

## Tasks To Be Performed:

1. Based on what you have learnt in the class, do the following steps:
  - a. Create a new folder
  - b. Put the following files in the folder
    - Code.txt
    - Log.txt
    - Output.txt
  - c. Stage the Code.txt and Output.txt files
  - d. Commit them
  - e. And finally push them to GitHub
2. Please share the commands for the above points

[EC2](#) > [Instances](#) > Launch an instance

# Launch an instance [Info](#)

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

**Name and tags** [Info](#)

Name

[Add additional tags](#)

**▼ Application and OS Images (Amazon Machine Image)** [Info](#)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Recents

My AMIs

**Quick Start**

**▼ Summary**

Number of instances [Info](#)

Software Image (AMI)

Canonical, Ubuntu, 24.04 LTS, ...[read more](#)  
ami-04b70fa74e45c3917

Virtual server type (instance type)

t2.micro

Firewall (security group)

default

Storage (volumes)

1 volume(s) - 8 GiB

[❏](#) **Free tier:** In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in

[✕](#)

Cancel

**Launch instance**

[Review commands](#)

Amazon Linux

macOS

Ubuntu

Windows

Red Hat

SUSE

Browse more AMIs  
Including AMIs from AWS, Marketplace and the Community

### Amazon Machine Image (AMI)

Ubuntu Server 24.04 LTS (HVM), SSD Volume Type  
ami-04b70fa74e45c3917 (64-bit (x86)) / ami-0eac975a54dfee8cb (64-bit (Arm))  
Virtualization: hvm   ENA enabled: true   Root device type: ebs  
Free tier eligible

### Description

Canonical, Ubuntu, 24.04 LTS, amd64 noble image build on 2024-04-23

Architecture  
64-bit (x86) ▾

AMI ID  
ami-04b70fa74e45c3917  

Verified provider

▼ Instance type [Info](#) | [Get advice](#)

Instance type

t2.micro  
Family: t2   1 vCPU   1 GiB Memory   Current generation: true  
On-Demand Windows base pricing: 0.0162 USD per Hour  
Free tier eligible

☐ All generations

▼ Summary

Number of instances [Info](#)

[Software Image \(AMI\)](#)  
Canonical, Ubuntu, 24.04 LTS, ...[read more](#)  
ami-04b70fa74e45c3917

[Virtual server type \(instance type\)](#)  
t2.micro

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1 volume(s) - 8 GiB

**Free tier:** In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in

Cancel

Launch instance

[Review commands](#)

**t2.micro**

Free tier eligible

Family: t2 1 vCPU 1 GiB Memory Current generation: true  
On-Demand Windows base pricing: 0.0162 USD per Hour  
On-Demand SUSE base pricing: 0.0116 USD per Hour  
On-Demand RHEL base pricing: 0.0716 USD per Hour  
On-Demand Linux base pricing: 0.0116 USD per Hour

[t2.micro](#)

[Additional costs apply for AMIs with pre-installed software](#)

☐ All generations

[Compare instance types](#)

▼ **Key pair (login)** [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - *required*

[↻](#) [Create new key pair](#)

▼ **Network settings** [Info](#)

[Edit](#)

Network [Info](#)

vpc-06a980b08a54688af

Subnet [Info](#)

No preference (Default subnet in any availability zone)

▼ **Summary**

Number of instances [Info](#)

[Software Image \(AMI\)](#)

Canonical, Ubuntu, 24.04 LTS, ...[read more](#)  
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1 volume(s) - 8 GiB

[i](#) **Free tier:** In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in

[✕](#)

[Cancel](#)

[Launch instance](#)

[Review commands](#)







No preference (Default subnet in any availability zone)

Auto-assign public IP [Info](#)

Enable

[Additional charges apply](#) when outside of [free tier allowance](#)

Firewall (security groups) [Info](#)

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

☐ Create security group

☒ Select existing security group

Common security groups [Info](#)

Select security groups ▼

default sg-06d9c74e80448682b ✕

VPC: vpc-06a980b08a54688af


🔄 [Compare security group rules](#)

Security groups that you add or remove here will be added to or removed from all your network interfaces.

▼ **Configure storage** [Info](#)

[Advanced](#)

1x  GiB  ▼ Root volume (Not encrypted)

 Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage ✕

▼ **Summary**

Number of instances [Info](#)

[Software Image \(AMI\)](#)

Canonical, Ubuntu, 24.04 LTS, ...[read more](#)  
ami-04b70fa74e45c3917

[Virtual server type \(instance type\)](#)

t2.micro

[Firewall \(security group\)](#)

default

[Storage \(volumes\)](#)

1 volume(s) - 8 GiB

 **Free tier:** In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in [your region](#)) ✕

Cancel

**Launch instance**

[Review commands](#)

 **Success**  
Successfully initiated launch of instance [\(i-0cf8082d9925f99d5\)](#)

▶ [Launch log](#)

### Next Steps

[<](#) [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [>](#)

#### Create billing and free tier usage alerts

To manage costs and avoid surprise bills, set up email notifications for billing and free tier usage thresholds.

Create billing alerts [🔗](#)

#### Connect to your instance

Once your instance is running, log into it from your local computer.

Connect to instance [🔗](#)

[Learn more](#) [🔗](#)

#### Connect an RDS database

Configure the connection between an EC2 instance and a database to allow traffic flow between them.

Connect an RDS database [🔗](#)

[Create a new RDS database](#) [🔗](#)

[Learn more](#) [🔗](#)

#### Create EBS snapshot policy

Create a policy that automates the creation, retention, and deletion of EBS snapshots

Create EBS snapshot policy [🔗](#)

- EC2 Dashboard ×
- EC2 Global View
- Events
- Console-to-Code [Preview](#)
- ▼ Instances
- Instances
- Instance Types
- Launch Templates
- Spot Requests
- Savings Plans
- Reserved Instances
- Dedicated Hosts
- Capacity
- Reservations [New](#)
- ▼ Images
- AMIs
- AMI Catalog
- ▼ Elastic Block Store
- Volumes
- Snapshots

Instances (1/1) [Info](#)

[↺](#) [Connect](#) [Instance state](#) [Actions](#) [Launch instances](#)

[All states](#) [< 1 >](#) [⚙️](#)

<input checked="" type="checkbox"/>	Name <a href="#">✎</a>	Instance ID	Instance state <a href="#">▼</a>	Instance type <a href="#">▼</a>	Status check	Alarm status	Availability
<input checked="" type="checkbox"/>	git-mrng-12	i-0cf8082d9925f99d5	<span>✔️ Running</span> <a href="#">🔍</a> <a href="#">🔍</a>	t2.micro	<a href="#">🕒</a> Initializing	<a href="#">View alarms</a> <a href="#">+</a>	us-east-1

Unselect instance: git-mrng-12

i-0cf8082d9925f99d5 (git-mrng-12) [⚙️](#) [×](#)

[Details](#) [Status and alarms \[New\]\(#\)](#) [Monitoring](#) [Security](#) [Networking](#) [Storage](#) [Tags](#)

▼ Instance summary [Info](#)

Instance ID

[📄](#) i-0cf8082d9925f99d5 (git-mrng-12)

IPv6 address

–

Hostname type

Public IPv4 address

[📄](#) 3.88.102.43 | [open address](#) [🔗](#)

Instance state

✔️ Running

Private IP DNS name (IPv4 only)

Private IPv4 addresses

[📄](#) 172.31.16.198

Public IPv4 DNS

[📄](#) ec2-3-88-102-43.compute-1.amazonaws.com | [open address](#) [🔗](#)




EC2 / Instances / i-0cf8082d9925f99d5 / Connect to instance

# Connect to instance [Info](#)

Connect to your instance i-0cf8082d9925f99d5 (git-mrng-12) using any of these options

- EC2 Instance Connect
- Session Manager
- SSH client
- EC2 serial console

**Port 22 (SSH) is open to all IP addresses**

Port 22 (SSH) is currently open to all IP addresses, indicated by 0.0.0.0/0 in the inbound rule in [your security group](#). For increased security, consider restricting access to only the EC2 Instance Connect service IP addresses for your Region: 18.206.107.24/29. [Learn more](#).

Instance ID

 i-0cf8082d9925f99d5 (git-mrng-12)


Connection Type

- ☒ **Connect using EC2 Instance Connect**

Connect using the EC2 Instance Connect browser-based client, with a public IPv4 address.
- ☐ **Connect using EC2 Instance Connect Endpoint**

Connect using the EC2 Instance Connect browser-based client, with a private IPv4 address and a VPC endpoint.

Public IP address

 3.88.102.43

Username

Enter the username defined in the AMI used to launch the instance. If you didn't define a custom username, use the default username, ubuntu.





To check for new updates run: `sudo apt update`

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.

To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo\_root" for details.

```
ubuntu@ip-172-31-16-198:~$ sudo apt-get update
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble InRelease [256 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [89.7 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [89.7 kB]
Get:4 http://security.ubuntu.com/ubuntu noble-security InRelease [89.7 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 Packages [1401 kB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main Translation-en [513 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:8 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [32.7 kB]
Get:9 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [10.7 kB]
Get:10 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [16.3 kB]
Get:11 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [5844 B]
Get:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]
Get:13 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [112 B]
Get:14 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [116 B]
Get:15 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
Get:16 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [301 kB]
```

i-0cf8082d9925f99d5 (git-mrng-12)

PublicIPs: 3.88.102.43 PrivateIPs: 172.31.16.198

## Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository](#).

Required fields are marked with an asterisk (\*).

Owner \*

 sujith123ak

Repository name \*

Gith-assignment1

✓ Gith-assignment1 is available.

Great repository names are short and memorable. Need inspiration? How about **musical-goggles** ?

Description (optional)



**Public**

Anyone on the internet can see this repository. You choose who can commit.



**Private**

You choose who can see and commit to this repository.

Initialize this repository with:



**Add a README file**

This is where you can write a long description for your project. [Learn more about READMEs](#).

Add .gitignore

.gitignore template: None

Choose which files not to track from a list of templates. [Learn more about ignoring files](#).

Choose a license

License: None

A license tells others what they can and can't do with your code. [Learn more about licenses](#).



## Create a new repository

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Required fields are marked with an asterisk (\*).

Owner \*

sujith123ak

Repository name \*

git-assignment1

✓ git-assignment1 is available.

Great repository names are short and memorable. Need inspiration? How about **friendly-octo-chainsaw** ?

Description (optional)



**Public**

Anyone on the internet can see this repository. You choose who can commit.



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You choose who can see and commit to this repository.

Initialize this repository with:



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This is where you can write a long description for your project. [Learn more about READMEs](#).

Add .gitignore

.gitignore template: None

Choose which files not to track from a list of templates. [Learn more about ignoring files](#).

Choose a license

License: None

A license tells others what they can and can't do with your code. [Learn more about licenses](#).



```
ubuntu@ip-172-31-16-198:~$ mkdir assignment1
mkdir: cannot create directory 'assignment1': File exists
ubuntu@ip-172-31-16-198:~$ cd assignment1
ubuntu@ip-172-31-16-198:~/assignment1$ git init
Reinitialized existing Git repository in /home/ubuntu/assignment1/.git/
ubuntu@ip-172-31-16-198:~/assignment1$ nano code.txt
ubuntu@ip-172-31-16-198:~/assignment1$ nano log.txt
ubuntu@ip-172-31-16-198:~/assignment1$ nano output.txt
ubuntu@ip-172-31-16-198:~/assignment1$ ls
code.txt  log.txt  output.txt
ubuntu@ip-172-31-16-198:~/assignment1$ git add code.txt
ubuntu@ip-172-31-16-198:~/assignment1$ git add output.txt
ubuntu@ip-172-31-16-198:~/assignment1$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   code.txt
        new file:   output.txt

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        log.txt

ubuntu@ip-172-31-16-198:~/assignment1$ git commit -m "committed"
[master (root-commit) 819e90a] committed
Committer: Ubuntu <ubuntu@ip-172-31-16-198.ec2.internal>
Your name and email address were configured automatically based
```

i-0cf8082d9925f99d5 (git-mrnrng-12)

PublicIPs: 3.88.102.43 PrivateIPs: 172.31.16.198





Changes to be committed:

(use "git rm --cached <file>..." to unstage)

new file: code.txt  
new file: output.txt

Untracked files:

(use "git add <file>..." to include in what will be committed)

log.txt

```
ubuntu@ip-172-31-16-198:~/assignment1$ git commit -m "committed"
[master (root-commit) 819e90a] committed
Committer: Ubuntu <ubuntu@ip-172-31-16-198.ec2.internal>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:
```

```
git config --global --edit
```

After doing this, you may fix the identity used for this commit with:

```
git commit --amend --reset-author
```

```
2 files changed, 2 insertions(+)
create mode 100644 code.txt
create mode 100644 output.txt
ubuntu@ip-172-31-16-198:~/assignment1$ git remote add origin https://github.com/sujith123ak/git-assignment1.git
ubuntu@ip-172-31-16-198:~/assignment1$ git push origin master
```

i-0cf8082d9925f99d5 (git-mrng-12)

PublicIPs: 3.88.102.43 PrivateIPs: 172.31.16.198

- 🔌 GitHub Apps
- 👤 OAuth Apps
- 🔑 **Personal access tokens** ⌵
- Fine-grained tokens Beta
- Tokens (classic)

## New personal access token (classic)

Personal access tokens (classic) function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to [authenticate to the API over Basic Authentication](#).

### Note

Hp-pat

What's this token for?

### Expiration \*

30 days ⌵

The token will expire on Thu, Jun 27 2024

### Select scopes


Scopes define the access for personal tokens. [Read more about OAuth scopes](#).

<input checked="" type="checkbox"/> <b>repo</b>	Full control of private repositories
<input checked="" type="checkbox"/> repo:status	Access commit status
<input checked="" type="checkbox"/> repo_deployment	Access deployment status
<input checked="" type="checkbox"/> public_repo	Access public repositories
<input checked="" type="checkbox"/> repo:invite	Access repository invitations
<input checked="" type="checkbox"/> security_events	Read and write security events
<input checked="" type="checkbox"/> <b>workflow</b>	Update GitHub Action workflows
<input checked="" type="checkbox"/> <b>write:packages</b>	Upload packages to GitHub Package Registry
<input checked="" type="checkbox"/> read:packages	Download packages from GitHub Package Registry
<input checked="" type="checkbox"/> <b>delete:packages</b>	Delete packages from GitHub Package Registry
<input checked="" type="checkbox"/> <b>admin:org</b>	Full control of orgs and teams, read and write org projects
<input checked="" type="checkbox"/> write:org	Read and write org and team membership, read and write org projects

<input checked="" type="checkbox"/> <b>delete_repo</b>	Delete repositories
<input checked="" type="checkbox"/> <b>write:discussion</b> <input checked="" type="checkbox"/> read:discussion	Read and write team discussions Read team discussions
<input checked="" type="checkbox"/> <b>admin:enterprise</b> <input checked="" type="checkbox"/> manage_runners:enterprise <input checked="" type="checkbox"/> manage_billing:enterprise <input checked="" type="checkbox"/> read:enterprise	Full control of enterprises Manage enterprise runners and runner groups Read and write enterprise billing data Read enterprise profile data
<input checked="" type="checkbox"/> <b>audit_log</b> <input checked="" type="checkbox"/> read:audit_log	Full control of audit log Read access of audit log
<input checked="" type="checkbox"/> <b>codespace</b> <input checked="" type="checkbox"/> codespace:secrets	Full control of codespaces Ability to create, read, update, and delete codespace secrets
<input checked="" type="checkbox"/> <b>copilot</b> <input checked="" type="checkbox"/> manage_billing:copilot	Full control of GitHub Copilot settings and seat assignments View and edit Copilot Business seat assignments
<input checked="" type="checkbox"/> <b>project</b> <input checked="" type="checkbox"/> read:project	Full control of projects Read access of projects
<input checked="" type="checkbox"/> <b>admin:gpg_key</b> <input checked="" type="checkbox"/> write:gpg_key <input checked="" type="checkbox"/> read:gpg_key	Full control of public user GPG keys Write public user GPG keys Read public user GPG keys
<input checked="" type="checkbox"/> <b>admin:ssh_signing_key</b> <input checked="" type="checkbox"/> write:ssh_signing_key <input checked="" type="checkbox"/> read:ssh_signing_key	Full control of public user SSH signing keys Write public user SSH signing keys Read public user SSH signing keys

Generate token

Cancel

 **git-assignment1** Public

[📌 Pin](#) [👁 Unwatch 1](#) [🍴 Fork 0](#) [★ Star 0](#)


[🔗 master](#) [🔗 1 Branch](#) [🏷 0 Tags](#)

[Add file](#)

[Code](#)

 <b>Ubuntu</b> committed <span>819e90a · 31 minutes ago</span> <a href="#">🕒 1 Commit</a>		
 code.txt	committed	31 minutes ago
 output.txt	committed	31 minutes ago

[📖 README](#)



## Add a README

Help people interested in this repository understand your project by adding a README.

[Add a README](#)

**About** [⚙](#)

No description, website, or topics provided.

[🔔 Activity](#)

[★ 0 stars](#)

[👁 1 watching](#)

[🍴 0 forks](#)

**Releases**

No releases published

[Create a new release](#)

**Packages**

No packages published

[Publish your first package](#)



```
log.txt

nothing added to commit but untracked files present (use "git add" to track)
ubuntu@ip-172-31-16-198:~/assignment1$ git push origin master
Username for 'https://github.com': sujith123ak
Password for 'https://sujith123ak@github.com':
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 292 bytes | 292.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/sujith123ak/git-assignment1.git
 * [new branch]      master -> master
ubuntu@ip-172-31-16-198:~/assignment1$ history
 1  sudo apt-get update
 2  mkdir assignment1
 3  cd assignment1
 4  git init
 5  nano code.txt
 6  nano log.txt
 7  nano output.txt
 8  ls
 9  git add code.txt
10  git add ouput.txt
11  git status
12  git commit -m "committed"
13  https://github.com/sujith123ak/Gith-assignment1.git
14  sudo apt-get update
15  mkdir assignment1
```

EC2

```
11 git status
12 git commit -m "committed"
13 https://github.com/sujith123ak/Gith-assignment1.git
14 sudo apt-get update
15 mkdir assignment1
16 sudo apt-get update
17 mkdir assignment1
18 cd assignment1
19 git init
20 nano code.txt
21 nano log.txt
22 nano output.txt
23 ls
24 git add code.txt
25 git add output.txt
26 git status
27 git commit -m "committed"
28 git remote add origin https://github.com/sujith123ak/git-assignment1.git
29 git push origin master
30 git push origin master
31 ghp_3YJdHGG2Q6Rqr6LlwkT7MnWd27XsZ230tcmT
32 ls
33 git add code.txt
34 git add output.txt
35 git status
36 git commit -m "committed"
37 git push origin master
38 history
```

ubuntu@ip-172-31-16-198:~/assignment1\$

i-0cf8082d9925f99d5 (git-mrng-12)

PublicIPs: 3.88.102.43 PrivateIPs: 172.31.16.198