**Technological Institute of the Philippines**
**Manila**
**CIT401 - Systems Administration and Maintenance**

| | |
|---|---|
| Names | Panayas, Sharmaine R. |
| Section | IT41S3 |

Instructions:

1. Meet as a group and perform the given task.
2. Put your answer on the number (marked as RED) asking for an output.
3. Do not modify the format of this document for easier checking.

Tasks:

A. Installing the LAMP
   1. Issue the command for the Apache
      - `sudo apt install apache2`
      - `sudo ufw app list`
   2. Issue the command for MySQL
      - `sudo apt install mysql-server`
   3. Issue the command for PHP
      - `sudo apt install php libapache2-mod-php php-mysql`

B. Configuring the IP address

1. Follow the link below on how to set static IP address in your Ubuntu server.
   https://technologyrss.com/how-to-configure-static-ip-address-on-ubuntu-21-04-server/

   **Step #01: Check server version using below command.**
   `lsb_release -a && ip r`

```
sharmainepanayas@sharmaine:~$ lsb_release -a && ip r
No LSB modules are available.
Distributor ID: Ubuntu
Description:    Ubuntu 22.04.1 LTS
Release:        22.04
Codename:       jammy
default via 192.168.1.1 dev enp0s3 proto dhcp src 192.168.1.9 metric 100
192.168.1.0/24 dev enp0s3 proto kernel scope link src 192.168.1.9 metric 100
192.168.1.1 dev enp0s3 proto dhcp scope link src 192.168.1.9 metric 100
sharmainepanayas@sharmaine:~$
```

**Step #02: Configure static ip address on Ubuntu 21.04 server.**

`sudo vi /etc/netplan/00-installer-config.yaml`

```
# This is the network config written by 'subiquity'
network:
  ethernets:
    eth0:
      dhcp4: no
    enp0s3:
      dhcp4: no
      addresses: [192.168.1.9/16]
      gateway4: 192.254.254.254
      nameservers:
        addresses: [8.8.8.8, 8.8.4.4]
  version: 2
~
~
```

For the IP address I used my ubuntu IP address. To show the ubuntu IP address I run the code `ifconfig -a`

```
No VM guests are running outdated hypervisor (qemu) binaries on this host.
sharmainepanayas@sharmaine:~$ ifconfig -a
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.1.9  netmask 255.255.255.0  broadcast 192.168.1.255
        inet6 2001:4451:81ec:d300:a00:27ff:fed1:c9b8  prefixlen 64  scopeid 0x0<global>
        inet6 fe80::a00:27ff:fed1:c9b8  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:d1:c9:b8  txqueuelen 1000  (Ethernet)
        RX packets 5262  bytes 2496872 (2.4 MB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 2137  bytes 179522 (179.5 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 96  bytes 7892 (7.8 KB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 96  bytes 7892 (7.8 KB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

sharmainepanayas@sharmaine:~$
```

`netplan apply`

```
~
"/etc/netplan/00-installer-config.yaml" 12L, 265B written
sharmainepanayas@sharmaine:~$ sudo netplan apply

** (generate:1213): WARNING **: 15:21:08.419: `gateway4` has been deprecated, use default routes ins
tead.
See the 'Default routes' section of the documentation for more details.

** (process:1211): WARNING **: 15:21:08.897: `gateway4` has been deprecated, use default routes inst
ead.
See the 'Default routes' section of the documentation for more details.
```

2. On my copy of VM after setting the static IP I have the following:

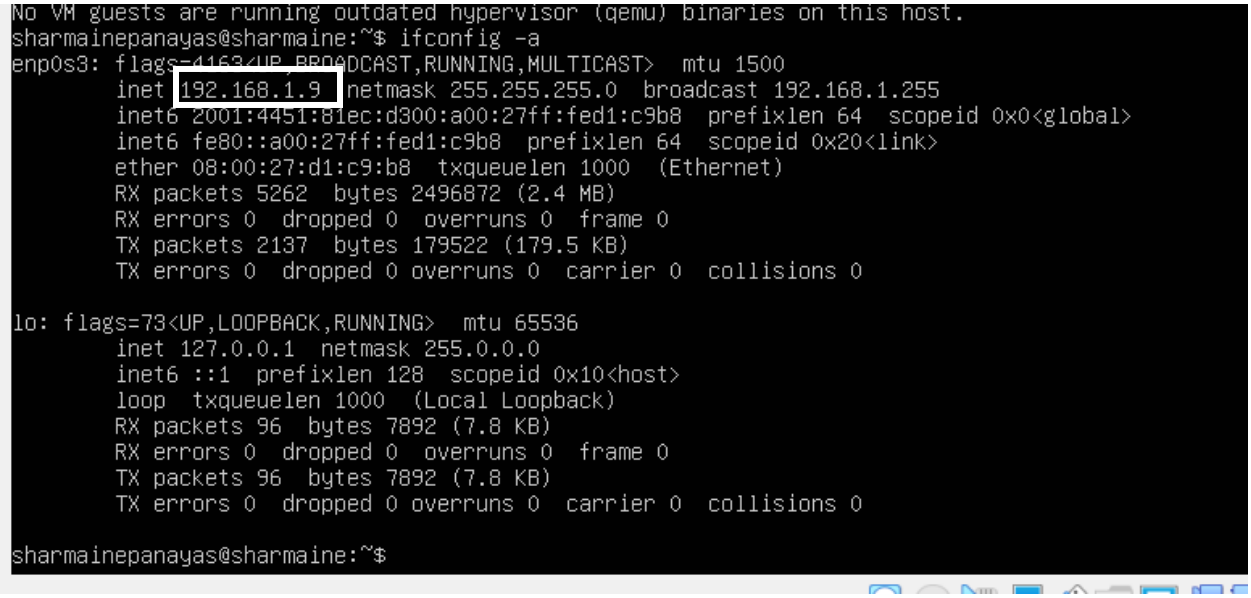


*Figure 1.Static IP  is set to the Ubuntu VM.*

The IP that I set in my Ubuntu is 192.168.1.9 and my desktop is  192.168.1.5. To validate that my desktop pc can communicate with the Ubuntu server, I will issue a ping command and there should be a reply.

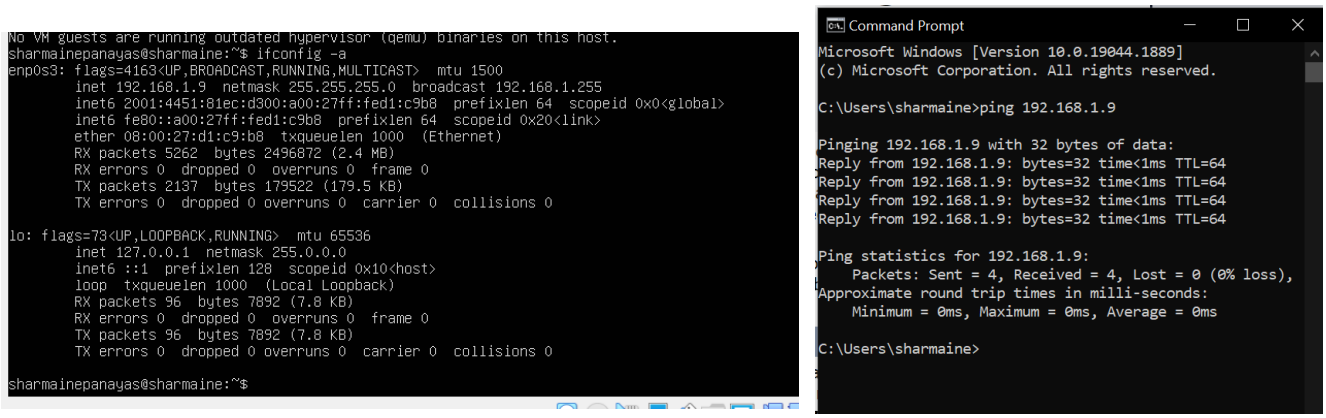


*Figure 2. Issuing ping command from PC to Ubuntu server.*

This way we can access the website that we will be deploying outside the Ubuntu server.

3. Provide a screenshot of your output like Figure 2.

4. Open a browser on your PC and access the test website by typing on the URL http://192.167.245.138 or replace it with your own IP address. The output will be like this:

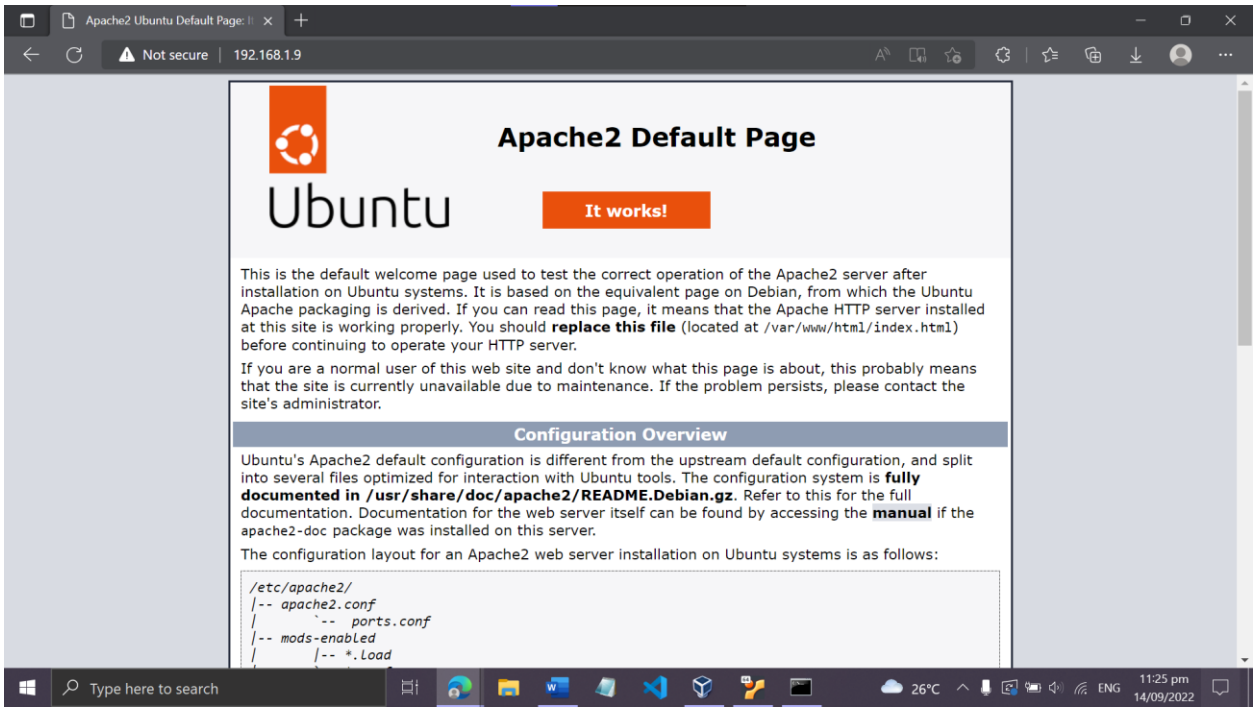


*Figure 3. Default Ubuntu Apache web page.*

5. Put your screenshot below including the URL to see that you can access your server on your PC browser.

```
# This is the network config written by 'subiquity'
network:
  ethernets:
    eth0:
      dhcp4: no
    enp0s3:
      dhcp4: no
      addresses: [192.168.1.9/16]
      gateway4: 192.254.254.254
      nameservers:
        addresses: [8.8.8.8, 8.8.4.4]
  version: 2
~
~
```

```
No VM guests are running outdated hypervisor (qemu) binaries on this host.
sharmainepanayas@sharmaine:~$ ifconfig -a
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.1.9  netmask 255.255.255.0  broadcast 192.168.1.255
        inet6 2001:4451:81ec:d300:a00:27ff:fed1:c9b8  prefixlen 64  scopeid 0x0<global>
        inet6 fe80::a00:27ff:fed1:c9b8  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:d1:c9:b8  txqueuelen 1000  (Ethernet)
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        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 96  bytes 7892 (7.8 KB)
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        TX packets 96  bytes 7892 (7.8 KB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

sharmainepanayas@sharmaine:~$
```
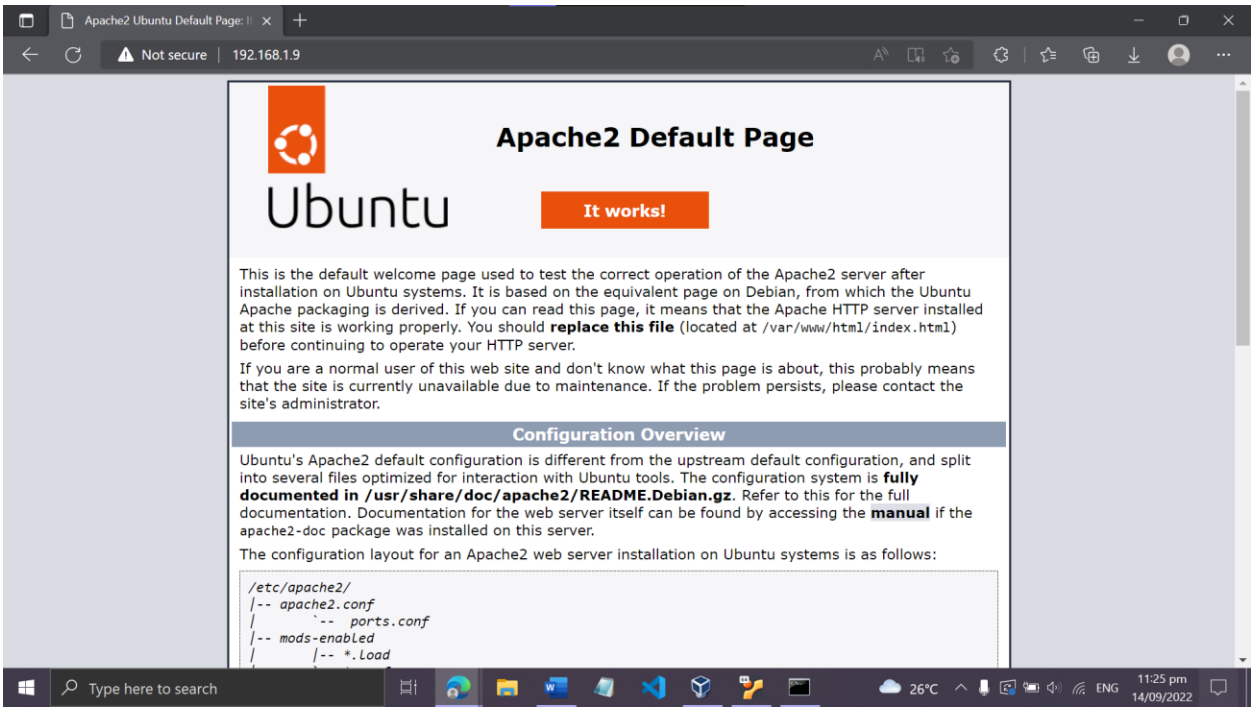

My Ubuntu static IP is 192.168.1.9

```
IPv4 Address. . . . . . . . . . . : 192.168.1.5(Preferred)
Subnet Mask . . . . . . . . . . . : 255.255.255.0
Lease Obtained. . . . . . . . . . : Wednesday, 14 Septembe
Lease Expires . . . . . . . . . . : Thursday, 15 September
Default Gateway . . . . . . . . . : fe80::1000%8
```

My Desktop IP is 192.168.1.5

```
Command Prompt
Microsoft Windows [Version 10.0.19044.1889]
(c) Microsoft Corporation. All rights reserved.

C:\Users\sharmaine>ping 192.168.1.9

Pinging 192.168.1.9 with 32 bytes of data:
Reply from 192.168.1.9: bytes=32 time<1ms TTL=64
Reply from 192.168.1.9: bytes=32 time<1ms TTL=64
Reply from 192.168.1.9: bytes=32 time<1ms TTL=64
Reply from 192.168.1.9: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.1.9:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\sharmaine>
```

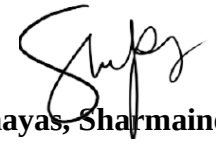
To validate that my desktop pc can communicate with the Ubuntu server, I will issue a ping command and there should be a reply.




This is the output when I entered the Ubuntu IP address in my browser.

**Honor Pledge**

"I affirm that I have not given or received any unauthorized help on this assignment and that this work is my own."



**Panayas, Sharmaine R.**