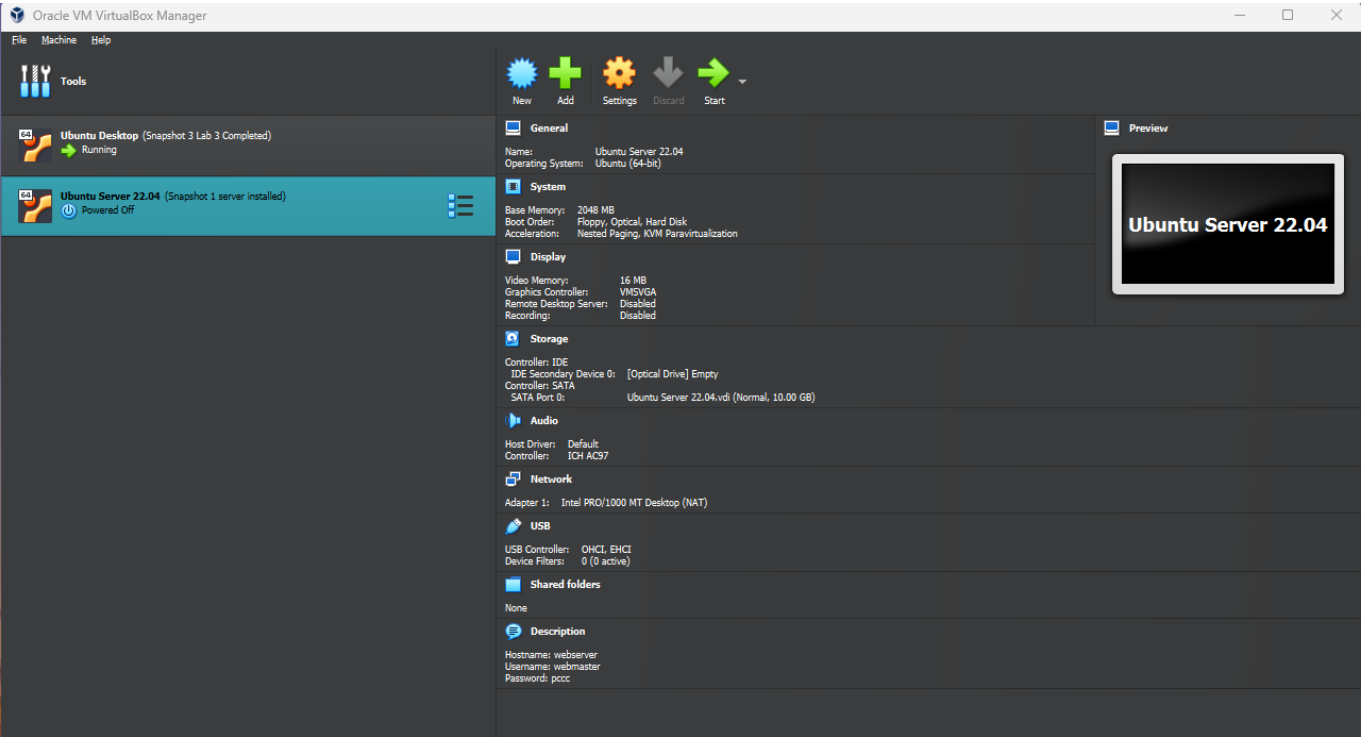
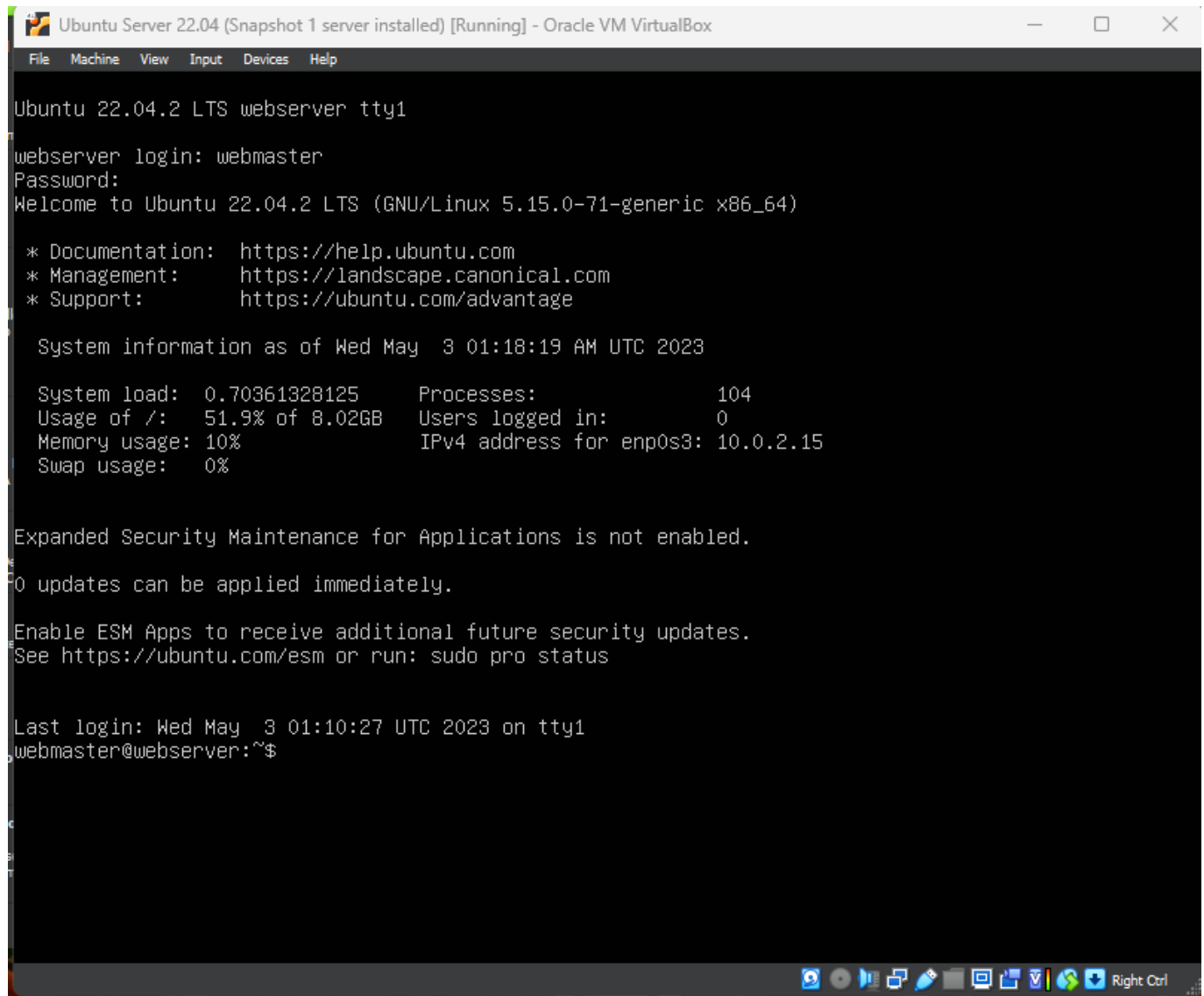


Final Project Ubuntu Server Installed

Ubuntu Server Installed in Virtual Box



Ubuntu Server Successfully installed



The screenshot shows a terminal window titled "Ubuntu Server 22.04 (Snapshot 1 server installed) [Running] - Oracle VM VirtualBox". The terminal output is as follows:

```
Ubuntu 22.04.2 LTS webserver tty1
webserver login: webmaster
Password:
Welcome to Ubuntu 22.04.2 LTS (GNU/Linux 5.15.0-71-generic x86_64)

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

System information as of Wed May  3 01:18:19 AM UTC 2023

System load:  0.70361328125   Processes:            104
Usage of /:   51.9% of 8.02GB   Users logged in:      0
Memory usage: 10%            IPv4 address for enp0s3: 10.0.2.15
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

Last login: Wed May  3 01:10:27 UTC 2023 on tty1
webmaster@webserver:~$
```

Firewall status

```
webmaster@webserver: ~  
webmaster@webserver:~$ sudo ufw status  
Status: active  
  
To Action From  
-- -- --  
Apache ALLOW Anywhere  
22/tcp ALLOW Anywhere  
Apache (v6) ALLOW Anywhere (v6)  
22/tcp (v6) ALLOW Anywhere (v6)  
  
webmaster@webserver:~$
```

Apache status

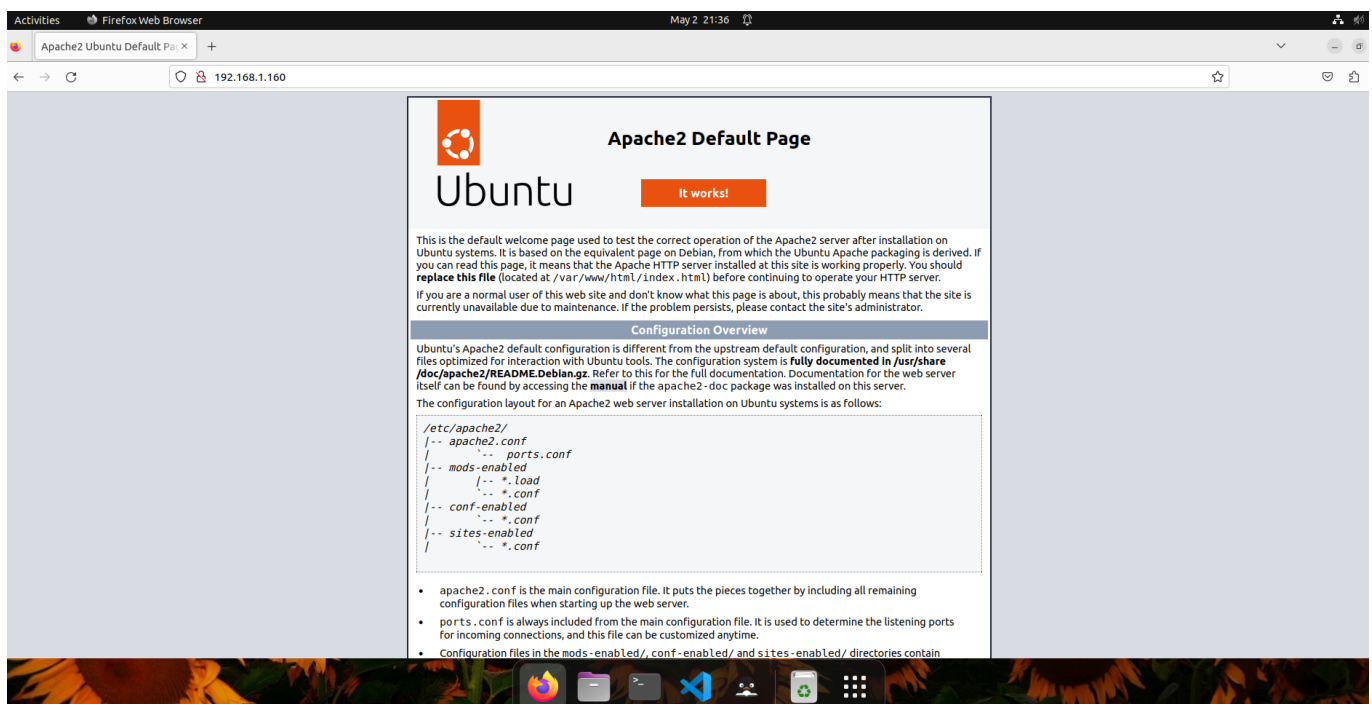
```
webmaster@webserver: ~  
webmaster@webserver:~$ sudo systemctl status apache2 --no-pager  
[sudo] password for webmaster:  
● apache2.service - The Apache HTTP Server  
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)  
   Active: active (running) since Thu 2023-05-04 01:43:57 UTC; 24h ago  
     Docs: https://httpd.apache.org/docs/2.4/  
  Main PID: 801 (apache2)  
    Tasks: 55 (limit: 2234)  
   Memory: 8.8M  
      CPU: 413ms  
   CGroup: /system.slice/apache2.service  
           └─801 /usr/sbin/apache2 -k start  
             └─802 /usr/sbin/apache2 -k start  
               └─803 /usr/sbin/apache2 -k start  
  
May 04 01:43:56 webserver systemd[1]: Starting The Apache HTTP Server...  
May 04 01:43:57 webserver systemd[1]: Started The Apache HTTP Server.  
webmaster@webserver:~$
```

Ssh status

```
Ubuntu Server 22.04 (Snapshot 2 Apache Installed) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
webmaster@webserver:~$ sudo ufw allow 'ssh'
Rule added
Rule added (v6)
webmaster@webserver:~$ sudo systemctl status ssh.service
• ssh.service - OpenBSD Secure Shell server
  Loaded: loaded (/lib/systemd/system/ssh.service; enabled; vendor preset: enabled)
  Active: active (running) since Wed 2023-05-03 01:39:54 UTC; 23min ago
    Docs: man:sshd(8)
           man:sshd_config(5)
  Process: 721 ExecStartPre=/usr/sbin/sshd -t (code=exited, status=0/SUCCESS)
 Main PID: 768 (sshd)
    Tasks: 1 (limit: 2234)
   Memory: 4.4M
      CPU: 28ms
  CGroup: /system.slice/ssh.service
          └─768 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

May 03 01:39:54 webserver systemd[1]: Starting OpenBSD Secure Shell server...
May 03 01:39:54 webserver sshd[768]: Server listening on 0.0.0.0 port 22.
May 03 01:39:54 webserver sshd[768]: Server listening on :: port 22.
May 03 01:39:54 webserver systemd[1]: Started OpenBSD Secure Shell server.
webmaster@webserver:~$
```

Default page



My netplan

```

webmaster@webserver: ~
GNU nano 6.2 /etc/netplan/01-netcfg.yaml
network:
  version: 2
  renderer: networkd
  ethernets:
    eth0:
      addresses:
        - 192.168.1.161/24
      nameservers:
        addresses: [1.1.1.1, 8.8.8.8, 8.8.4.4]
      routes:
        - to: default
          via: 192.168.1.1

[ Read 12 lines ]
^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

```

Apache conf file

```

webmaster@webserver: ~
GNU nano 6.2 /etc/apache2/apache2.conf
# Use mod_remoteip instead.
#
LogFormat "%v:%p %h %l %u %t \"%r\" %>s %O \"%{Referer}i\" \"%{User-Agent}i\"" >
LogFormat "%h %l %u %t \"%r\" %>s %O \"%{Referer}i\" \"%{User-Agent}i\" combin>
LogFormat "%h %l %u %t \"%r\" %>s %O" common
LogFormat "%{Referer}i -> %U" referer
LogFormat "%{User-agent}i" agent

# Include of directories ignores editors' and dpkg's backup files,
# see README.Debian for details.

# Include generic snippets of statements
IncludeOptional conf-enabled/*.conf

# Include the virtual host configurations:
IncludeOptional sites-enabled/*.conf

# vim: syntax=apache ts=4 sw=4 sts=4 sr noet
ServerName 127.0.0.1

^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

```

Site-Available conf file

```
webmaster@webserver: ~  
GNU nano 6.2 /etc/apache2/sites-available/mywebsite.conf  
<VirtualHost *:80>  
    ServerAdmin webmaster@localhost  
    ServerName mywebsite  
    ServerAlias www.mywebsite  
    DocumentRoot /var/www/mywebsite  
    ErrorLog ${APACHE_LOG_DIR}/error.log  
    CustomLog ${APACHE_LOG_DIR}/access.log combined  
</VirtualHost>  
  
[ Read 8 lines ]  
^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
```

Apache access log file

```
webmaster@webserver: /var/log/apache2  
GNU nano 6.2 access.log  
192.168.1.1 - - [03/May/2023:03:37:00 +0000] "GET / HTTP/1.1" 200 10926 "-" "  
192.168.1.158 - - [03/May/2023:03:41:19 +0000] "GET / HTTP/1.1" 200 3460 "-" "M  
192.168.1.158 - - [03/May/2023:03:41:19 +0000] "GET /icons/ubuntu-logo.png HTTP  
192.168.1.158 - - [03/May/2023:03:41:19 +0000] "GET /favicon.ico HTTP/1.1" 404 >  
192.168.1.158 - - [03/May/2023:03:42:19 +0000] "GET / HTTP/1.1" 200 3460 "-" "M  
192.168.1.158 - - [03/May/2023:03:42:19 +0000] "GET /icons/ubuntu-logo.png HTTP  
192.168.1.158 - - [03/May/2023:04:05:09 +0000] "GET / HTTP/1.1" 200 3460 "-" "M  
192.168.1.158 - - [03/May/2023:04:28:01 +0000] "GET / HTTP/1.1" 200 3460 "-" "M  
192.168.1.158 - - [03/May/2023:04:28:01 +0000] "GET /favicon.ico HTTP/1.1" 404 >  
192.168.1.158 - - [03/May/2023:04:48:50 +0000] "GET / HTTP/1.1" 200 1117 "-" "M  
192.168.1.158 - - [03/May/2023:04:48:50 +0000] "GET /favicon.ico HTTP/1.1" 404 >  
192.168.1.158 - - [03/May/2023:04:53:29 +0000] "GET / HTTP/1.1" 200 2516 "-" "M  
192.168.1.158 - - [03/May/2023:04:53:29 +0000] "GET /style.css HTTP/1.1" 404 49>  
192.168.1.158 - - [03/May/2023:04:53:29 +0000] "GET /background.png HTTP/1.1" 4>  
192.168.1.158 - - [03/May/2023:04:53:29 +0000] "GET /house1.jpg HTTP/1.1" 404 4>  
192.168.1.158 - - [03/May/2023:04:53:29 +0000] "GET /house2.webp HTTP/1.1" 404 >  
192.168.1.158 - - [03/May/2023:04:53:29 +0000] "GET /house3.jpg HTTP/1.1" 404 4>  
192.168.1.158 - - [03/May/2023:04:53:29 +0000] "GET /favicon.ico HTTP/1.1" 404 >  
192.168.1.158 - - [03/May/2023:05:00:49 +0000] "GET / HTTP/1.1" 200 2516 "-" "M  
192.168.1.158 - - [03/May/2023:05:00:49 +0000] "GET /style.css HTTP/1.1" 404 49>  
  
[ Read 197 lines ]  
^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
```

Apache error log file


```

webmaster@webserver: /var/log/apache2
GNU nano 6.2 error.log
[Wed May 03 03:31:34.259979 2023] [mpm_event:notice] [pid 1579:tid 139661506901>
[Wed May 03 03:31:34.260073 2023] [core:notice] [pid 1579:tid 139661506901888] >
[Wed May 03 03:35:09.043489 2023] [mpm_event:notice] [pid 1579:tid 139661506901>
[Wed May 03 03:36:42.695278 2023] [mpm_event:notice] [pid 782:tid 1398011683162>
[Wed May 03 03:36:42.696864 2023] [core:notice] [pid 782:tid 139801168316288] A>
[Wed May 03 03:42:38.366468 2023] [mpm_event:notice] [pid 782:tid 1398011683162>
[Wed May 03 03:44:03.408778 2023] [mpm_event:notice] [pid 788:tid 1398768030862>
[Wed May 03 03:44:03.410192 2023] [core:notice] [pid 788:tid 139876803086208] A>
[Wed May 03 04:25:21.877756 2023] [mpm_event:notice] [pid 788:tid 1398768030862>
[Wed May 03 04:27:25.914802 2023] [mpm_event:notice] [pid 791:tid 1403079470508>
[Wed May 03 04:27:25.915282 2023] [core:notice] [pid 791:tid 140307947050880] A>
[Wed May 03 04:46:45.813494 2023] [mpm_event:notice] [pid 791:tid 1403079470508>
AH00558: apache2: Could not reliably determine the server's fully qualified dom>
[Wed May 03 04:46:45.816588 2023] [mpm_event:notice] [pid 791:tid 1403079470508>
[Wed May 03 04:46:45.816593 2023] [core:notice] [pid 791:tid 140307947050880] A>
[Wed May 03 04:46:57.084612 2023] [mpm_event:notice] [pid 791:tid 1403079470508>
AH00558: apache2: Could not reliably determine the server's fully qualified dom>
[Wed May 03 04:46:57.087251 2023] [mpm_event:notice] [pid 791:tid 1403079470508>
[Wed May 03 04:46:57.087255 2023] [core:notice] [pid 791:tid 140307947050880] A>
[Wed May 03 04:48:43.405447 2023] [mpm event:notice] [pid 791:tid 1403079470508>
[ Read 40 lines ]
^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

```

SSH auth log file

```

webmaster@webserver: /var/log
GNU nano 6.2 auth.log
May  3 03:22:26 webserver useradd[646]: new group: name=webmaster, GID=1000
May  3 03:22:26 webserver useradd[646]: new user: name=webmaster, UID=1000, GID>
May  3 03:22:26 webserver useradd[646]: add 'webmaster' to group 'adm'
May  3 03:22:26 webserver useradd[646]: add 'webmaster' to group 'cdrom'
May  3 03:22:26 webserver useradd[646]: add 'webmaster' to group 'sudo'
May  3 03:22:26 webserver useradd[646]: add 'webmaster' to group 'dip'
May  3 03:22:26 webserver useradd[646]: add 'webmaster' to group 'plugdev'
May  3 03:22:26 webserver useradd[646]: add 'webmaster' to group 'lxd'
May  3 03:22:26 webserver useradd[646]: add 'webmaster' to shadow group 'adm'
May  3 03:22:26 webserver useradd[646]: add 'webmaster' to shadow group 'cdrom'
May  3 03:22:26 webserver useradd[646]: add 'webmaster' to shadow group 'sudo'
May  3 03:22:26 webserver useradd[646]: add 'webmaster' to shadow group 'dip'
May  3 03:22:26 webserver useradd[646]: add 'webmaster' to shadow group 'plugde>
May  3 03:22:26 webserver useradd[646]: add 'webmaster' to shadow group 'lxd'
May  3 03:22:26 webserver systemd-logind[675]: New seat seat0.
May  3 03:22:26 webserver systemd-logind[675]: Watching system buttons on /dev/>
May  3 03:22:26 webserver systemd-logind[675]: Watching system buttons on /dev/>
May  3 03:22:26 webserver systemd-logind[675]: Watching system buttons on /dev/>
May  3 03:22:26 webserver sshd[777]: Server listening on 0.0.0.0 port 22.
May  3 03:22:26 webserver sshd[777]: Server listening on :: port 22.
[ Read 1413 lines ]
^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

```

Terminal

```
webmaster@webserver: ~  
webmaster@webserver:~$ sudo nano /etc/apache2/sites-available/mywebsite.conf  
webmaster@webserver:~$ sudo a2dissite mywebsite.conf  
Site mywebsite disabled.  
To activate the new configuration, you need to run:  
    systemctl reload apache2  
webmaster@webserver:~$ sudo a2ensite mywebsite.conf  
Enabling site mywebsite.  
To activate the new configuration, you need to run:  
    systemctl reload apache2  
webmaster@webserver:~$ sudo systemctl reload apache2  
webmaster@webserver:~$ sudo nano /etc/apache2/apache2.conf  
webmaster@webserver:~$ sudo apache2ctl configtest  
Syntax OK  
webmaster@webserver:~$ sydi systemctl restart apache2  
sydi: command not found  
webmaster@webserver:~$ sudo systemctl restart apache2  
webmaster@webserver:~$ hostname -I  
192.168.1.161 2600:4040:acb3:2100:a00:27ff:fe80:af4c  
webmaster@webserver:~$
```

My website screenshot

