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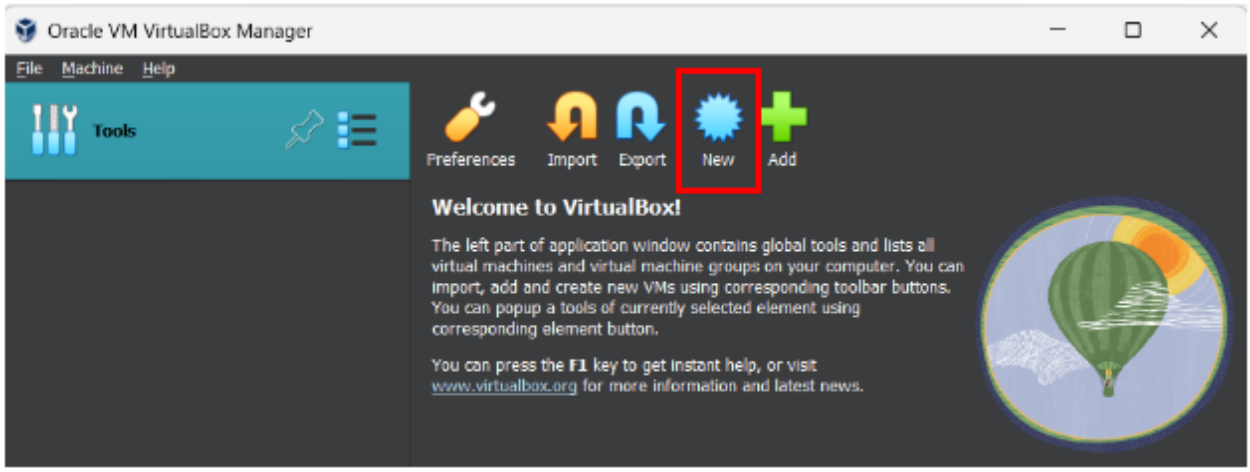
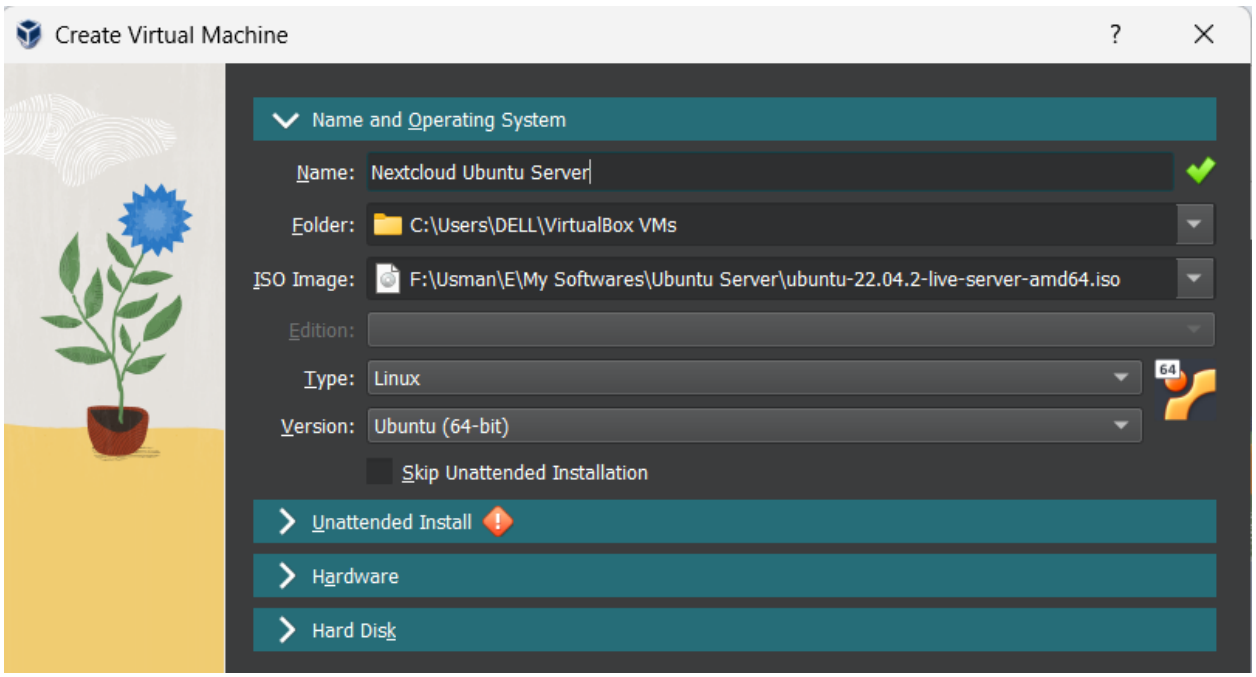
Roll no: 19P-0116
Section: C

Setting up Next Cloud:
After downloading and installing the latest version of Virtual Box. To set the Next Cloud download the disk image of Ubuntu Server. And then follow the steps mentioned below:

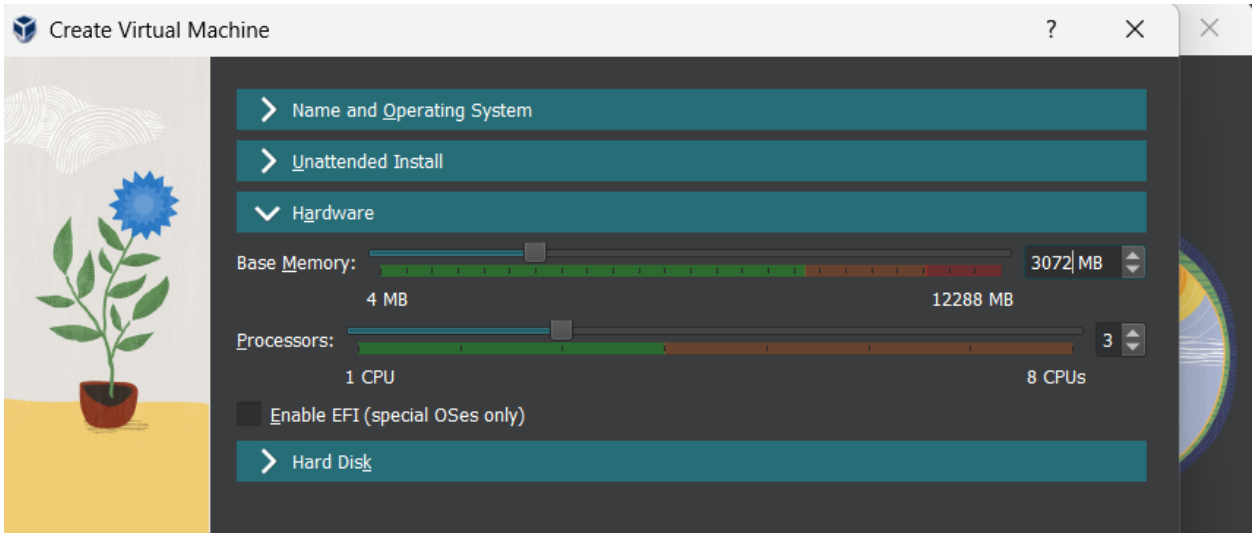
1) Click **New**, To create a new VM.



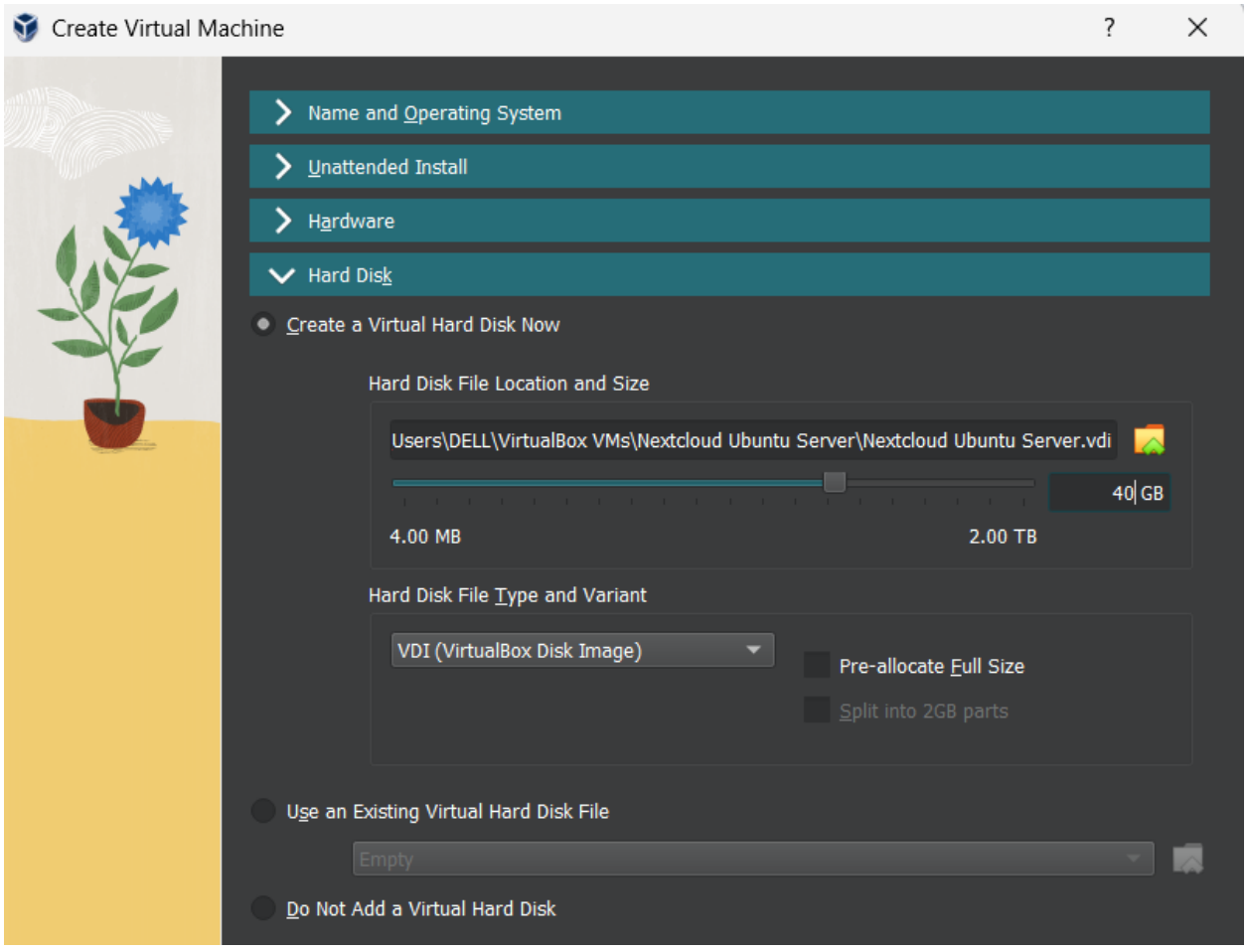
2) Name the operating system and select the disk image of the Ubuntu Server.



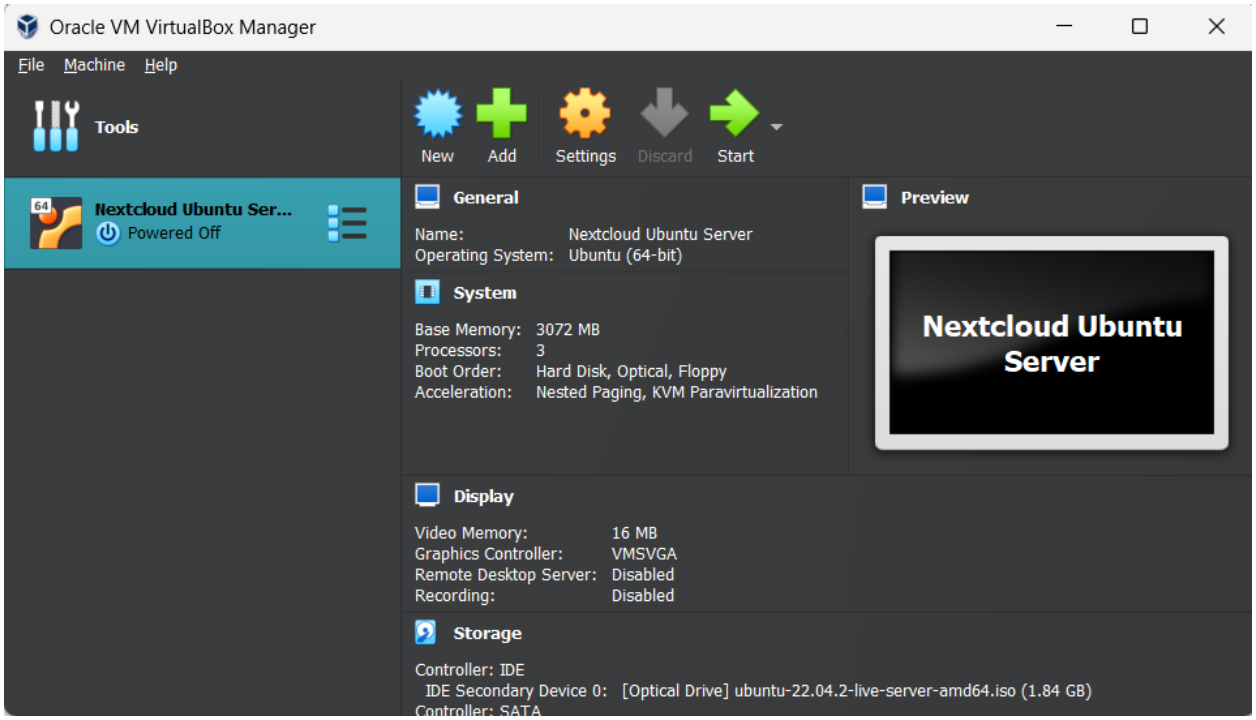
3) Set the hardware resources like RAM and CPU to the VM.



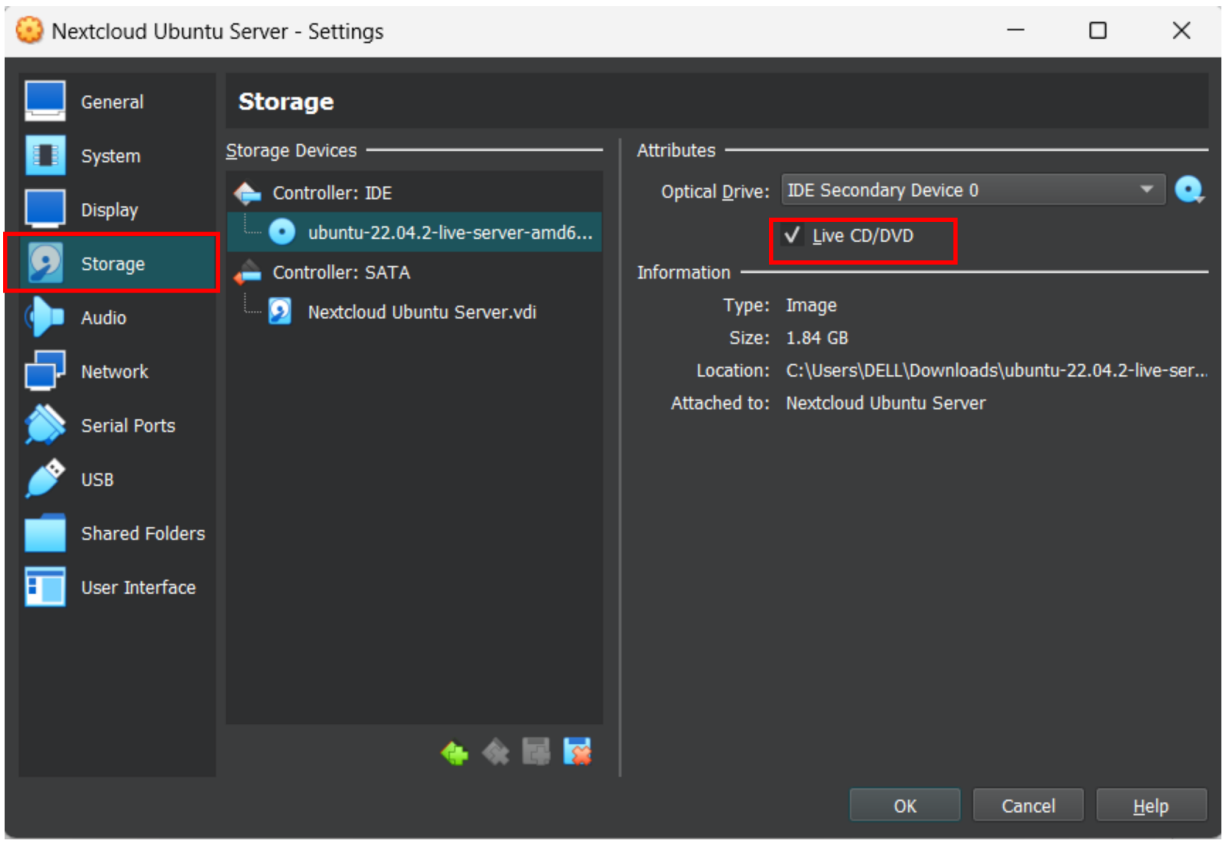
4) Set the Storage resource for the operating system and the actual cloud storage.



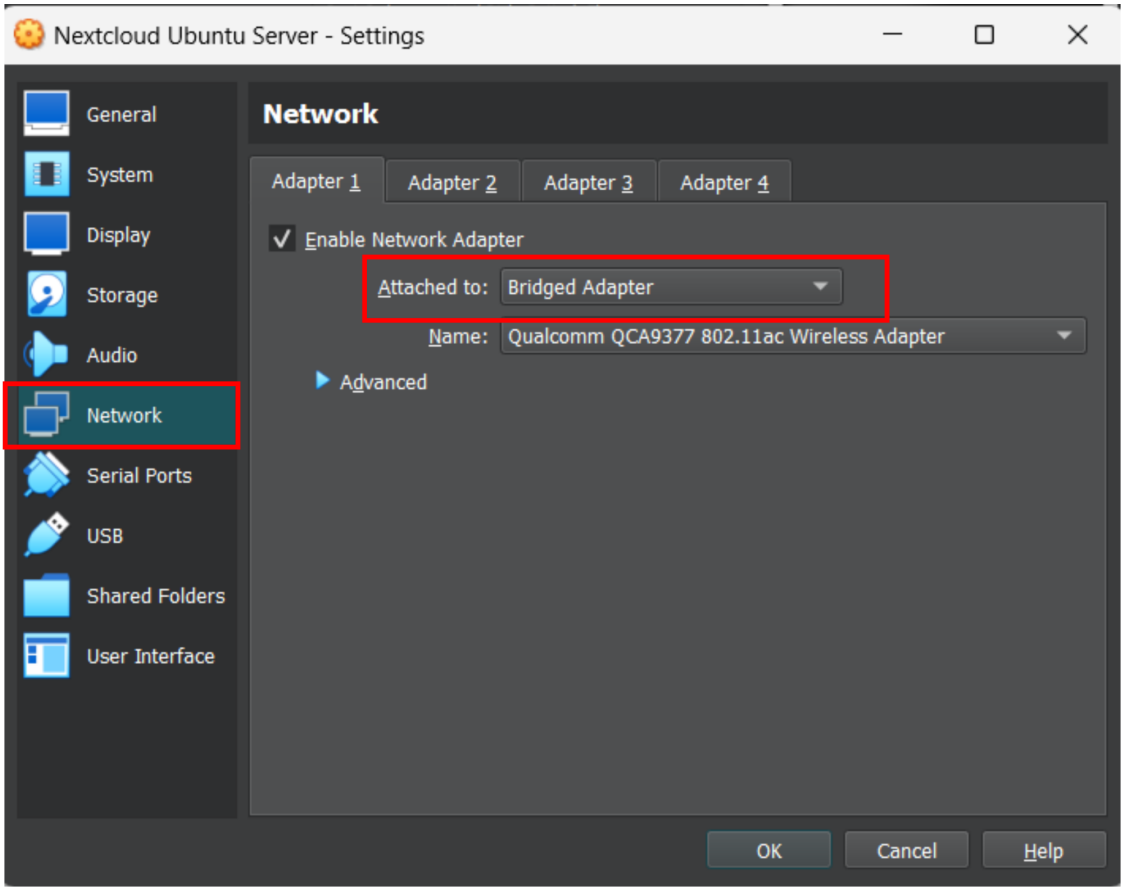
5) Click on **Settings**.



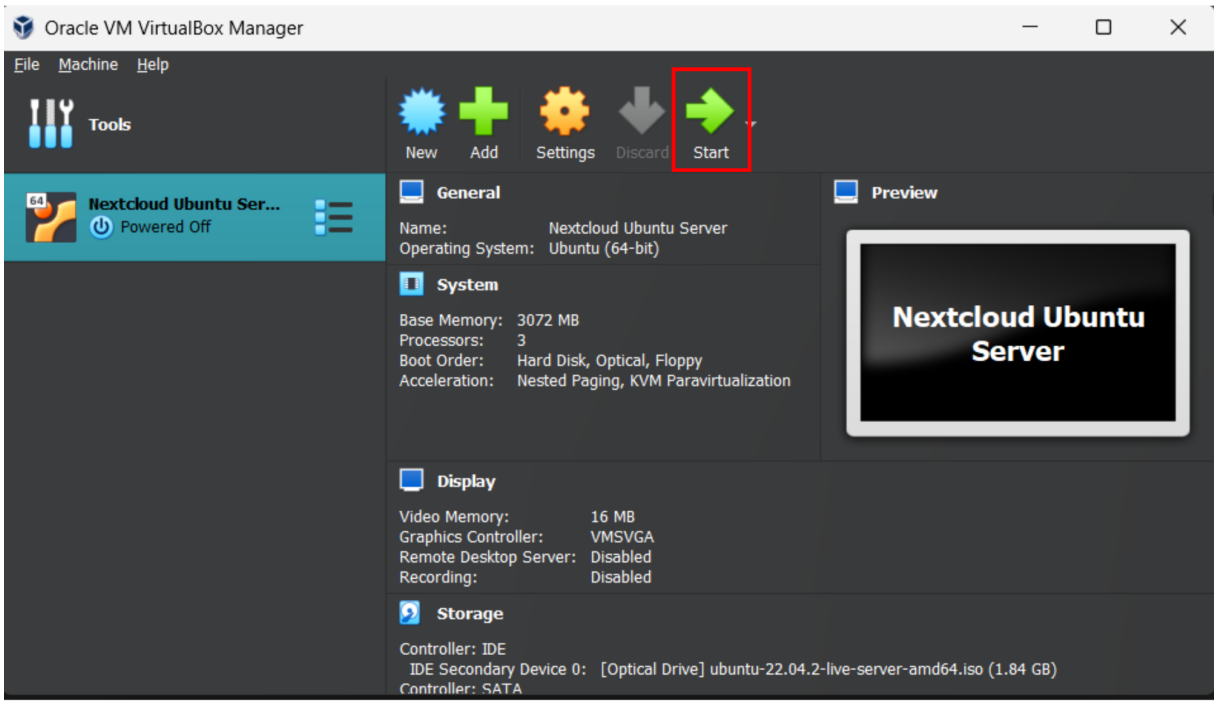
6) Goto **Storage** section, and then check the **Live CD/DVD** and click **OK**.



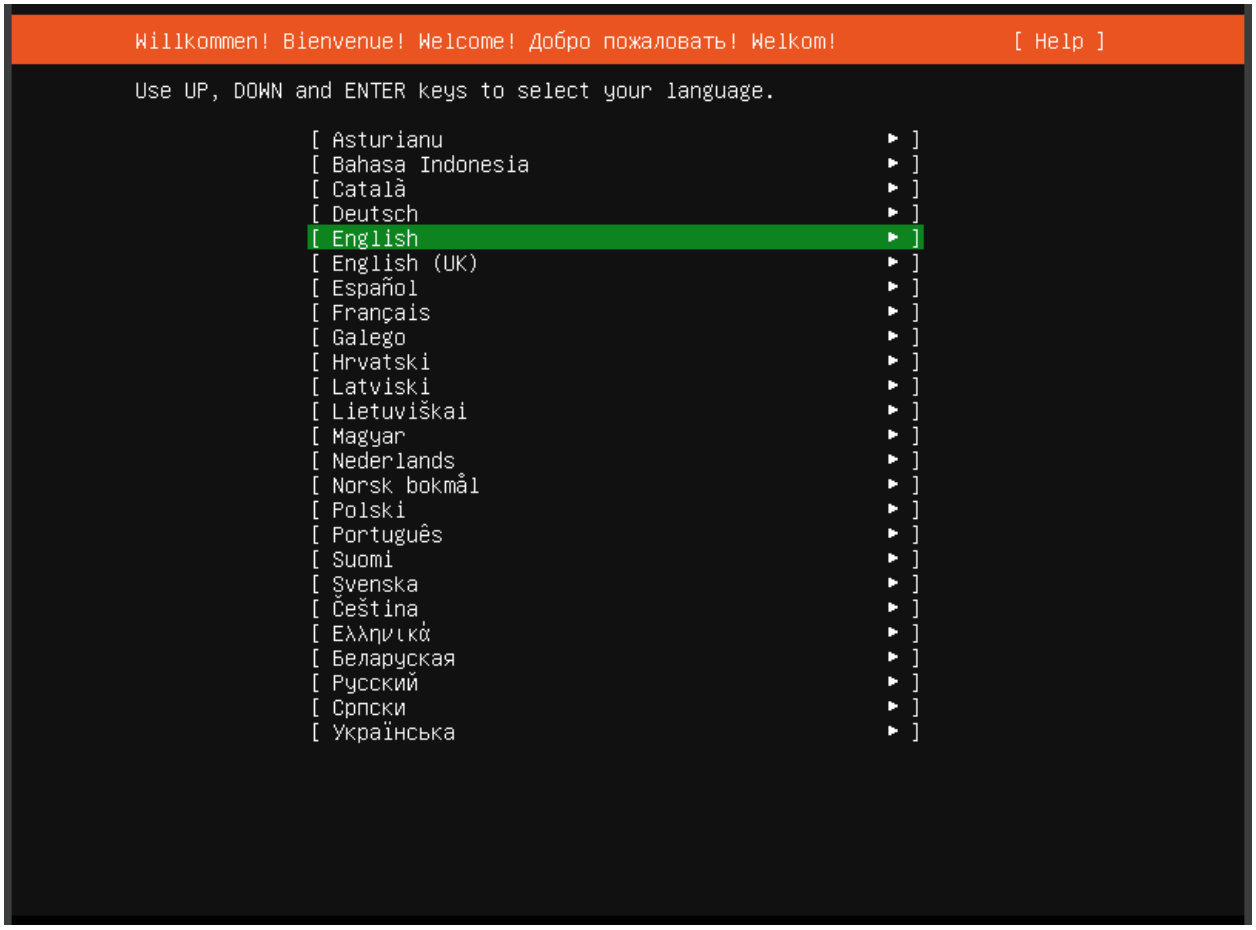
7) Now goto **Network** section and change the “Attached to” and select **Bridged Adapter**.



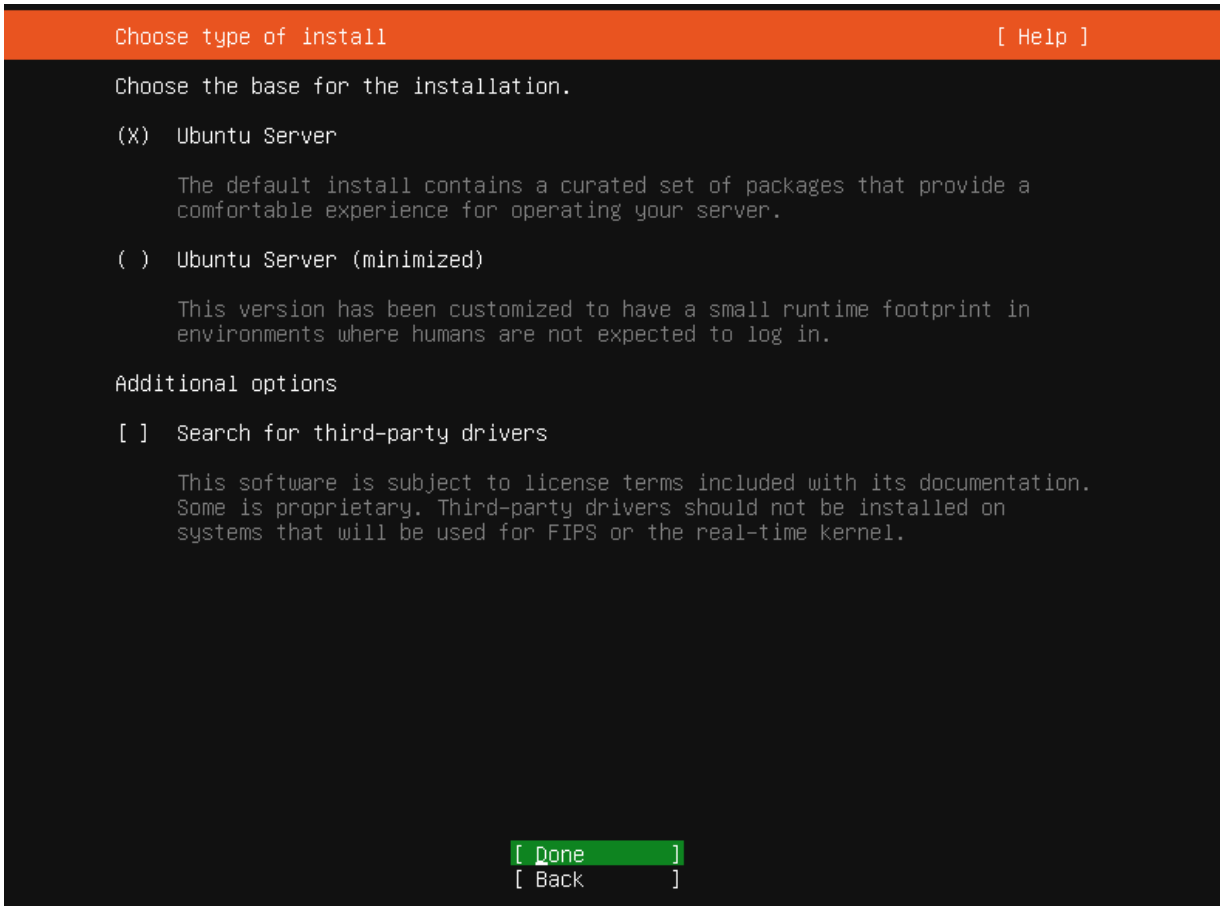
8) Click on **Start**, to start theVM.



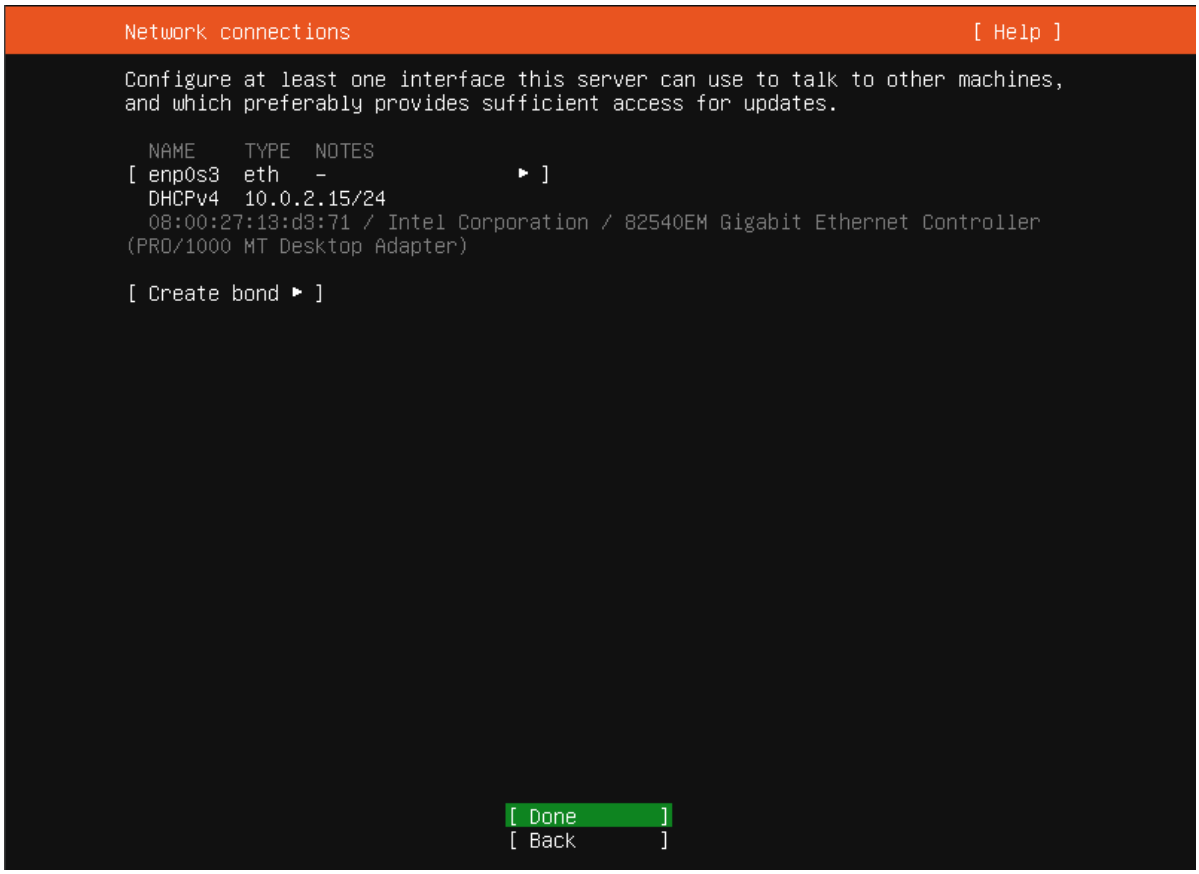
8) Press enter on **Try or Install Ubuntu Server**, the menu below will be shown:



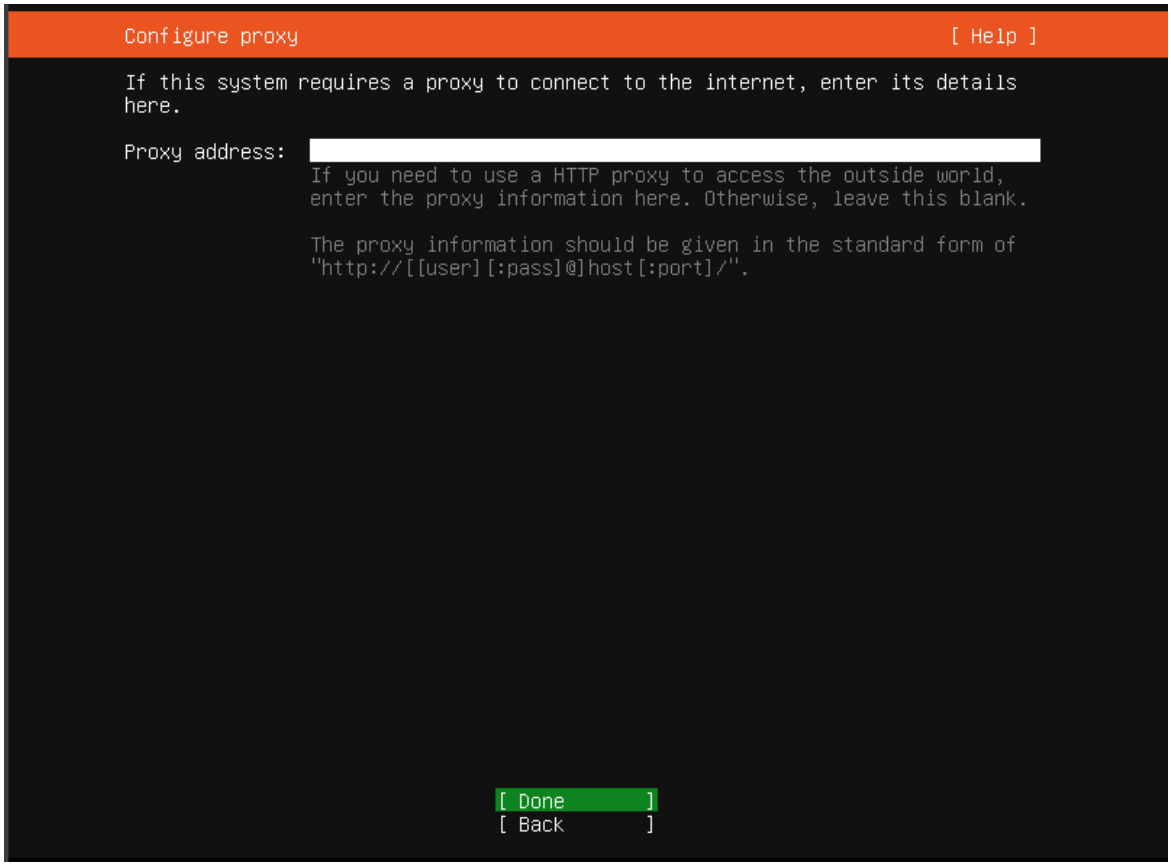
9) Press Enter to install Ubuntu Server.



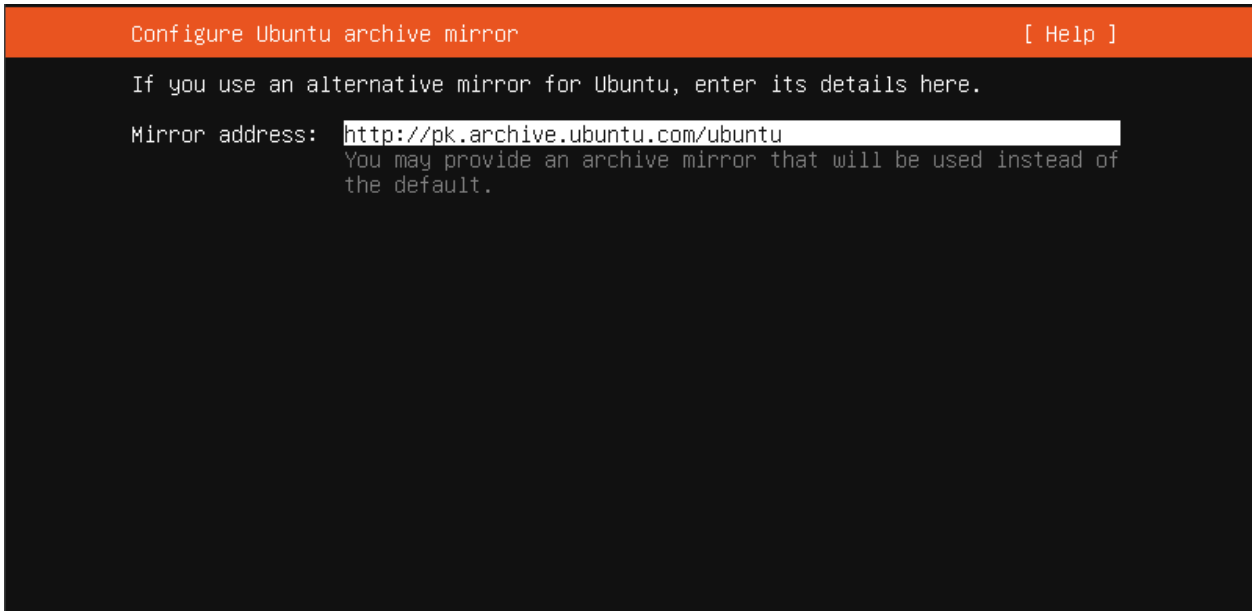
10) Choose the network adapter Ubuntu Server will use and press Enter.



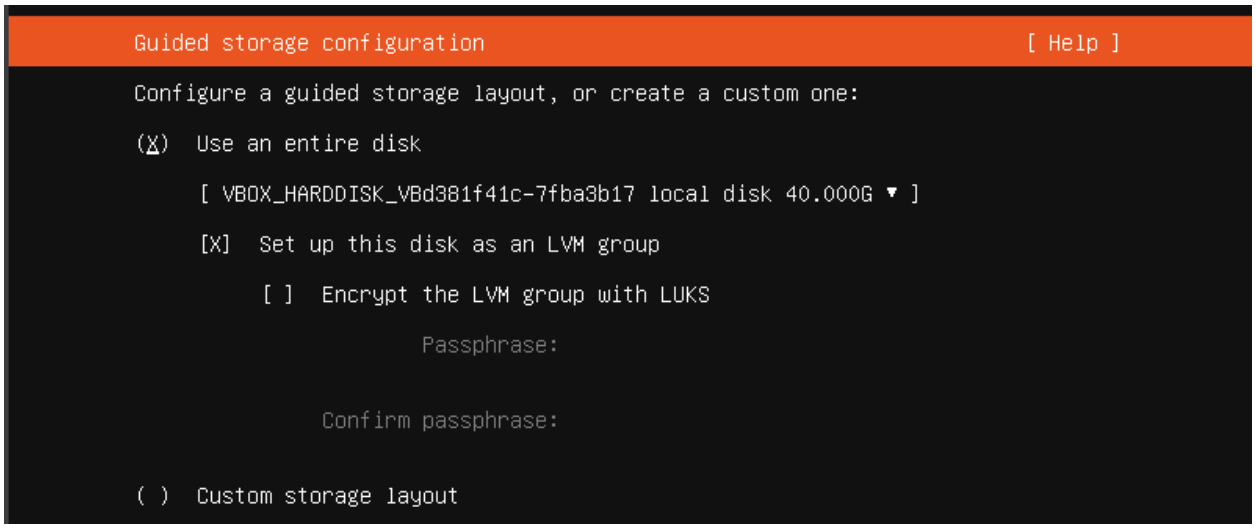
11) Leave the proxy address blank and press Enter.



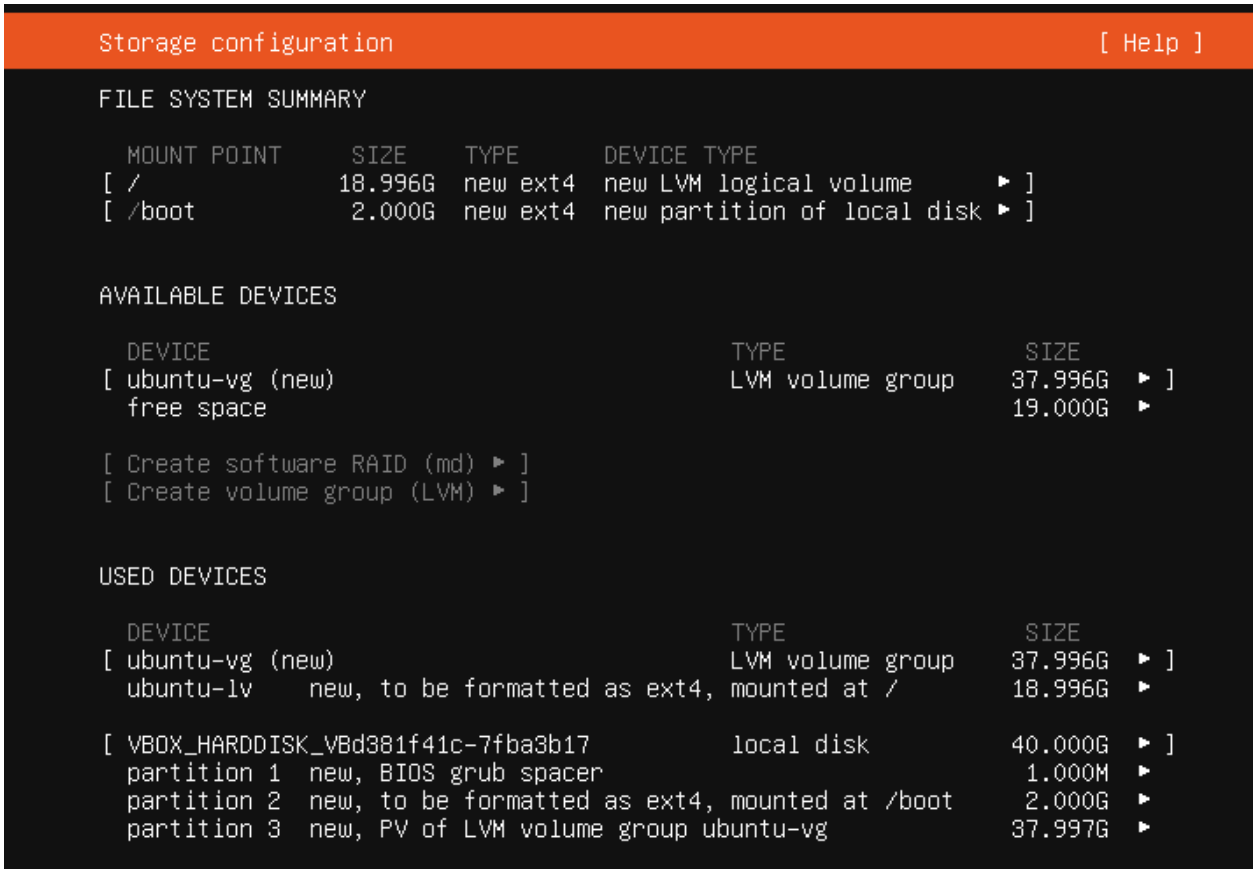
12) Press Enter on the mirror address.



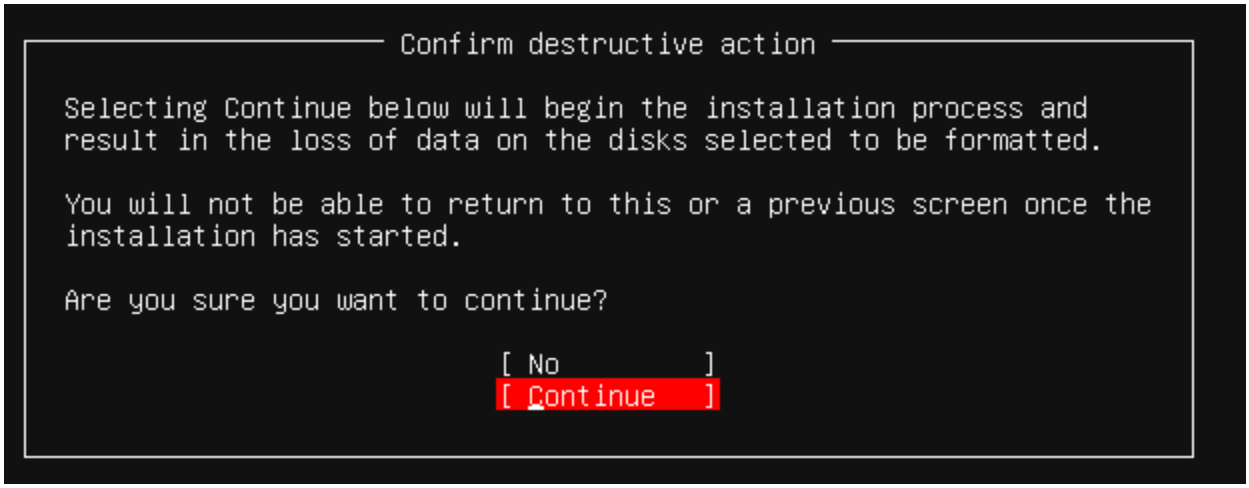
13) Complete the storage configuration.



14) The file system summary will be shown.

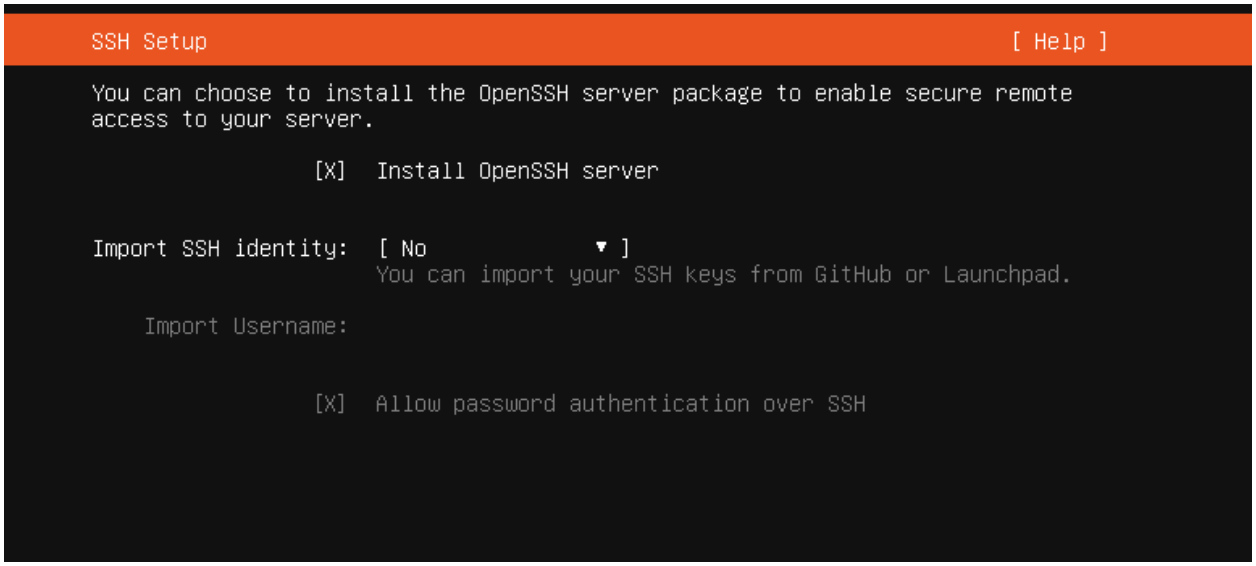


15) Press Enter to continue if the configurations are correct.

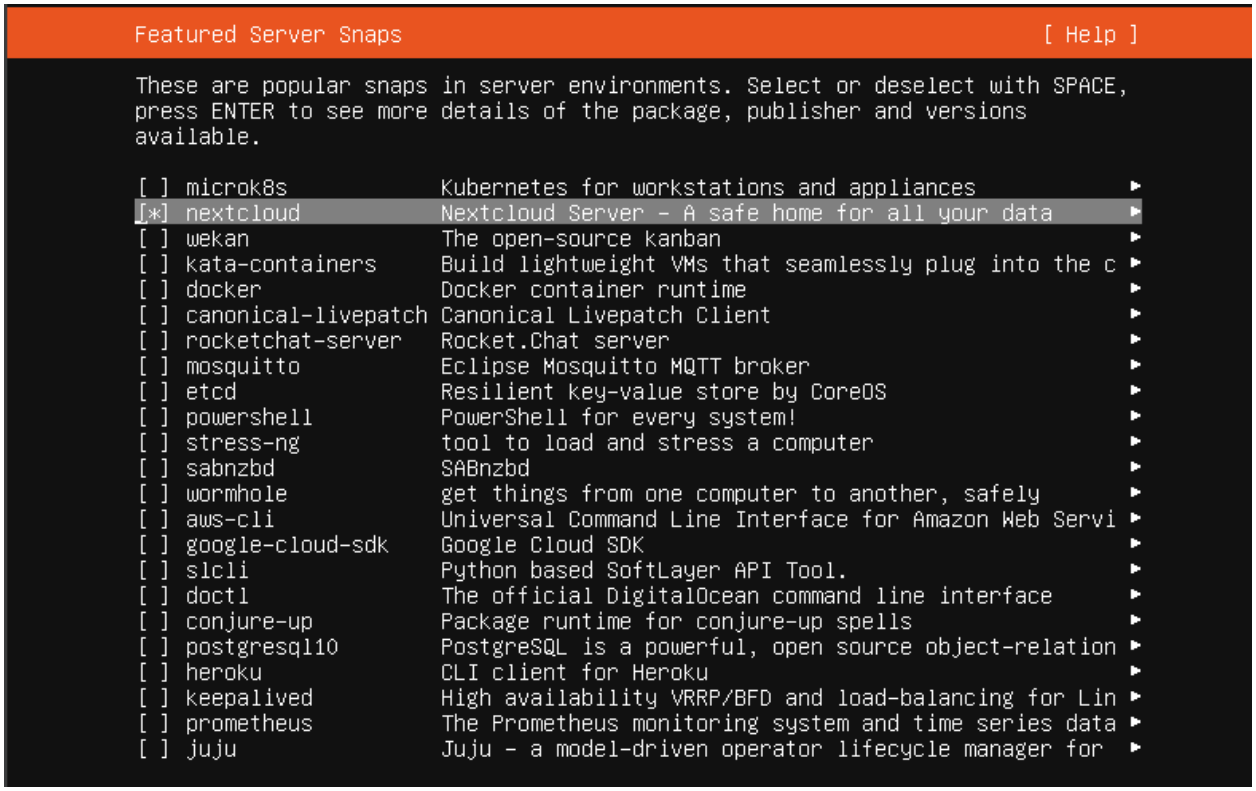


16) Set the server name, username and set the password.

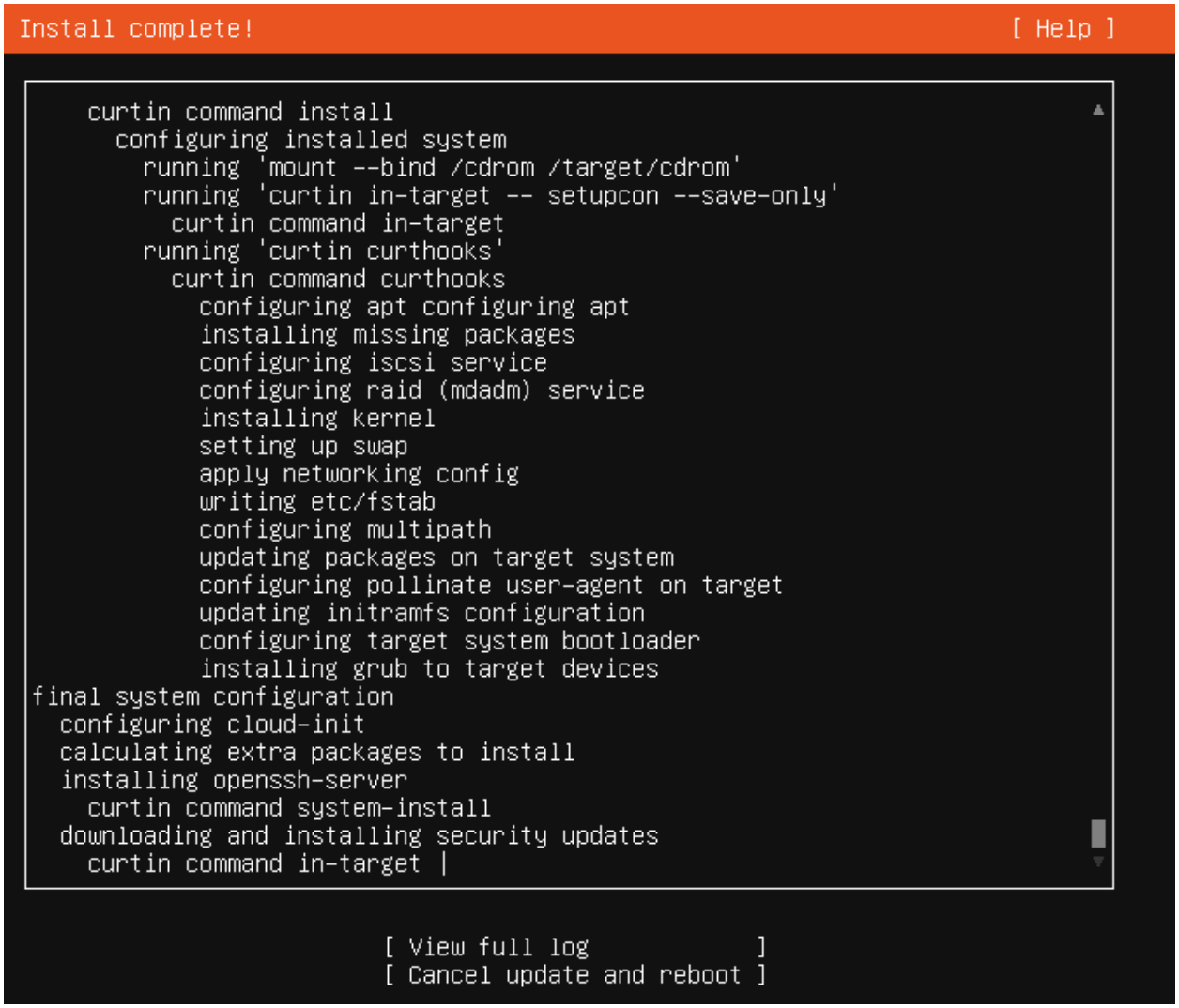
17) Install OpenSSH server .



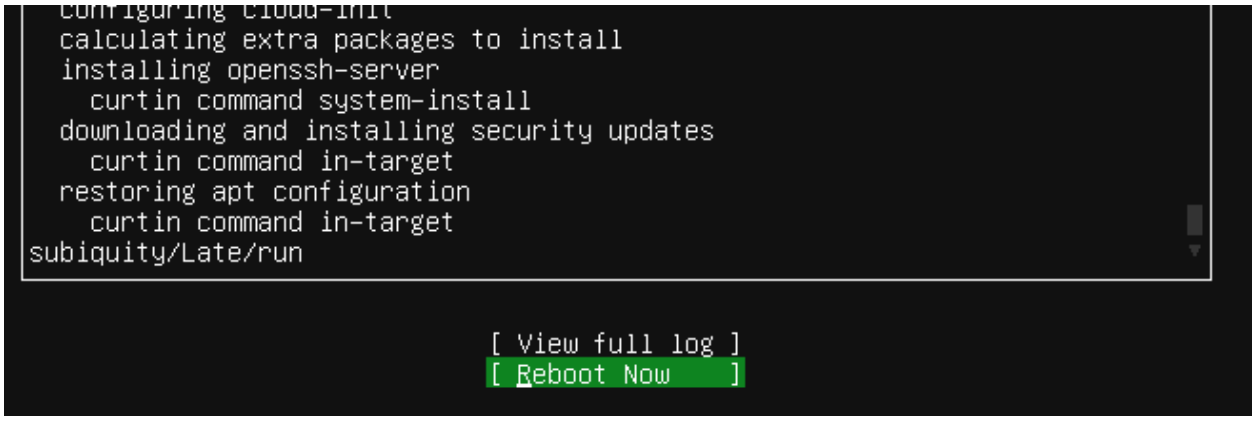
18) Select nextcloud and press Enter on Done.



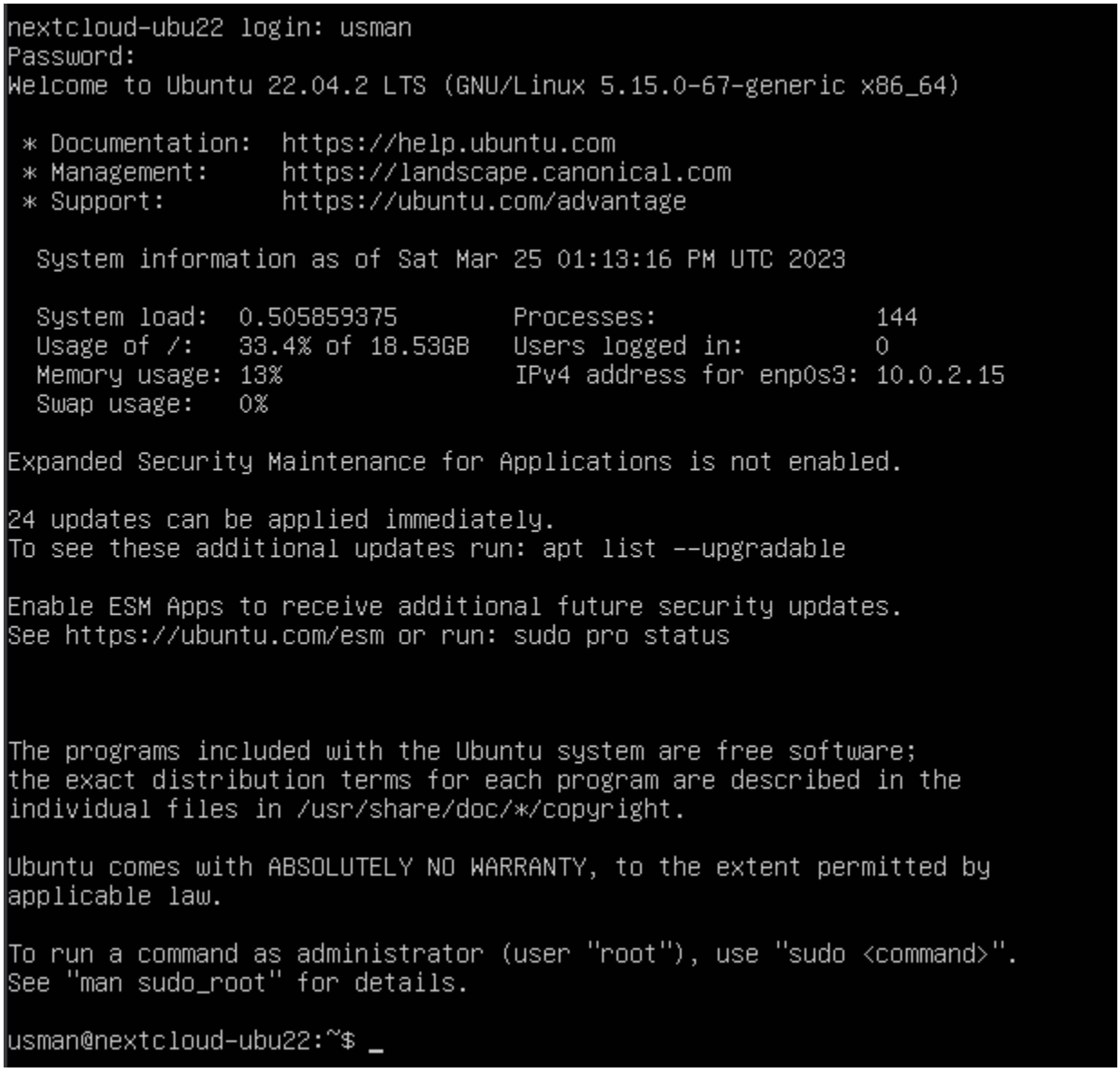
19) The installation process will start.



20) Press Enter on Reboot Now after the installation.



21) Login using your nextcloud credentials.



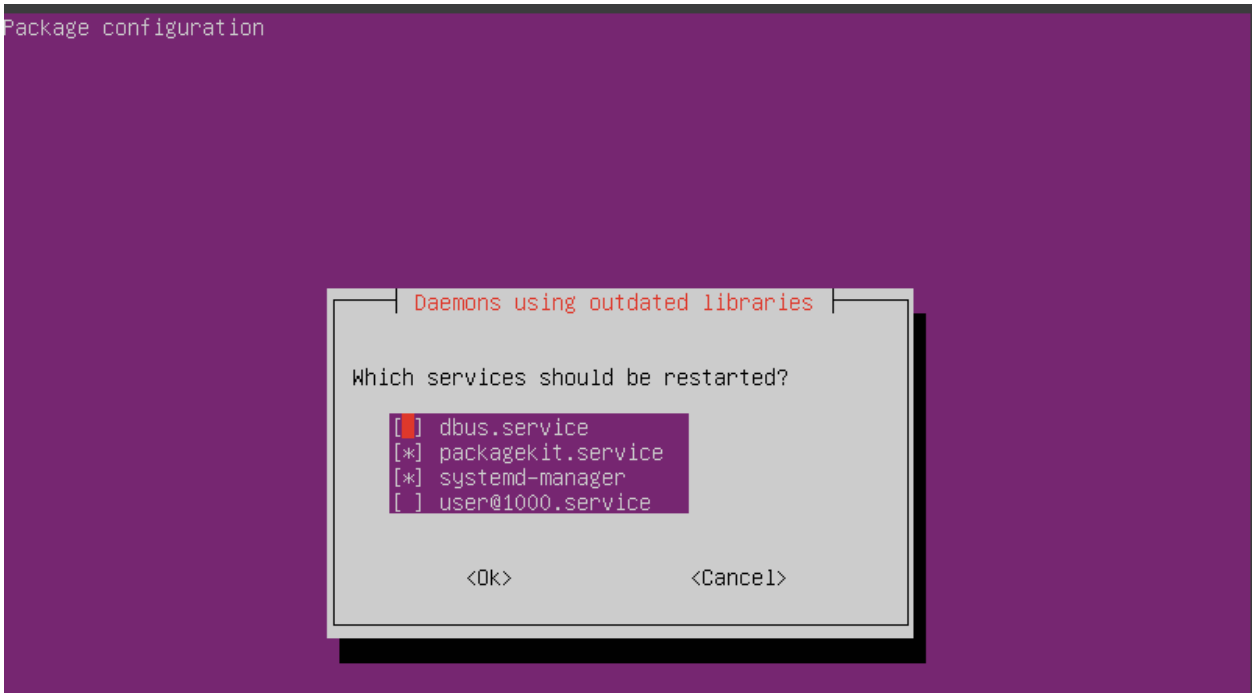
22) Enter the following command:

sudo apt-get update && sudo apt-get upgrade && sudo apt-get dist-upgrade

Press Y and continue.

```
usman@nextcloud-ubu22:~$ sudo apt-get update && sudo apt-get upgrade && sudo apt-get dist-upgrade
[sudo] password for usman:
Hit:1 http://pk.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://pk.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Hit:3 http://pk.archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:4 http://pk.archive.ubuntu.com/ubuntu jammy-security InRelease
Fetched 119 kB in 3s (35.6 kB/s)
Reading package lists... Done
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following packages will be upgraded:
  apparmor cloud-init isc-dhcp-client isc-dhcp-common libapparmor1 libldap-2.5-0 libldap-common
  libmbim-glib4 libmbim-proxy libmm-glib0 libnetplan0 libqmi-glib5 libqmi-proxy libsasl2-2
  libsasl2-modules libsasl2-modules-db modemmanager netplan.io python3-software-properties
  software-properties-common systemd-hwe-hwdb tcpdump ubuntu-advantage-tools
  update-notifier-common
24 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Need to get 5,219 kB of archives.
After this operation, 1,148 kB of additional disk space will be used.
Do you want to continue? [Y/n] _
```

23) Set the package configurations.



```
 /etc/needrestart/restart.d/systemd-manager
 systemctl restart packagekit.service
Service restarts being deferred:
 /etc/needrestart/restart.d/dbus.service
 systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
usman@nextcloud-ubu22:~$ _
```

24) Run command: **sudo ufw allow OpenSSH**

```
usman@nextcloud-ubu22:~$ sudo ufw allow OpenSSH
Rules updated
Rules updated (v6)
usman@nextcloud-ubu22:~$ sudo ufw enable
Firewall is active and enabled on system startup
usman@nextcloud-ubu22:~$ _
```

25) Run command: **sudo ufw status**

```
usman@nextcloud-ubu22:~$ sudo ufw status
Status: active

To                         Action      From
--                         ------      ----
OpenSSH                    ALLOW       Anywhere
OpenSSH (v6)               ALLOW       Anywhere (v6)

usman@nextcloud-ubu22:~$
```

26) Run command: **sudo nextcloud.manual-insatll <username> <password>**

```
usman@nextcloud-ubu22:~$ sudo nextcloud.manual-install usman password
Nextcloud was successfully installed
usman@nextcloud-ubu22:~$
```

27) Run command: **sudo ufw allow 80,443/tcp**

```
usman@nextcloud-ubu22:~$ sudo ufw allow 80,443/tcp
[sudo] password for usman:
Rule added
Rule added (v6)
usman@nextcloud-ubu22:~$
```

28) Run command: **sudo nextcloud.occ config:system:get trusted_domains**
Check for available trusted domains.

```
usman@nextcloud-ubu22:~$ sudo nextcloud.occ config:system:get trusted_domains
localhost
10.0.2.15
usman@nextcloud-ubu22:~$
```

29) Run command: **ip a | grep inet**

```
usman@nextcloud-ubu22:~$ ip a | grep inet
    inet 127.0.0.1/8 scope host lo
    inet6 ::1/128 scope host
    inet 192.168.10.24/24 metric 100 brd 192.168.10.255 scope global dynamic enp0s3
    inet6 fe80::a00:27ff:fe13:d371/64 scope link
```

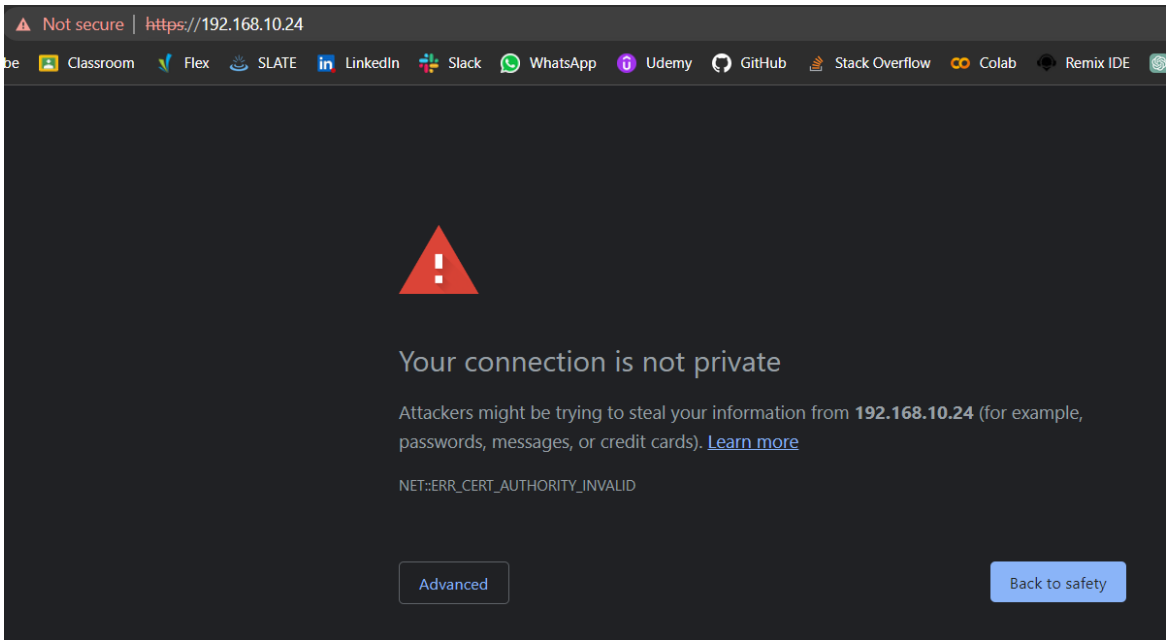
30) Run command: **sudo nextcloud.occ config:system:set trusted_domains 1 --value 192.168.10.24**
Setting the ip address as a trusted domain for the server.

```
usman@nextcloud-ubu22:~$ sudo nextcloud.occ config:system:set trusted_domains 1 --value 192.168.10.2
4
System config value trusted_domains => 1 set to string 192.168.10.24
```

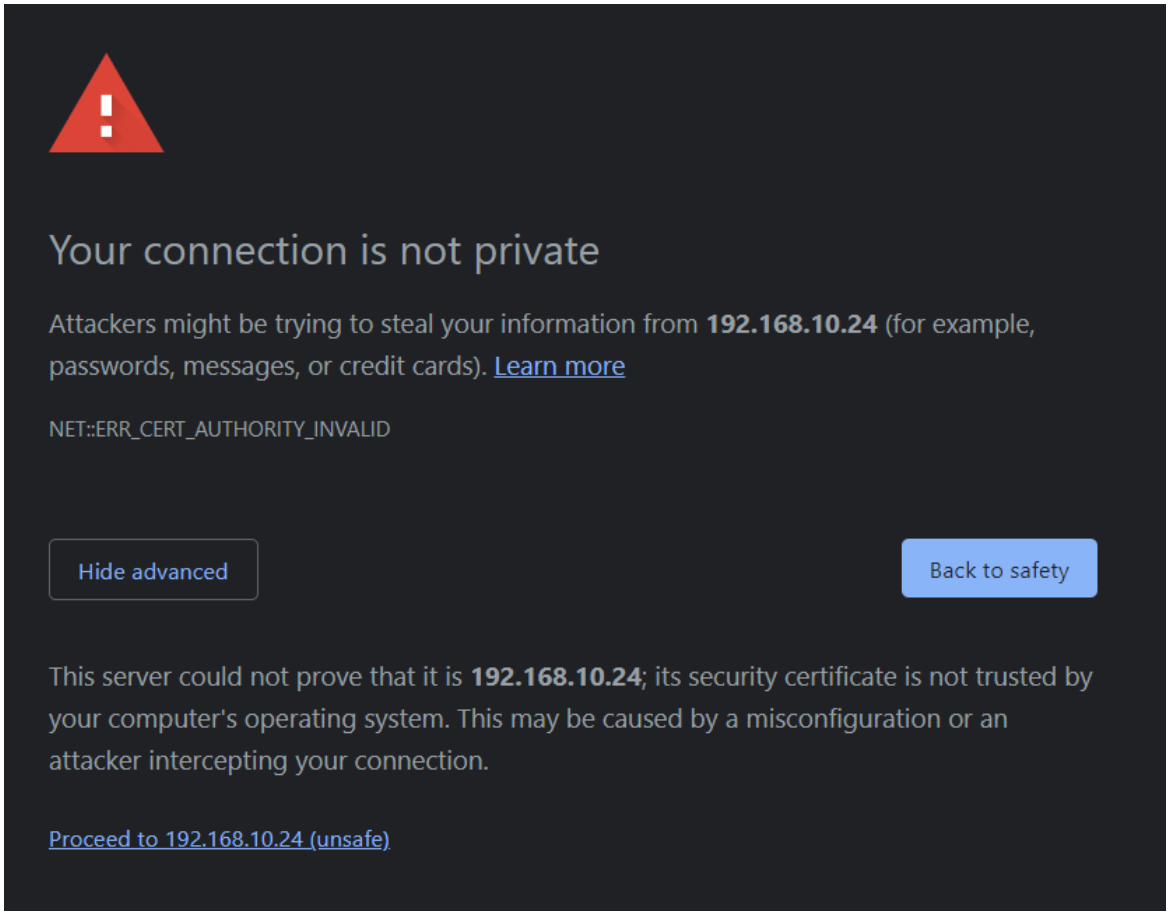
31) Run command: **sudo nextcloud.enable-https self-signed**
Self signing the certificate.

```
usman@nextcloud-ubu22:~$ sudo nextcloud.enable-https self-signed
Generating key and self-signed certificate... done
Restarting apache... done
usman@nextcloud-ubu22:~$ _
```

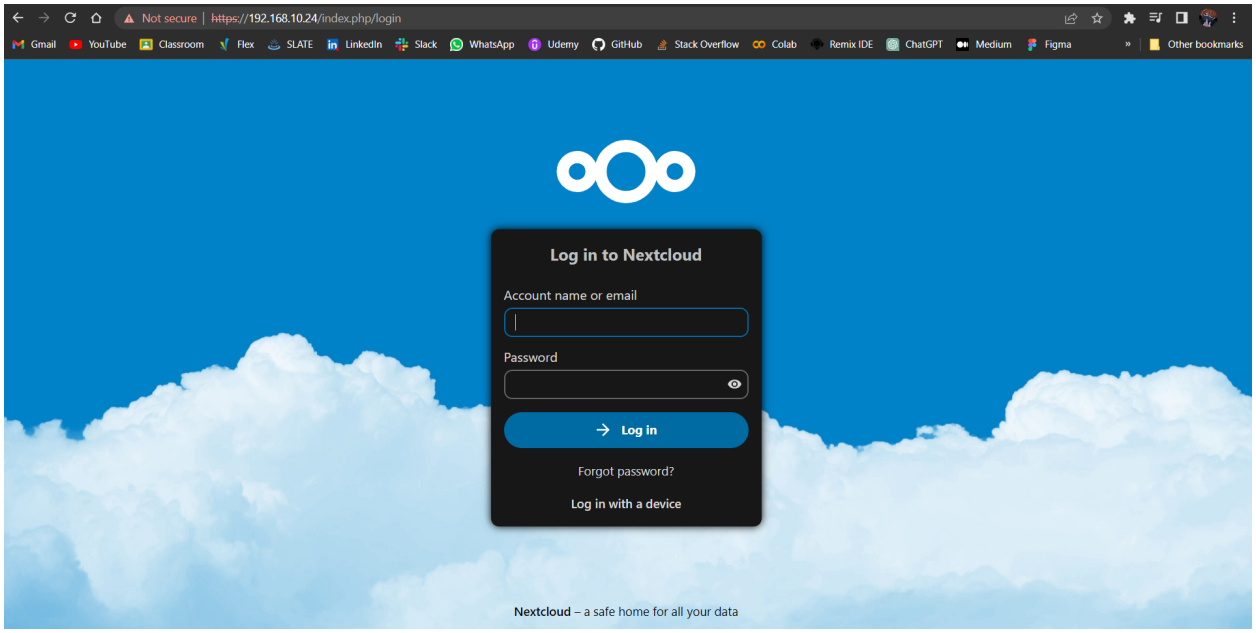
32) Goto the browser and enter the ip address (192.168.10.24) to access the nextcloud server.



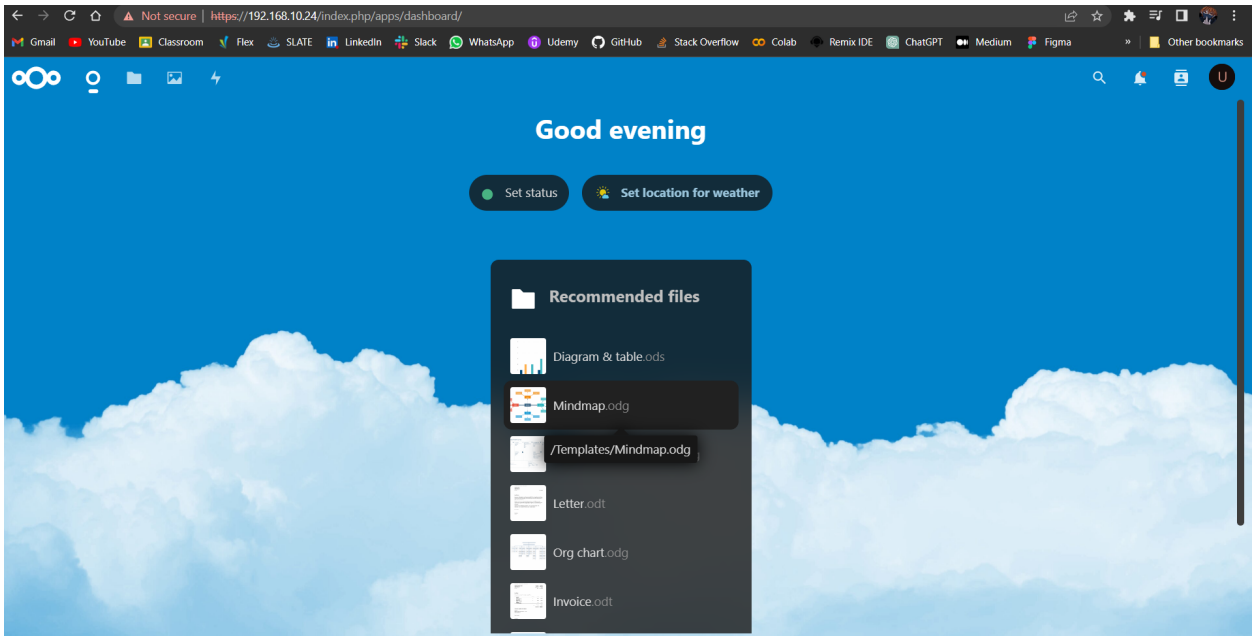
33) Click on Advanced, and click on Proceed to 192.168.10.24.



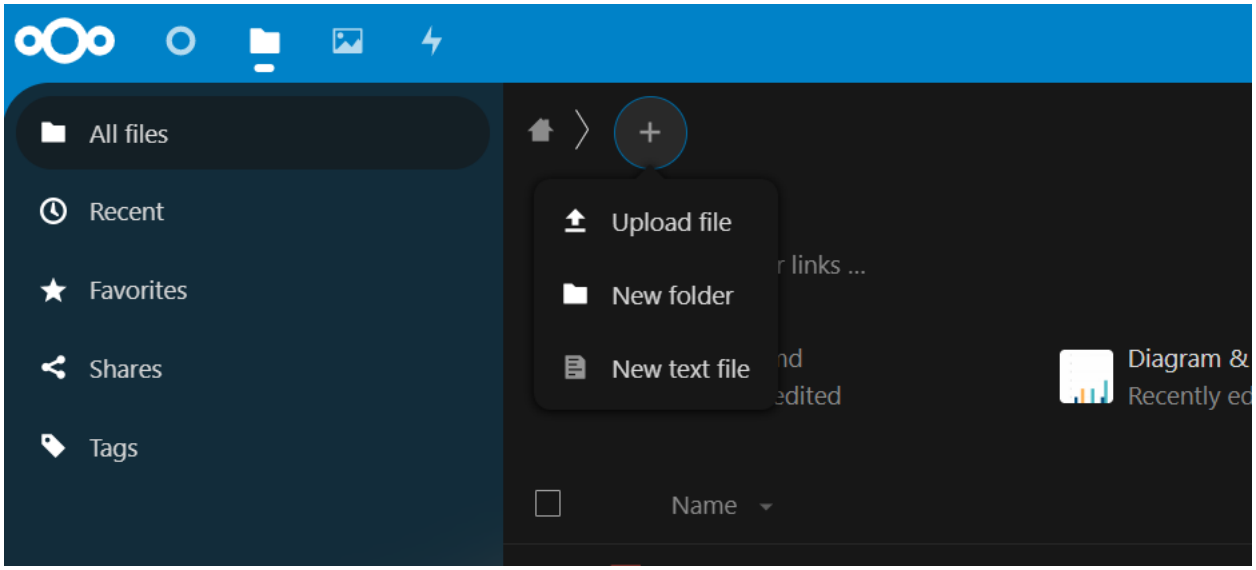
34) Enter the nextcloud credentials to Login.



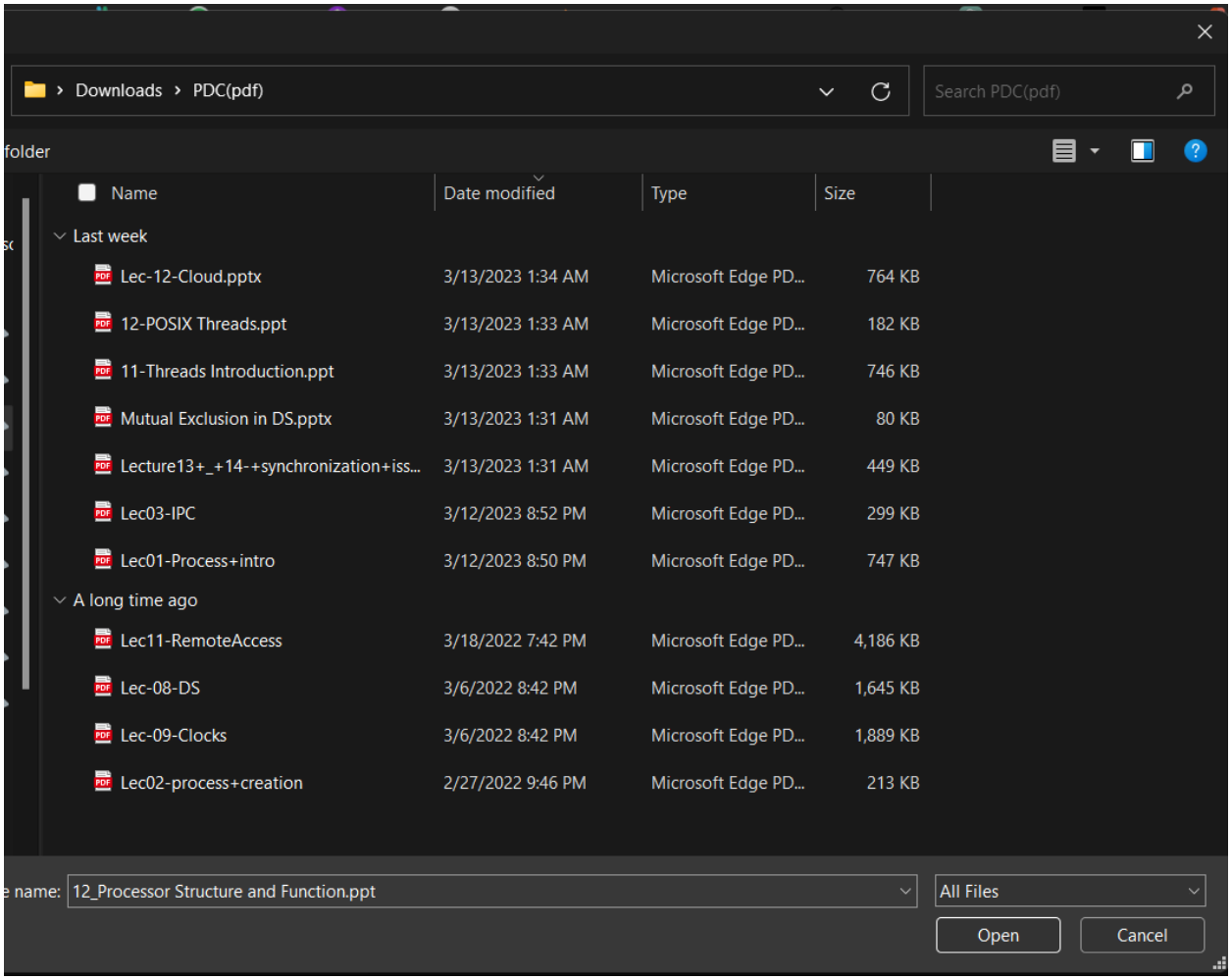
34) The welcome screen will be shown on successful Login.



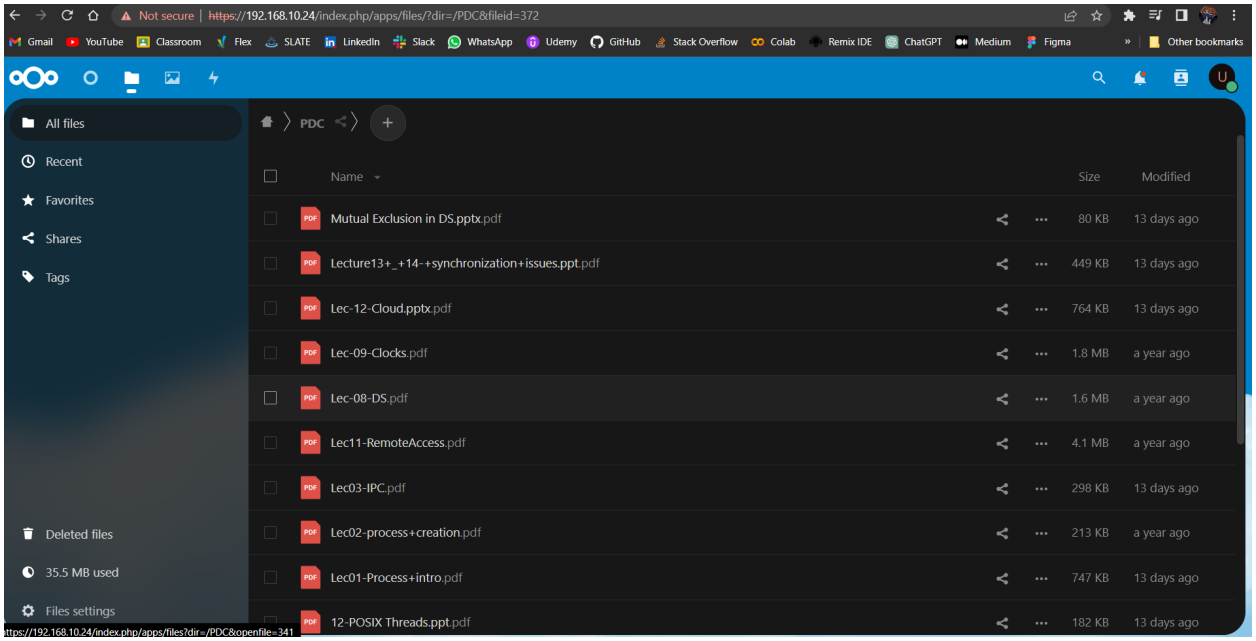
35) Click on **Files**, and press '+' to upload files on the server.



36) Select the files to be uploaded.



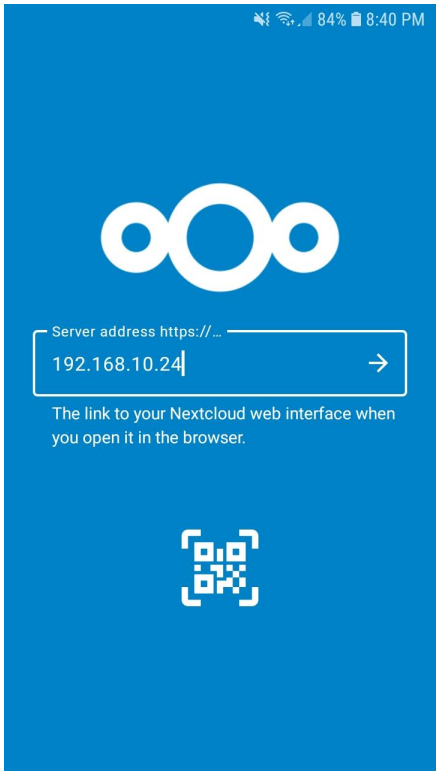
37) Create a new folder and move the files to it.



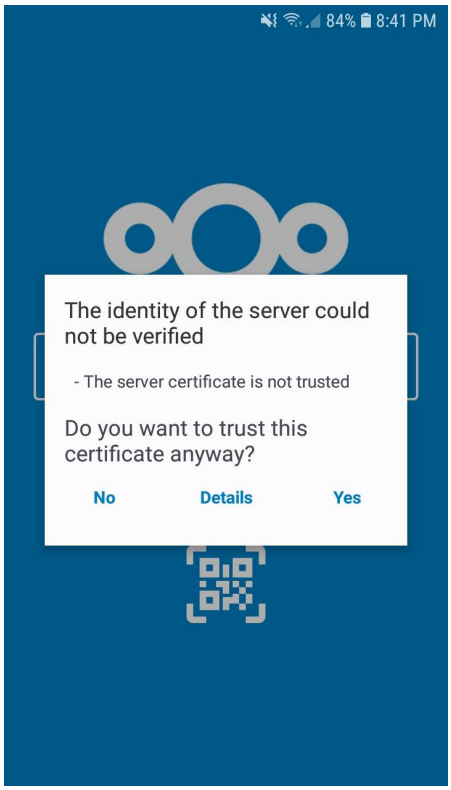
How to access Nextcloud on Mobile:

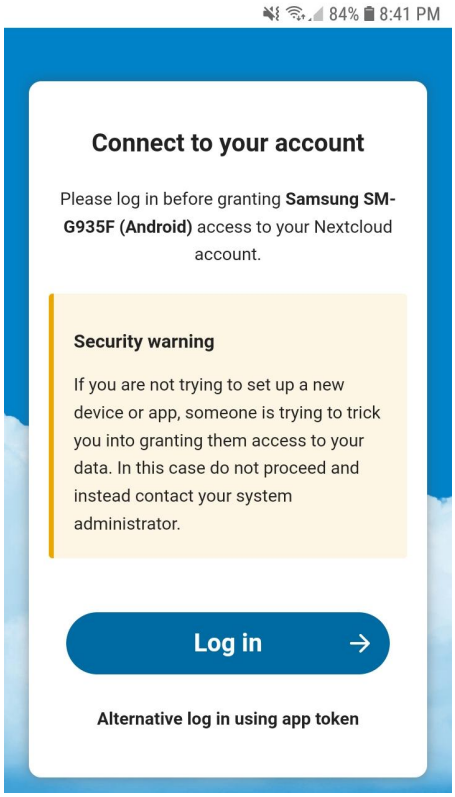
1) Install the Nextcloud app from the Play Store.

2) Open the app and Enter the ip address of your the nextcloud server:

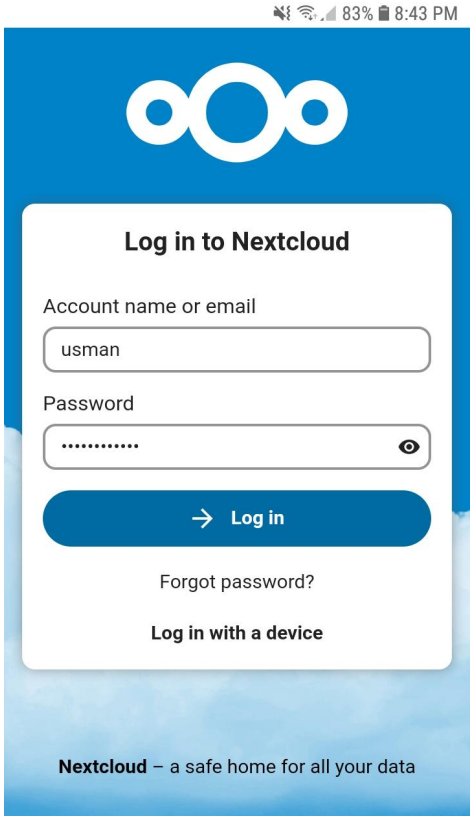


3) As the certificate is self signed. Press Yes to continue the login process.

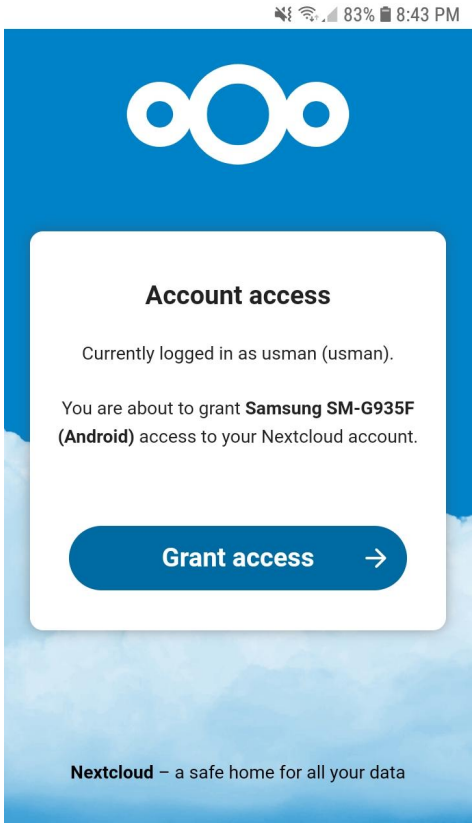




4) Enter your credentials to Login:



5) Press Grant Access to continue.



6) Now you access the same file or media that you uploaded and upload from it to the server.