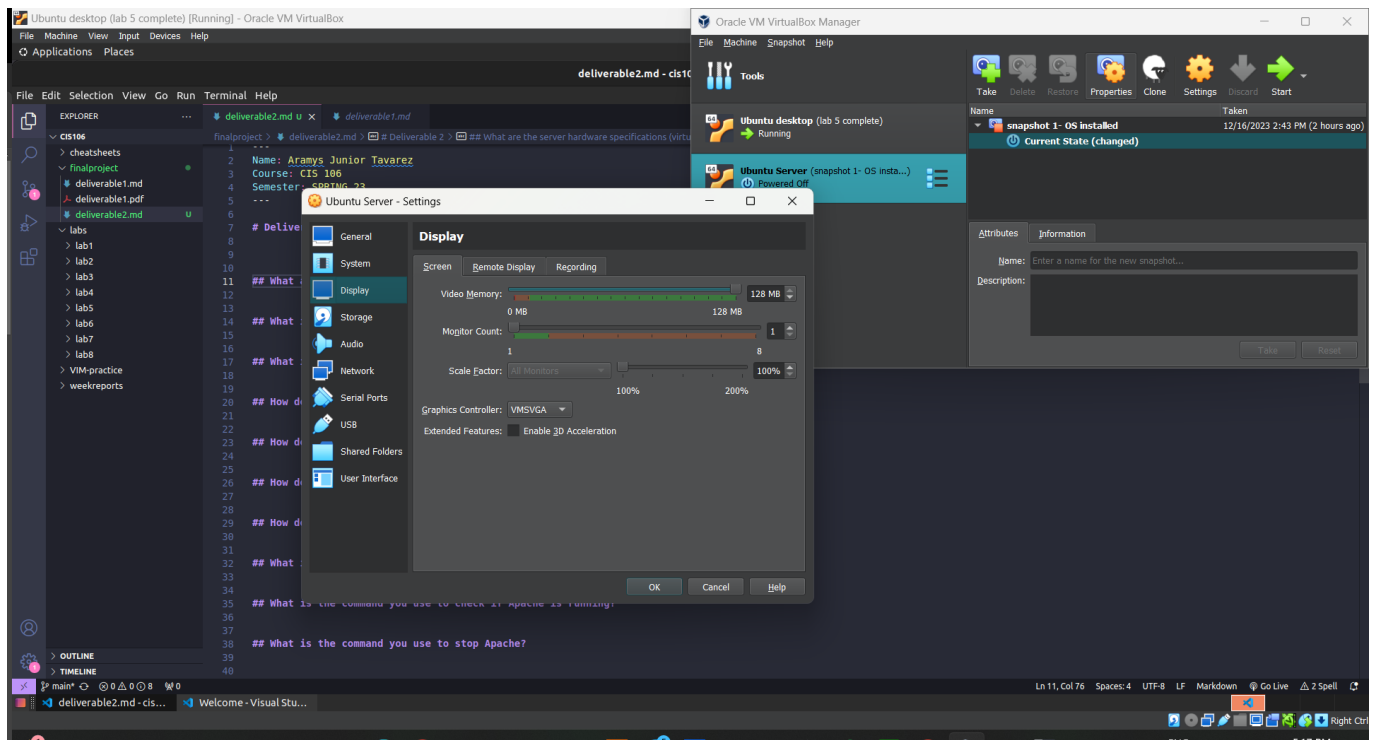
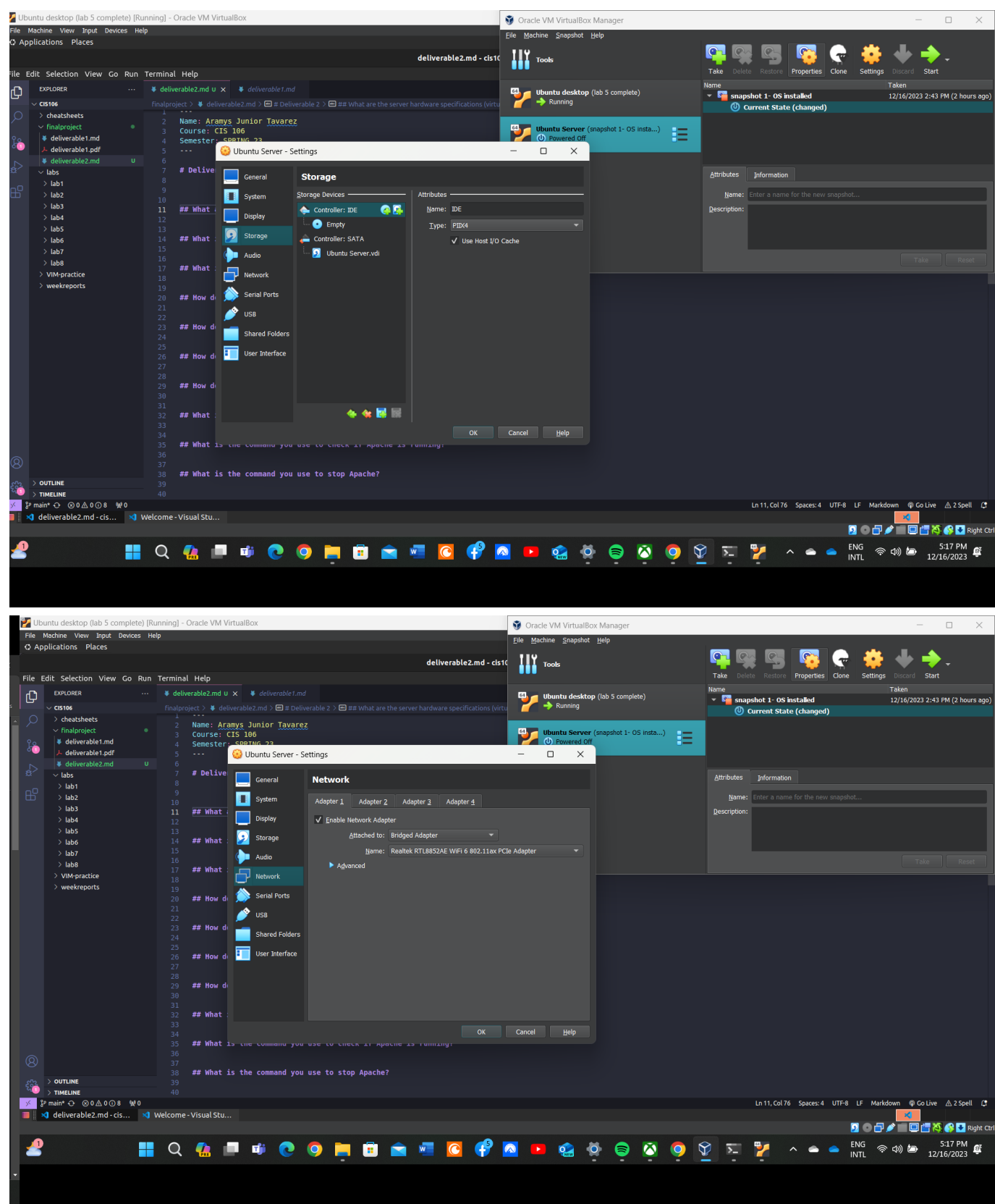
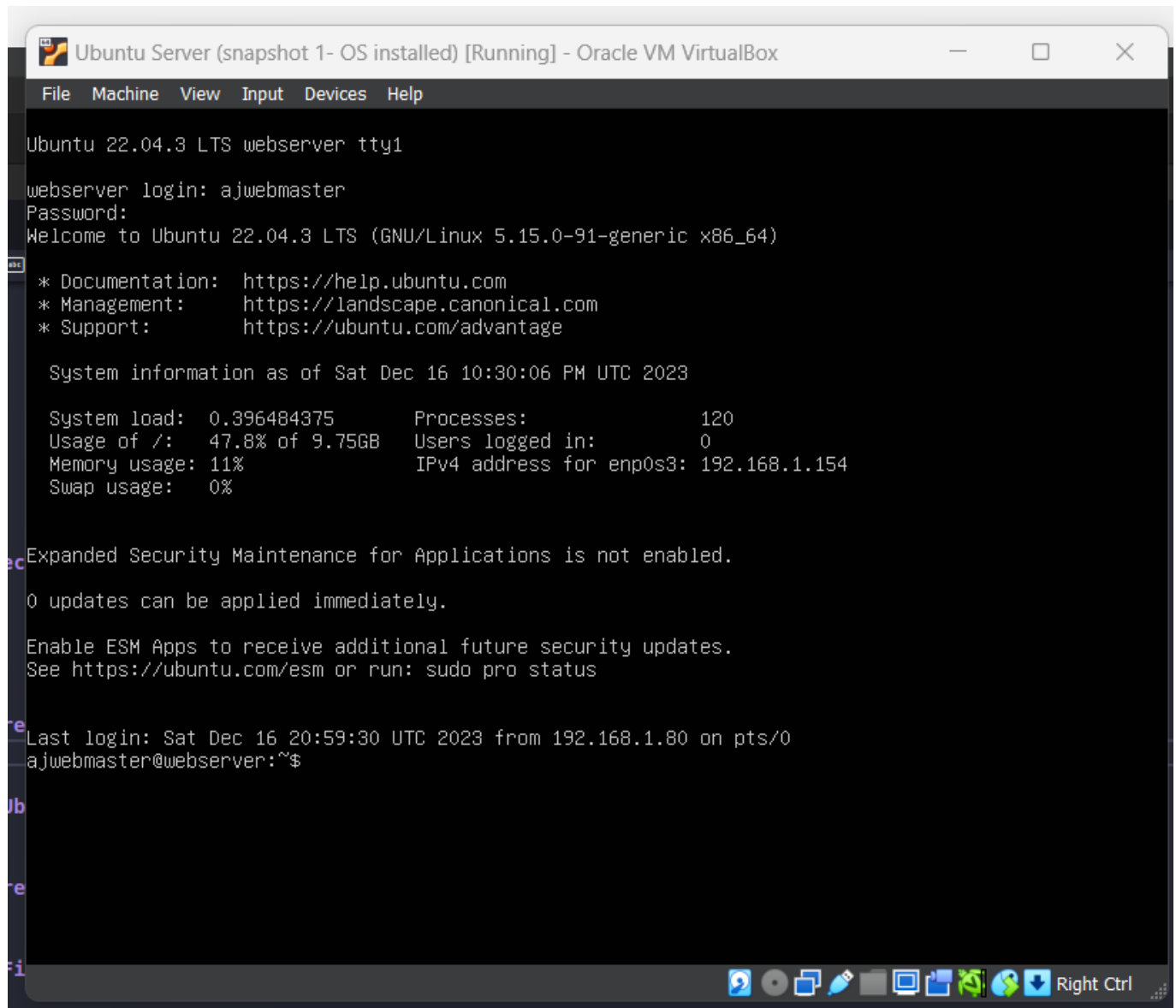


What are the server hardware specifications (virtual machine settings)?





What is Ubuntu server log in screen?



```
Ubuntu Server (snapshot 1- OS installed) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

Ubuntu 22.04.3 LTS webserver tty1
webserver login: ajwebmaster
Password:
Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 5.15.0-91-generic x86_64)

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

System information as of Sat Dec 16 10:30:06 PM UTC 2023

System load:  0.396484375      Processes:            120
Usage of /:   47.8% of 9.75GB   Users logged in:      0
Memory usage: 11%              IPv4 address for enp0s3: 192.168.1.154
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: Sat Dec 16 20:59:30 UTC 2023 from 192.168.1.80 on pts/0
ajwebmaster@webserver:~$
```

What is the IP address of your Ubuntu Server Virtual Machine?

In the welcome page, in the section ipv4 address:192.168.1.154

How do you enable the Ubuntu Firewall?

```
sudo ufw enable
```

How do you check if the Ubuntu Firewall is running?

```
sudo ufw status
```

How do you disable the Ubuntu Firewall?

```
sudo ufw disable
```

How do you add Apache to the Firewall?

```
sudo ufw allow 'apache'
```

What is the command you used to install Apache?

```
sudo apt install apache2
```

What is the command you use to check if Apache is running?

```
sudo systemctl status apache2 --no-pager
```

What is the command you use to stop Apache?

```
sudo systemctl stop apache2 --no-pager
```

What is the command you use to restart Apache?

```
sudo systemctl restart apache2 --no-pager
```

What is the command used to test Apache configuration?

```
sudo apachectl configtest
```

What is the command used to check the installed version of Apache?

```
apache2 -v
```

What are the most common commands to troubleshoot Apache errors? Provide a brief description of each command.

`systemctl` - Used to control and interact with Linux services via the systemd service manager.

`journalctl` - Used to query and view the logs that are generated by systemd. `apachectl` - When troubleshooting, this command is used to check Apache's configuration.

Which are Apache Log Files, and what are they used for?

Apache log files are a very helpful resource for troubleshooting. Generally, any error that you receive in a browser or other HTTP client will have a corresponding entry in Apache's logs. To examine log files for errors while troubleshooting Apache on a Fedora, CentOS, or RedHat server, examine the

`/var/log/httpd/error_log` file.

```
server built on Feb 19 2018:11:11
ajwebmaster@webserver:~$ sudo apachectl configtest
[sudo] password for ajwebmaster:
Syntax OK
ajwebmaster@webserver:~$
```