/www/lab4/server$ node -v
v20.10.0
devuser@webserver006: /var/www/lab4/server$ npm -v
10.2.3
devuser@webserver006: /var/www/lab4/server$
```

อนุญาต port 3000 ให้ใช้งานได้

```
devuser@webserver006:~$ sudo ufw status
```

```
[sudo] password for devuser:
```

```
Status: active
```

To	Action	From
--	-----	----
OpenSSH	ALLOW	Anywhere
Apache	ALLOW	Anywhere
Nginx Full	ALLOW	Anywhere
3333	ALLOW	Anywhere
3000	ALLOW	Anywhere
3001	ALLOW	Anywhere
3002	ALLOW	Anywhere
3003	ALLOW	Anywhere
3004	ALLOW	Anywhere
4000	ALLOW	Anywhere
OpenSSH (v6)	ALLOW	Anywhere (v6)
Apache (v6)	ALLOW	Anywhere (v6)
Nginx Full (v6)	ALLOW	Anywhere (v6)
3333 (v6)	ALLOW	Anywhere (v6)
3000 (v6)	ALLOW	Anywhere (v6)
3001 (v6)	ALLOW	Anywhere (v6)
3002 (v6)	ALLOW	Anywhere (v6)
3003 (v6)	ALLOW	Anywhere (v6)
3004 (v6)	ALLOW	Anywhere (v6)
4000 (v6)	ALLOW	Anywhere (v6)

```
devuser@webserver006:~$
```

sudo

```
devuser@server:~$ sudo mkdir -p /var/www/lab4
[sudo] password for devuser:
devuser@server:~$ cd /var/www/
devuser@server:/var/www$ cd lab4
devuser@server:/var/www/lab4$
```

```
devuser@server:/var/www/lab4/nodelogin$ npm install express --save

added 62 packages, and audited 63 packages in 1s

11 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
```

```
devuser@server:/var/www/lab4/nodelogin$ npm install express-session --save

added 5 packages, and audited 68 packages in 2s

11 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
```

```
devuser@server:/var/www/lab4/nodelogin$ npm install mysql --save

added 12 packages, and audited 80 packages in 996ms

11 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
```

สร้าง Database

```
devuser@server:/var/www/lab4/nodelogin$ sudo mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 17
Server version: 8.0.35-0ubuntu0.22.04.1 (Ubuntu)

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

```
mysql> CREATE DATABASE IF NOT EXISTS `nodelogin` DEFAULT CHARACTER SET utf8 COLLATE utf8_general_ci;
Query OK, 1 row affected, 3 warnings (0.01 sec)

mysql>
```

```
mysql> GRANT ALL ON nodelogin.* TO 'example_user'@'%';
Query OK, 0 rows affected (0.01 sec)

mysql>
```

```
mysql> USE nodelogin;
Database changed
mysql> CREATE TABLE IF NOT EXISTS `accounts` (
  ->   `id` int(11) NOT NULL AUTO_INCREMENT,
  ->   `username` varchar(50) NOT NULL,
  ->   `password` varchar(255) NOT NULL,
  ->   `email` varchar(100) NOT NULL,
  ->   PRIMARY KEY (`id`)
  -> ) ENGINE=InnoDB AUTO_INCREMENT=2 DEFAULT CHARSET=utf8;
Query OK, 0 rows affected, 2 warnings (0.01 sec)
```

```

ERROR 1046 (3D000): No database selected
mysql> USE nodelogin;
Database changed
mysql> CREATE TABLE IF NOT EXISTS `accounts` (
  -> `id` int(11) NOT NULL AUTO_INCREMENT,
  -> `username` varchar(50) NOT NULL,
  -> `password` varchar(255) NOT NULL,
  -> `email` varchar(100) NOT NULL,
  -> PRIMARY KEY (`id`)
  -> ) ENGINE=InnoDB AUTO_INCREMENT=2 DEFAULT CHARSET=utf8;
Query OK, 0 rows affected, 2 warnings (0.01 sec)

mysql> GRANT ALL ON nodelogin.* TO 'example_user'@'%';
ERROR 1410 (42000): You are not allowed to create a user with GRANT
mysql> SHOW DATABASES;
+-----+
| Database |
+-----+
| fifa_database |
| information_schema |
| mysql |
| nodelogin |
| performance_schema |
| sys |
+-----+
6 rows in set (0.00 sec)

mysql> USE nodelogin;
Database changed
mysql> CREATE TABLE IF NOT EXISTS `accounts` (
  -> `id` int(11) NOT NULL AUTO_INCREMENT,
  -> `username` varchar(50) NOT NULL,
  -> `password` varchar(255) NOT NULL,
  -> `email` varchar(100) NOT NULL,
  -> PRIMARY KEY (`id`)
  -> ) ENGINE=InnoDB AUTO_INCREMENT=2 DEFAULT CHARSET=utf8;
Query OK, 0 rows affected, 3 warnings (0.00 sec)

mysql> INSERT INTO `accounts` (`id`, `username`, `password`, `email`) VALUES (1, 'test', 'test', 'test@test.com');
Query OK, 1 row affected (0.00 sec)

mysql>

```

อนุญาตให้ User เข้ามาจัดการได้

```

mysql> INSERT INTO `accounts` (`id`, `username`, `password`, `email`) VALUES (3, 'test3', 'test3', 'test3@test.com');
Query OK, 1 row affected (0.00 sec)

```

ใส่ข้อมูลและตรวจสอบ

```

mysql> SELECT * FROM accounts;
+----+-----+-----+-----+
| id | username | password | email |
+----+-----+-----+-----+
| 1 | test | test | test@test.com |
| 2 | test2 | test2 | test2@test.com |
| 3 | test3 | test3 | test3@test.com |
+----+-----+-----+-----+
3 rows in set (0.00 sec)

```

```

mysql> exit
Bye

```

```

devuser@server: /var/www/lab4/nodelogin$

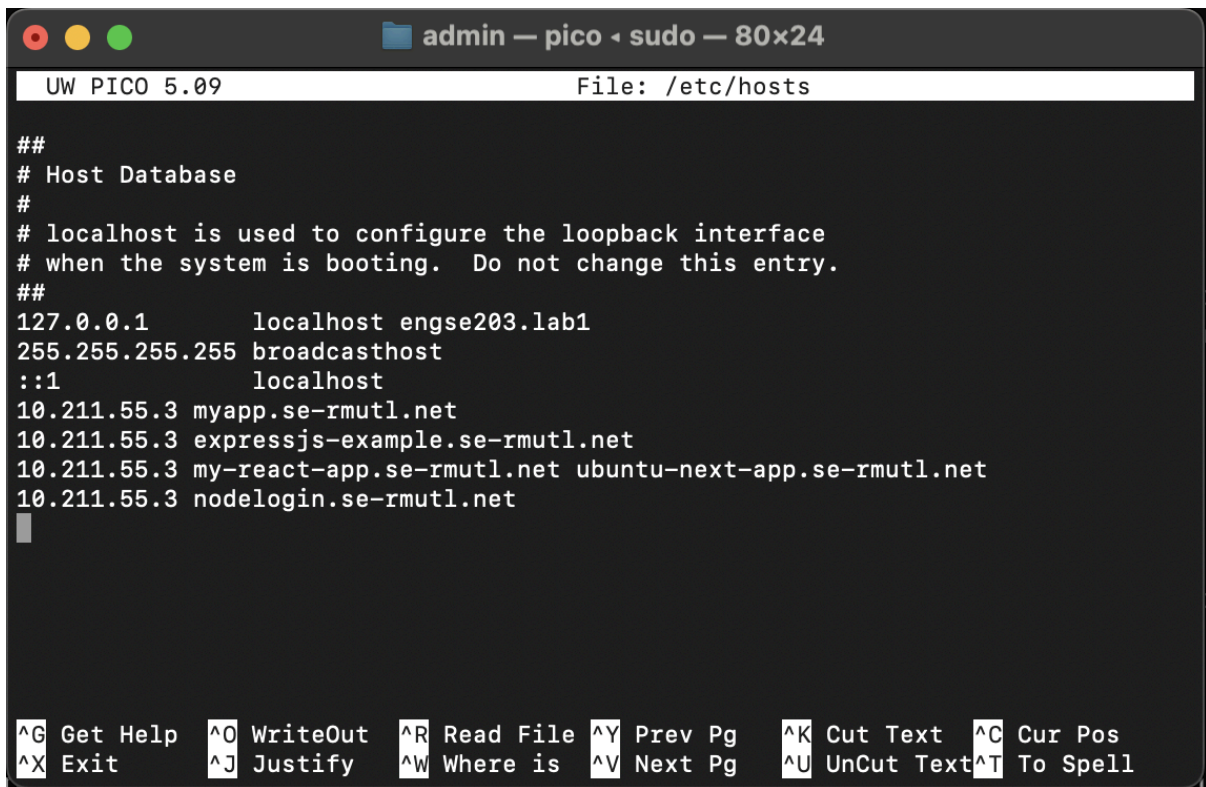
```

cd เข้าไปในโฟลเดอร์ nginx

```
devuser@webserver006:~$ cd /etc/nginx/sites-available/  
devuser@webserver006:/etc/nginx/sites-available$ ls  
client default expressjs-example myapp my-react-app nodelogin ubuntu-next-app  
devuser@webserver006:/etc/nginx/sites-available$
```

```
devuser@webserver006:/etc/nginx/sites-available$ sudo nano nodelogin
```

```
GNU nano 6.2 nodelogin  
server {  
    listen 80;  
    listen [::]:80;  
    server_name nodelogin.se-rmutl.net;  
  
    location / {  
        proxy_pass http://127.0.0.1:3003; # !!! - change to your app port  
        proxy_http_version 1.1;  
        proxy_set_header Upgrade $http_upgrade;  
        proxy_set_header Connection 'upgrade';  
        proxy_set_header Host $host;  
        proxy_cache_bypass $http_upgrade;  
    }  
}  
  
# Virtual Host configuration for example.com  
#  
# You can move that to a different file under sites-available/ and symlink that  
# to sites-enabled/ to enable it.  
#  
#server {  
#    listen 80;  
#    listen [::]:80;  
#  
#    server_name example.com;  
#  
#    root /var/www/example.com;  
#    index index.html;  
#  
#    location / {  
#        try_files $uri $uri/ =404;  
#    }  
#}  
  
[ Read 35 lines ]  
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute    ^C Location   M-U Undo      M-A Set Mark  
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify    ^_ Go To Line  M-E Redo      M-G Copy
```



The screenshot shows a terminal window with the title bar "admin — pico — sudo — 80x24". The status bar at the top indicates "UW PICO 5.09" and "File: /etc/hosts". The main content area displays the following text:

```
##
# Host Database
#
# localhost is used to configure the loopback interface
# when the system is booting. Do not change this entry.
##
127.0.0.1      localhost engse203.lab1
255.255.255.255 broadcasthost
::1           localhost
10.211.55.3    myapp.se-rmutl.net
10.211.55.3    expressjs-example.se-rmutl.net
10.211.55.3    my-react-app.se-rmutl.net ubuntu-next-app.se-rmutl.net
10.211.55.3    nodelogin.se-rmutl.net
```

The bottom of the window features a status bar with various keyboard shortcuts: `^G` Get Help, `^O` WriteOut, `^R` Read File, `^Y` Prev Pg, `^K` Cut Text, `^C` Cur Pos, `^X` Exit, `^J` Justify, `^W` Where is, `^V` Next Pg, `^U` UnCut Text, and `^T` To Spell.

remote จาก VSCode เข้า Ubuntu แล้วไปที่ folder
lab4/login.js เปลี่ยน User และ Password

```
const express = require("express");
const mysql = require("mysql2");
const cors = require("cors");

const app = express();

const db = mysql.createConnection({
  host: 'localhost',
  user: 'example_user',
  password: 'P@ssw0rd@2023',
  database: 'loginsystem',
});
app.use(express.json());
```

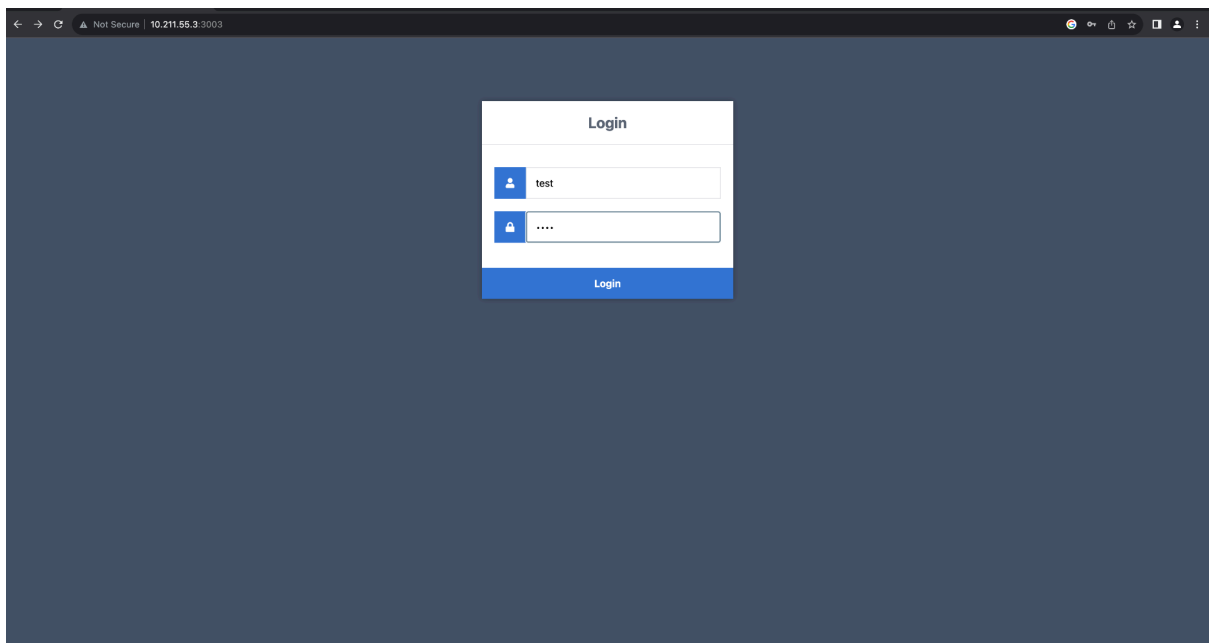
เปลี่ยน Port เป็น 3003

```
app.listen(3003, () => {  
  console.log("running server");  
});
```

```
devuser@server:/var/www/lab4/nodelogin/nodelogin$ node login.js  
█
```

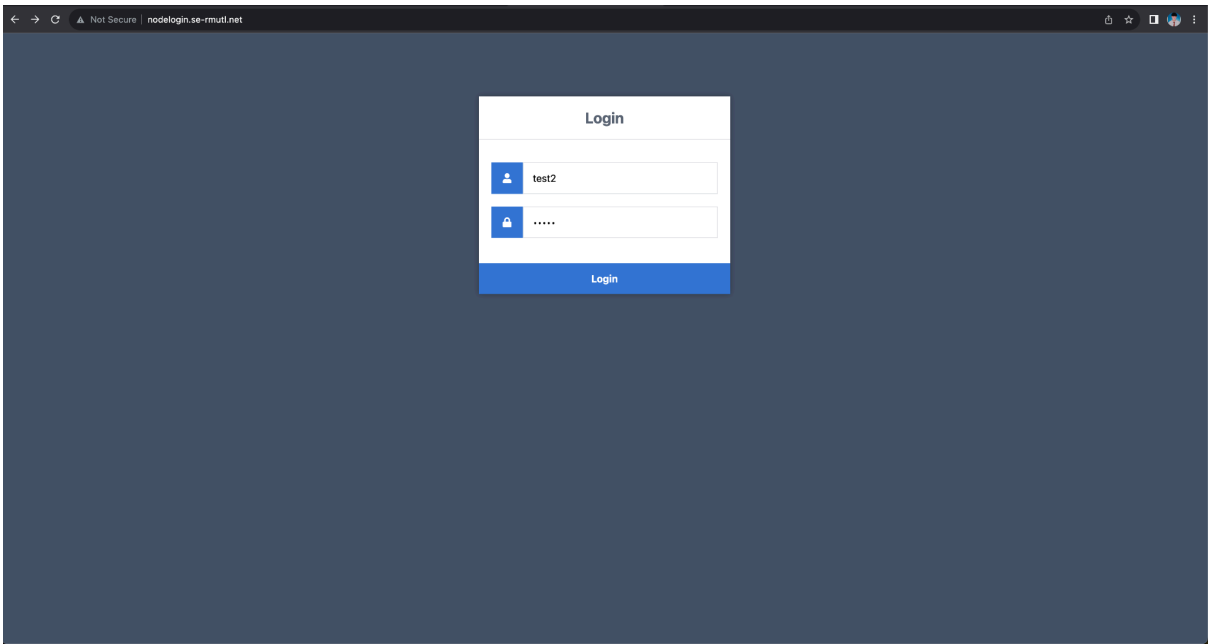
Output :

http://10.211.55.3:3003






http://nodelogin.se-rmutl.net






Step 6 webserver006 Client & server

 Lab4 step6

Step7 backend006 server

 Lab4 step 7 backend server

66543210006-3 จิรภัทร นุโหวาร