

Cloud Hosting Tutorial

Web Server Design | CS 431/531 Fall 2019

Old Dominion University

Department of Computer Science

Kritika Garg, kgarg@odu.edu

Set up Digital ocean server

Welcome, kritikagarg!

To begin, let's create a new project. Projects help you organize your resources by environment, workload, client - however you or your team like to work.

Note: You can change the name, redefine the purpose, and move resources between projects as your needs change.

Create your first project

Name cannot be blank

Enter project name

*

What is your project for?

This information will help us improve the projects experience, based on what you're building.

Select purpose

* ∨

Tell us which tools and technologies you plan to use on DigitalOcean

CONFIGURATION MANAGEMENT



Ansible



Chef



Docker



Kubernetes



Puppet

DEPLOYMENT



PROJECTS

kritikagarg

+ New Project

MANAGE

DISCOVER

ACCOUNT

Search by resource name or IP (Ctrl+B)

Create



USAGE
\$0.00



Create new projects and organize your resources to suit your workflow. [Learn more](#)



Build your first project

Get Started with a Droplet

Create something new

[Learn more](#)



PROJECTS ^

kritikagarg

+ New Project

MANAGE v

DISCOVER v

ACCOUNT v

Q Search by resource name or IP (Ctrl+B)

Create v



USAGE

\$0.00



Choose an image ?

Distributions

Container distributions

Marketplace

Custom images



Ubuntu

18.04.3 (LTS) x64 v



FreeBSD

Select version v



Fedora

Select version v



Debian

Select version v



CentOS

Select version v

Choose a plan

[Help me choose](#)

STARTER

Standard

PERFORMANCE

General Purpose

CPU-Optimized

Memory-Optimized

NEW

Standard virtual machines with a mix of memory and compute resources. Best for small projects that can handle variable levels of CPU



PROJECTS

kritikagarg

+ New Project

MANAGE

DISCOVER

ACCOUNT

Search by resource name or IP (Ctrl+B)

Create



USAGE

\$0.00



Choose a plan

[Help me choose](#)

STARTER

Standard

PERFORMANCE

General Purpose

CPU-Optimized

Memory-Optimized

NEW

Standard virtual machines with a mix of memory and compute resources. Best for small projects that can handle variable levels of CPU performance, like blogs, web apps and dev/test environments.

\$5/mo
\$0.007/hour1 GB / 1 CPU
25 GB SSD disk
1000 GB transfer**\$10**/mo
\$0.015/hour2 GB / 1 CPU
50 GB SSD disk
2 TB transfer**\$15**/mo
\$0.022/hour3 GB / 1 CPU
60 GB SSD disk
3 TB transfer**\$15**/mo
\$0.022/hour2 GB / 2 CPUs
60 GB SSD disk
3 TB transfer**\$15**/mo
\$0.022/hour1 GB / 3 CPUs
60 GB SSD disk
3 TB transfer**\$20**/mo
\$0.030/hour4 GB / 2 CPUs
80 GB SSD disk
4 TB transfer[Show all plans](#)

Each Droplet adds [more data transfer](#) to your account.



PROJECTS



kritikagarg

+ New Project

MANAGE

DISCOVER

ACCOUNT

Search by resource name or IP (Ctrl+B)

Create



USAGE
\$0.00



Choose a datacenter region


New York


123


San Francisco

12


Amsterdam

23


Singapore

1


London

1


Frankfurt

1


Toronto

1


Bangalore

1

Select additional options ?

☐

Private networking

☐

IPv6

☐

User data

☐

Monitoring



PROJECTS

 kritikagarg

+ New Project

MANAGE

DISCOVER

ACCOUNT

🔍 Search by resource name or IP (Ctrl+B)

Create ▾



USAGE
\$0.00



Select additional options ?



Private networking



IPv6



User data



Monitoring

Authentication ?



SSH keys

A more secure authentication method



One-time password

Emails a one-time root password to you (less secure)

Finalize and create

How many Droplets?

Deploy multiple Droplets with the same [configuration](#).



1 Droplet



Choose a hostname

Give your Droplets an identifying name you will remember them by. Your Droplet name can only contain alphanumeric characters, dashes, and periods.

ubuntu-s-4vcpu-8gb-nyc1-01

Add tags



PROJECTS

 kritikagarg

+ New Project

MANAGE

DISCOVER

ACCOUNT

🔍 Search by resource name or IP (Ctrl+B)

Create ▾



USAGE
\$0.00



Finalize and create

How many Droplets?

Deploy multiple Droplets with the same [configuration](#).

—

1 Droplet

+

Choose a hostname

Give your Droplets an identifying name you will remember them by. Your Droplet name can only contain alphanumeric characters, dashes, and periods.

ubuntu-s-18

Add tags

Use tags to organize and relate resources. Tags may contain letters, numbers, colons, dashes, and underscores.

Type tags here

Select Project

Assign Droplets to a project

 kritikagarg





PROJECTS ^



kritikagarg

+ New Project

MANAGE v

DISCOVER v

ACCOUNT v

Q Search by resource name or IP (Ctrl+B)

Create v

USAGE
\$0.00

Add tags

Use tags to organize and relate resources. Tags may contain letters, numbers, colons, dashes, and underscores.

Type tags here

Select Project

Assign Droplets to a project



kritikagarg



Add backups

**Enable backups**

RECOMMENDED

A [system-level backup](#) is taken once a week, and each backup is retained for 4 weeks.

\$8.00/mo

20% of the Droplet price

Create Droplet

Your New Droplet: ubuntu-s18

Inbox x



DigitalOcean <support@support.digitalocean.com>

to me ▾

12:10 PM (8 hours ago)



Your new Droplet is all set to go! You can access it using the following credentials:

Droplet Name: ubuntu-s18
IP Address: 192.81.211.229
Username: root
Password: 77e225872259dbbe22ec7a4fa6

Email containing public I.P. and temporary password

For security reasons, you will be required to change this Droplet's root password when you login. You should choose a strong password that will be easy for you to remember, but hard for a computer to guess. You might try creating an alpha-numerical phrase from a memorable sentence (e.g. "I won my first spelling bee at age 7," might become "lwm#1sbaa7"). Random strings of common words, such as "Mousetrap Sandwich Hospital Anecdote," tend to work well, too.

As an added security measure, we also strongly recommend adding an SSH key to your account. You can do that here: <https://cloud.digitalocean.com/settings/security?i=e32b0a>

Once added, you can select your SSH key and use it when creating future Droplets. This eliminates the need for root passwords altogether, and makes your Droplets much less vulnerable to attack.

Happy Coding,
Team DigitalOcean

**Run a service(echo-server)
on the cloud.**

(base) kritika@kritika-E6430:~\$ ssh root@192.81.211.229

In terminal,

Ssh root@Public.IP.address

To access your new ubuntu server

File Edit View Search Terminal Help

(base) kritika@kritika-E6430:~\$ ssh root@192.81.211.229

The authenticity of host '192.81.211.229 (192.81.211.229)' can't be established.

ECDSA key fingerprint is SHA256:m/mBbhe4TG2j14YJoN2cV486/t5XPdI/nSQ8a7eTQg.

Are you sure you want to continue connecting (yes/no)? yes

```
root@ubuntu-s18: ~  
File Edit View Search Terminal Help  
(base) kritika@kritika-E6430:~$ ssh root@192.81.211.229  
The authenticity of host '192.81.211.229 (192.81.211.229)' can't be established.  
ECDSA key fingerprint is SHA256:m/mBbhe4TG2j14YJoN2cV486/t5XPdI/nSQ8a7eTQg.  
Are you sure you want to continue connecting (yes/no)? yes  
Warning: Permanently added '192.81.211.229' (ECDSA) to the list of known hosts.  
root@192.81.211.229's password:
```

**Enter your Temporary
password**

Welcome to DigitalOcean's One-Click Docker Droplet.

To keep this Droplet secure, the UFW firewall is enabled.

All ports are BLOCKED except 22 (SSH), 2375 (Docker) and 2376 (Docker).

* The Docker One-Click Quickstart guide is available at:

<https://do.co/docker1804#start>

* You can SSH to this Droplet in a terminal as root: `ssh root@165.227.196.193`

* Docker is installed and configured per Docker's recommendations:

<https://docs.docker.com/install/linux/docker-ce/ubuntu/>

* Docker Compose is installed and configured per Docker's recommendations:

<https://docs.docker.com/compose/install/#install-compose>

For help and more information, visit <http://do.co/docker1804>

To delete this message of the day: `rm -rf /etc/update-motd.d/99-one-click`

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in `/usr/share/doc/*/copyright`.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

Changing password for root.

(current) UNIX password:

Enter new UNIX password:

Retype new UNIX password:



Create new password

File Edit View Search Terminal Help

root@ubuntu-s18:~# nano echoserver.py

```
#!/usr/bin/env python3
```

```
import sys
```

```
import socket
```

```
HOST= '0.0.0.0'
```

```
PORT= 80
```

```
if len(sys.argv) > 1:
```

```
    HOST = sys.argv[1]
```

```
if len(sys.argv) > 2:
```

```
    PORT = int(sys.argv[2])
```

```
with soc
```

**Paste your echo
server code here!**

```
if not msg:
```

```
    break
```

```
client_host.sendall(msg)
```

```
[ Read 27 lines ]
```

```
^G Get Help
```

```
^X Exit
```

```
^O Write Out
```

```
^R Read File
```

```
^W Where Is
```

```
^_ Replace
```

```
^K Cut Text
```

```
^U Uncut Text
```

```
^J Justify
```

```
^T To Linter
```

```
^C Cur Pos
```

```
^_ Go To Line
```

```
M-U Undo
```

```
M-E Redo
```

```
M-A Mark Text
```

```
M-6 Copy Text
```

```
M-] To Bracket
```

```
M-W WhereIs Next
```

File Edit View Search Terminal Help

```
root@ubuntu-s18:~# nano echoserver.py
```

```
root@ubuntu-s18:~# ls -lr
```

```
total 4
```

```
-rwxr-xr-x 1 root root 587 Sep 16 20:06 echoserver.py
```

```
root@ubuntu-s18:~#
```

File Edit View Search Terminal Help

```
root@ubuntu-s18:~# nano echoserver.py
root@ubuntu-s18:~# ls -lr
total 4
-rwxr-xr-x 1 root root 587 Sep 16 20:06 echoserver.py
root@ubuntu-s18:~#
root@ubuntu-s18:~#
root@ubuntu-s18:~# chmod +x echoserver.py
root@ubuntu-s18:~#
root@ubuntu-s18:~# ./echoserver.py
```

**Run your echo server
In your cloud server**

File Edit View Search Terminal Help

```
root@ubuntu-s18:~# nano echoserver.py
```

```
root@ubuntu-s18:~# ls -lr
```

```
total 4
```

```
-rwxr-xr-x 1 root root 587 Sep 16 20:06 echoserver.py
```

```
root@ubuntu-s18:~#
```

```
root@ubuntu-s18:~#
```

```
root@ubuntu-s18:~# chmod +x echoserver.py
```

```
root@ubuntu-s18:~#
```

```
root@ubuntu-s18:~# ./echoserver.py
```

```
Listening on 0.0.0.0:80
```

```
█
```

File Edit View Search Terminal Help

```
(base) kgarg@E-3102-16:~$ ping 192.81.211.229
PING 192.81.211.229 (192.81.211.229) 56(84) bytes of data:
64 bytes from 192.81.211.229: icmp_seq=1 ttl=48 time=13.3 ms
64 bytes from 192.81.211.229: icmp_seq=2 ttl=48 time=12.7 ms
64 bytes from 192.81.211.229: icmp_seq=3 ttl=48 time=12.7 ms
64 bytes from 192.81.211.229: icmp_seq=4 ttl=48 time=12.8 ms
64 bytes from 192.81.211.229: icmp_seq=5 ttl=48 time=12.8 ms
64 bytes from 192.81.211.229: icmp_seq=6 ttl=48 time=13.1 ms
```

**Ping your I.P. address
In another terminal**

File Edit View Search Terminal Help

```
(base) kgarg@E-3102-16:~$ ping 192.81.211.229
PING 192.81.211.229 (192.81.211.229) 56(84) bytes of data.
 64 bytes from 192.81.211.229: icmp_seq=1 ttl=48 time=13.3 ms
 64 bytes from 192.81.211.229: icmp_seq=2 ttl=48 time=12.7 ms
 64 bytes from 192.81.211.229: icmp_seq=3 ttl=48 time=12.7 ms
 64 bytes from 192.81.211.229: icmp_seq=4 ttl=48 time=12.8 ms
 64 bytes from 192.81.211.229: icmp_seq=5 ttl=48 time=12.8 ms
 64 bytes from 192.81.211.229: icmp_seq=6 ttl=48 time=13.1 ms
 64 bytes from 192.81.211.229: icmp_seq=7 ttl=48 time=12.6 ms
 64 bytes from 192.81.211.229: icmp_seq=8 ttl=48 time=12.7 ms
 64 bytes from 192.81.211.229: icmp_seq=9 ttl=48 time=12.7 ms
^C
--- 192.81.211.229 ping statistics ---
 9 packets transmitted, 9 received, 0% packet loss, time 8014ms
 rtt min/avg/max/mdev = 12.684/12.885/13.336/0.215 ms
(base) kgarg@E-3102-16:~$
```

File Edit View Search Terminal Help

```
(base) kgarg@E-3102-16:~$ ping 192.81.211.229
PING 192.81.211.229 (192.81.211.229) 56(84) bytes of data.
64 bytes from 192.81.211.229: icmp_seq=1 ttl=48 time=13.3 ms
64 bytes from 192.81.211.229: icmp_seq=2 ttl=48 time=12.7 ms
64 bytes from 192.81.211.229: icmp_seq=3 ttl=48 time=12.7 ms
64 bytes from 192.81.211.229: icmp_seq=4 ttl=48 time=12.8 ms
64 bytes from 192.81.211.229: icmp_seq=5 ttl=48 time=12.8 ms
64 bytes from 192.81.211.229: icmp_seq=6 ttl=48 time=13.1 ms
64 bytes from 192.81.211.229: icmp_seq=7 ttl=48 time=12.6 ms
64 bytes from 192.81.211.229: icmp_seq=8 ttl=48 time=12.7 ms
64 bytes from 192.81.211.229: icmp_seq=9 ttl=48 time=12.7 ms
^C
```

```
--- 192.81.211.229 ping statistics ---
9 packets transmitted, 9 received, 0% packet loss, time 8014ms
rtt min/avg/max/mdev = 12.684/12.885/13.336/0.215 ms
```

```
(base) kgarg@E-3102-16:~$
```

```
(base) kgarg@E-3102-16:~$ telnet 192.81.211.229 80
```

```
Trying 192.81.211.229...
```

```
Connected to 192.81.211.229.
```

```
Escape character is '^['.
```



Telnet your_IP_address

Set up a Domain name server.

Set up your Domain

[support](#)



Microsoft Azure is an ever-expanding set of cloud services to help you build, manage, and deploy applications.

Details Level up your ideas by learning cloud computing skills and get a \$100 credit with your free Azure for Students account—no credit card required.

Request [your offer code](#) to get access

📞 Help available at [Microsoft support](#)



Affordable registration, hosting, and domain management

Details 1 year domain name registration on the .me TLD.

Get access by connecting your GitHub account on [Namecheap](#)

Details 1 year SSL certificate.

Use your offer code on the [Namecheap website](#)

Your code:

5E79BC142E*224D24B32

📞 Help available at [Namecheap support](#)



Domain names, web hosting, and websites. Unicorns and rainbows come standard with our customer support.

Details One free domain name and free Advanced Security (SSL, privacy protection, and more).

Get access by connecting your GitHub account on [Name.com](#)

📞 Help available at [Name.com support](#)

Claim your free domain

Namecheap is giving university students a free bundle
to kickstart their online presence.

kritikagarg

.me

find

PLUS

Bonuses from these great folks

GitHub

Websites for you and your projects, hosted right on GitHub.

✓ +1 year pages setup

OR

EXPOSURE

Exposure gives you a beautiful website for your photo stories.

✓ +1 year photo website

For a limited time, .me domains are **free** for students

kritikagarg.me

FREE

ADD



Your Domains

Your cart is empty

Complete order

.io, .tech, .com, .website are heavily discounted

kritikagarg.io

~~\$32.88~~

\$24.88

ADD

kritikagarg.tech

~~\$45.88~~

\$0.48

ADD

kritikagarg.com

Taken

kritikagarg.website

~~\$19.88~~

\$0.48

ADD

DOMAIN RESULTS



For a limited time, .me domains are free for students

kritikagarg.me

FREE



Your Domains

kritikagarg.me

1 year registration

FREE

Subtotal

\$0.00

Complete order

.io, .tech, .com, .website are heavily discounted

kritikagarg.io

~~\$32.88~~

\$24.88

ADD

kritikagarg.tech

~~\$45.88~~

\$0.48

ADD

kritikagarg.com

Taken

kritikagarg.website

~~\$19.88~~

\$0.48

ADD

The entirety of this site is protected by copyright © 2001-2019 Namecheap.com.

Summary

You are registering **kritikagarg.me**

for **FREE**

Choose a free option

☒ GitHub Pages  **FREE**

☐ Exposure  **FREE**

Which domain should receive the free option?

kritikagarg.me

Student email

Currently we are only offering free .me domains and a discounted rate on other TLD's to select universities in the US, UK, Canada and Australia. Enter your student email address here. We'll check your eligibility and email you additional instructions.

If you are a part of the GitHub student program please use your primary GitHub email on the checkout form, instead of your student email address. You may learn more about the GitHub Student Developer Pack [here](#).

kgarg001@odu.edu

Finish Up

Login or create a new Namecheap account

Login

REGISTER

All fields are required

Log In

The entirety of this site is protected by copyright © 2001-2019 Namecheap.com.

Confirm Order #314558

Order summary

kritikagarg.me

1 year registration

FREE

Subtotal

\$0.00

Confirm Order

The entirety of this site is protected by copyright © 2001-2019 Namecheap.com.

Congratulations!

Your GitHub account was successfully setup. You can expect some delay before your GitHub Pages website is fully working.

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Take care of business with .BIZ for only \$8.48 →

Search for your domain name

Get your .IO domain for just \$25.88. Lowest market price! →

SEARCH DOMAIN ▾

Go big with your next domain

Beast Mode 🔍

🏠 Get Started with a .com domain →

SUPPORT ▾ SIGN IN ▾ SIGN UP

🛒 ▾ USD ▾ 🔍



kritikagarg

.....

Sign In

Forgot your password?

Domains

Hosting

WordPress

Apps ^{NEW}

Security ^{UPDATE}

Transfer to Us ^{TRY ME}

How To

Account

Take care of business with .BIZ for only \$8.48 →

Search for your domain name

Get your .IO domain for just \$25.88. Lowest market price! →

SEARCH DOMAIN ▾

Go big with your next domain

Beast Mode



🏠 Get Started with a .com domain →

Namecheap for

Individuals

Business

Resellers

Buy a domain name and create your website today



🕒 Dashboard

🕒 Expiring / Expired

🏠 Domain List

📦 Product List

🎮 Apps

⚙️ Profile

Hello Kritika Garg

Last logged in on Sep 16, 2019, 09:13 PM (EST)



Account Balance
\$0.00 **Top-up**



Two Factor
Authentication
OFF **Manage**

Recently Active in Your Account

All

Products

Expiration

 kritikagarg.me

📁 + ADD CATEGORY



Sep 12, 2020

Domain

MANAGE

[View all domains](#)

Q&A

🕒 Dashboard

🕒 Expiring / Expired

🏠 Domain List

📦 Product List

🎮 Apps

⚙️ Profile

🏠 Domain

📦 Products

🏠 Sharing & Transfer

⚙️ Advanced DNS

STATUS & VALIDITY



✓ ACTIVE

Sep 12, 2019 - Sep 12, 2020



AUTO-RENEW

ADD YEARS



PROTECTION

Sep 12, 2019 - Sep 12, 2020



AUTO-RENEW

ADD YEARS

SHOW DETAILS



Enable PremiumDNS protection in order to switch your domain to our PremiumDNS platform. With our PremiumDNS platform, you get 100% DNS uptime and DDoS protection at the DNS level.

BUY NOW

NAMESERVERS



Custom DNS

ns1.digitalocean.com

ns2.digitalocean.com

ns3.digitalocean.com

+ ADD NAMESERVER

Add these 3 digitalocean name servers

REDIRECT DOMAIN



You can create redirects via your DNS provider or your Namecheap account. To perform this function from your account, you must first change your nameservers to Namecheap default. [Learn How](#) →

Go back to your DigitalOcean account to add domain

Create 



USAGE
\$0.00



kritikagarg

DEFAULT

Update your project information under Settings

→ Move Resources

Resources Activity Settings

DROPLETS (1)



ubuntu-s18

NYC1 / 1GB / 25GB Disk

192.81.211.229

Add tags

Add a domain

Access console

Resize droplet

View usage

Enable backups

Add tags

Move to...

Destroy

Create something new



Create a Managed Database

Worry-free database management



Start using Spaces

Deliver data with scalable object storage



Spin up a Load Balancer

Distribute traffic between multiple Droplets

Build on what you have



Add a disk to your Droplet

Create a block storage volume



Manage DNS on DigitalOcean

Manage DNS and resources in one place



Take a snapshot

Make on-demand copies of Droplets



Secure your Droplets

Create a cloud firewall



Start using Floating IPs

Redirect Droplet traffic quickly



Track more Droplet metrics

Enable the DigitalOcean agent

Learn more

Product Docs

Technical overviews, how-tos, release notes, and support material

Tutorials

DevOps and development guidelines

API Docs

Run your resources programmatically

Ask a question

Connect, share and learn



PROJECTS

kritikagarg

+ New Project

MANAGE

Droplets

Kubernetes

Volumes

Databases

Spaces

Images

Networking

Monitoring

API

DISCOVER

Marketplace

ACCOUNT

Profile

Billing

Security

Referrals

Search by resource name or IP (Ctrl+B)

Create

US
\$0You need to update your nameservers with your domain registrar for the records below to take effect. [Learn how to do that](#)

Create new record

A AAAA CNAME MX TXT NS SRV CAA

Use @ to create the record at the root of the domain or enter a hostname to create it elsewhere. A records are for IPv4 addresses only and tell a request where your domain should direct to.

HOSTNAME

Enter @ or hostname

WILL DIRECT TO

Select resource or enter custom IP

TTL (SECONDS)

Enter TTL
3600

Create Record

DNS records

Type	Hostname	Value	TTL (seconds)	
A	kritikagarg.me	directs to 192.81.211.229	3600	More
NS	kritikagarg.me	directs to ns1.digitalocean.com.	1800	More
NS	kritikagarg.me	directs to ns2.digitalocean.com.	1800	More
NS	kritikagarg.me	directs to ns3.digitalocean.com.	1800	More

File Edit View Search Terminal Help

```
root@ubuntu-s18:~# host kritikagarg.me
kritikagarg.me has address 192.81.211.229
root@ubuntu-s18:~#
```

**After few minutes, check if your ip
address is mapped to your domain name
or not?**

kritika@kritika-E6430: ~

File Edit View Search Terminal Help

(base) kritika@kritika-E6430:~\$ ssh root@kritikagarg.me

ssh root@your_domain_name

```
(base) kritika@kritika-E6430:~$ ssh root@kritikagarg.me
The authenticity of host 'kritikagarg.me (192.81.211.229)' can't be established.
ECDSA key fingerprint is SHA256:m/mBbhe4TG2j14YJoN2cV486/t5XPdI/nSQ8a7eTQg.
Are you sure you want to continue connecting (yes/no)? yes
```

```
(base) kritika@kritika-E6430:~$ ssh root@kritikagarg.me
The authenticity of host 'kritikagarg.me (192.81.211.229)' can't be established.
ECDSA key fingerprint is SHA256:m/mBbhe4TG2j14YJoN2cV486/t5XPdI/nSQ8a7eTQg.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'kritikagarg.me' (ECDSA) to the list of known hosts.
root@kritikagarg.me's password: 
```

File Edit View Search Terminal Help

```
(base) kritika@kritika-E6430:~$ ssh root@kritikagarg.me
The authenticity of host 'kritikagarg.me (192.81.211.229)' can't be established.
ECDSA key fingerprint is SHA256:m/mBbhe4TG2j14YJoN2cV486/t5XPdI/n50Q8a7eTQg.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'kritikagarg.me' (ECDSA) to the list of known hosts.
root@kritikagarg.me's password:
Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-58-generic x86_64)
```

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

System information as of Tue Sep 17 01:30:08 UTC 2019

System load:	0.0	Processes:	87
Usage of /:	4.0% of 24.06GB	Users logged in:	1
Memory usage:	14%	IP address for eth0:	192.81.211.229
Swap usage:	0%		

```
0 packages can be updated.
0 updates are security updates.
```

```
Last login: Tue Sep 17 01:27:40 2019 from 172.56.3.139
root@ubuntu-s18:~#
```

File Edit View Search Terminal Help

```
(base) kritika@kritika-E6430:~$ ssh root@kritikagarg.me
The authenticity of host 'kritikagarg.me (192.81.211.229)' can't be established.
ECDSA key fingerprint is SHA256:m/mBbhe4TG2j14YJoN2cV486/t5XPdI/nS0Q8a7eTQg.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'kritikagarg.me' (ECDSA) to the list of known hosts.
root@kritikagarg.me's password:
Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-58-generic x86_64)
```

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

System information as of Tue Sep 17 01:30:08 UTC 2019

```
System load:  0.0           Processes:      87
Usage of /:   4.0% of 24.06GB Users logged in: 1
Memory usage: 14%          IP address for eth0: 192.81.211.229
Swap usage:   0%
```

```
0 packages can be updated.
0 updates are security updates.
```

```
Last login: Tue Sep 17 01:27:40 2019 from 172.56.3.139
root@ubuntu-s18:~# ./echoserver.py
Listening on 0.0.0.0:80
█
```

File Edit View Search Terminal Help

```
(base) kritika@kritika-E6430:~$ host kritikagarg.me
```

```
kritikagarg.me has address 192.81.211.229
```

```
(base) kritika@kritika-E6430:~$ telnet kritikagarg.me 80
```

```
Trying 192.81.211.229...
```

```
Connected to kritikagarg.me.
```

```
Escape character is '^['.
```

```
□
```

**In other terminal,
Telnet your_domain_name port_80**

File Edit View Search Terminal Help

(base) kritika@kritika-E6430:~\$ ssh root@kritikagarg.me

The authenticity of host 'kritikagarg.me (192.81.211.229)' can't be established.

ECDSA key fingerprint is SHA256:m/mBbhe4TG2j14YJoN2cV486/t5XPdI/nSQ8a7eTQg.

Are you sure you want to continue connecting (yes/no)? yes

Warning: Permanently added 'kritikagarg.me' (ECDSA) to the list of known hosts.

root@kritikagarg.me's password:

Welcome to Ubuntu 18.04.3 LTS (GNU/Linux 4.15.0-58-generic x86_64)

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

System information as of Tue Sep 17 01:30:08 UTC 2019

System load:	0.0	Processes:	87
Usage of /:	4.0% of 24.06GB	Users logged in:	1
Memory usage:	14%	IP address for eth0:	192.81.211.229
Swap usage:	0%		

0 packages can be updated.

0 updates are security updates.

Last login: Tue Sep 17 01:27:40 2019 from 172.56.3.139

root@ubuntu-s18:~# ./echoserver.py

~~Listening on 0.0.0.0:80~~

Connected by ('172.56.3.139', 28516)

☐