ITP111 – System Administration and Maintenance
MIDTERM – LABORATORY ACTIVITY 2
Running a Website in Nginx in Ubuntu Server

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4IT-B

Create a Simple Website

1. **Create a New Directory for the Website:** Nginx serves content from /var/www/. Create a new directory for your website.

```
lucky@lucky:~$ sudo mkdir -p /var/www/simple_website
```

2. **Assign Proper Permissions:** Change ownership of the directory to the current user.

```
lucky@lucky:~$ sudo chown -R $lucky:$lucky /var/www/simple_website_
```

3. **Create an HTML File:** Create a basic HTML file in the website directory.

```
lucky@lucky:~$ nano /var/www/simple_website/index.html
```

Add the following content:

```
<html>
<head>
<title>Welcome to My Simple Website</title>
</head>
<body>
<h1>Hello, this is a test website running on Nginx! -Natanauan</h1>
</body>
</html>
```

4. **Save the File:** Press CTRL + X, then Y, and hit Enter to save and exit the nano editor.

Configure Nginx to Serve the Website

1. **Create a New Server Block:** Server blocks (virtual hosts) are configurations that enable Nginx to serve different websites. Create a new server block configuration file.

```
lucky@lucky:~$ sudo nano /etc/nginx/sites-available/simple_website
```

Add the following configuration:

```
server {
listen 80;
server_name localhost

root var/www/simple_website;
index index.html;

location / {
try_files $uri $uri/ =404;
}
}
```

2. **Enable the Configuration:** Create a symbolic link to enable the server block.

```
lucky@lucky:~$ sudo ln -s /etc/nginx/sites-available/simple_website /etc/nginx/sites-enabled/
```

3. **Test Nginx Configuration:** Verify that the configuration file is correct.

```
sudo nginx -t
the configuration file /etc/nginx/nginx.conf syntax is ok
configuration file /etc/nginx/nginx.conf test is successful
```

4. **Reload Nginx:** Reload Nginx to apply the new configuration.

```
sudo systemctl reload nginx
```

Verify the Website

1. **Open a Web Browser:** In your web browser, navigate to your server's IP address or localhost:

   http://<your-server-ip>

2. **Verify the Webpage:** You should see the "Hello, this is a test website running on Nginx!" message from your HTML file.

3. Create a simple CRUD static pages of a simple Student Information System and test run on the server
   a. Data Page
   b. Add Page
   c. Edit Page
   d. Delete