

# Assignment 3

- 1) Launch an EC2 instance , Create VM- Amazon Linux , Connect to the EC2 using SSH , install NGINX python

Firstly go aws and login into aws console

⇒ Search for EC2 and select instances in EC2 dashboard

## # Launching an EC2

⇒ Under Instances select “Launch Instances”

⇒ After redirected to Launch Instances Pages

-> Name the instance

## #Creating Amazon linux VM

-> select Amazon Linux under “Application and OS Images”

-> Amazon Linux 2023 AMI under “AMI”

-> select instance type of free tire

-> create key pair and after creating key download it

-> set rest as default and select create instances

# Assignment 3

## Name and tags [Info](#)

Name

Assignment 3

[Add additional tags](#)

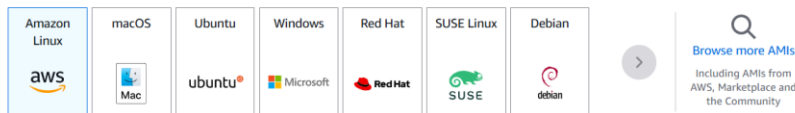
## ▼ Application and OS Images (Amazon Machine Image) [Info](#)

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.

Q Search our full catalog including 1000s of application and OS images

Recents

**Quick Start**



### Amazon Machine Image (AMI)

Amazon Linux 2023 AMI  
ami-0c2e61fdbc5495691 (64-bit (x86), uefi-preferred) / ami-02c4522b179cdaac1 (64-bit (Arm), uefi)

Free tier eligible

#### Description

Amazon Linux 2023 is a modern, general purpose Linux-based OS that comes with 5 years of long term support. It is optimized for AWS and designed to provide a secure, stable and high-performance execution environment to develop and run your cloud applications.

Amazon Linux 2023 AMI 2023.6.20250303.0 x86\_64 HVM kernel-6.1

#### Architecture

64-bit (x86)

#### Boot mode

uefi-preferred

#### AMI ID

ami-0c2e61fdbc5495691

#### Publish Date

2025-03-04

#### Username

ec2-user

Verified provider

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

### Instance type

t3.micro  
Family: t3 2 vCPU 1 GiB Memory Current generation: true  
On-Demand Ubuntu Pro base pricing: 0.0143 USD per Hour  
On-Demand RHEL base pricing: 0.0396 USD per Hour On-Demand SUSE base pricing: 0.0108 USD per Hour  
On-Demand Linux base pricing: 0.0108 USD per Hour On-Demand Windows base pricing: 0.02 USD per Hour

Free tier eligible

All generations

[Compare instance types](#)

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

## ▼ 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**

Key pair name - **required**

assignment3Key

[Create new key pair](#)

## ▼ Network settings [Info](#)

[Edit](#)

### Network [Info](#)

vpc-0bc8047a26d566314

### Subnet [Info](#)

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

We'll create a new security group called 'launch-wizard-1' with the following rules:

☒ Allow SSH traffic from

Helps you connect to your instance

Anywhere

0.0.0.0/0

☐ Allow HTTPS traffic from the internet

To set up an endpoint, for example when creating a web server

☐ Allow HTTP traffic from the internet

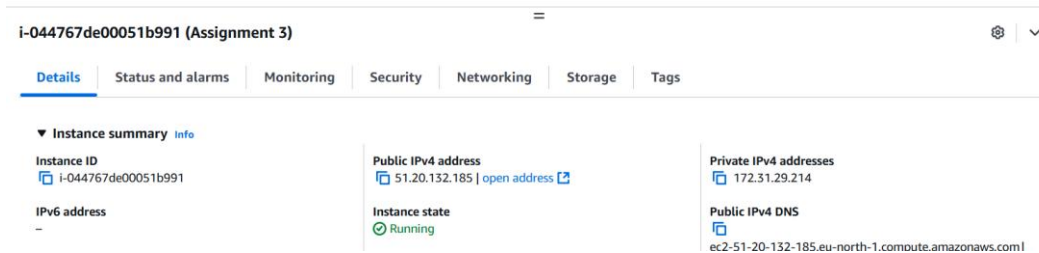
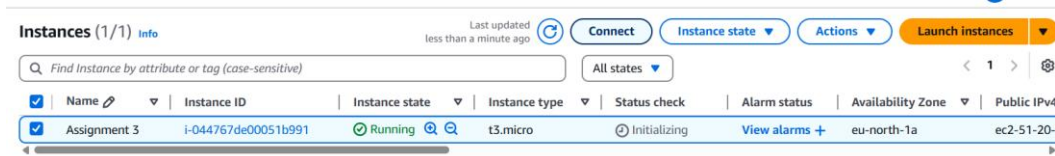
To set up an endpoint, for example when creating a web server

⇒ Now after scrolling to the bottom of the page select  
“Launch instance”

# Assignment 3

# Connect instances using ssh

⇒ Now you created instances is going to appear in instances dashboard

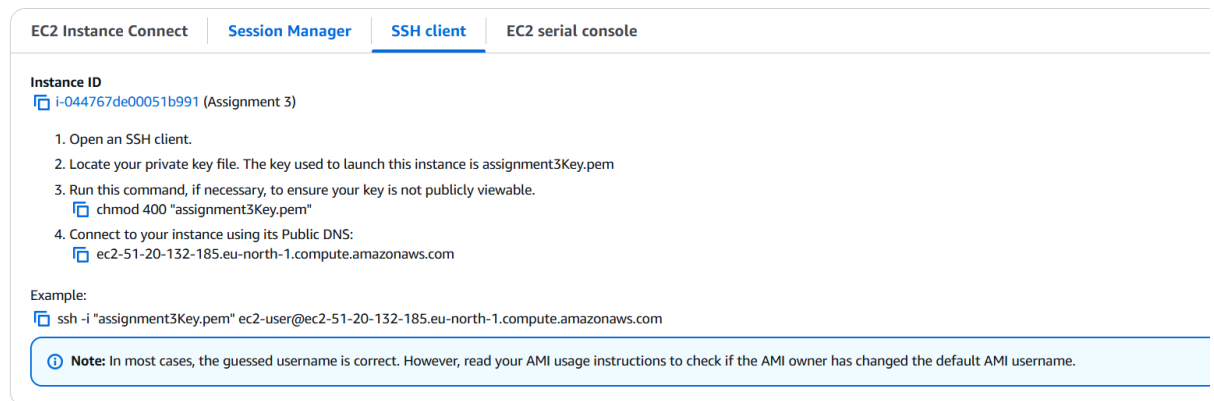


⇒ Now in instance dashboard select “Connect option”

⇒ Now navigate to ‘SSH Client ‘ Section

## Connect to instance

Connect to your instance i-044767de00051b991 (Assignment 3) using any of these options

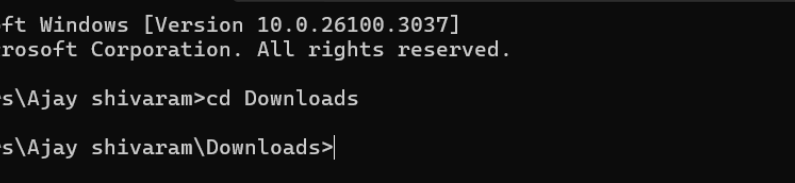


⇒ Copy below “example” snippet in clipboard

⇒ Now move to cmd in your desktop

⇒ Where key is placed in Downloads so I’ll navigate to Downloads in cmd

# Assignment 3



The screenshot shows a Windows Command Prompt window. The title bar at the top reads "Command Prompt" and includes standard window controls (close, maximize, and a dropdown menu). The command prompt displays the following text:

```
Microsoft Windows [Version 10.0.26100.3037]  
(c) Microsoft Corporation. All rights reserved.  
  
C:\Users\Ajay shivaram>cd Downloads  
C:\Users\Ajay shivaram\Downloads>
```

The prompt indicates the user is currently in the "Downloads" directory of the "Ajay shivaram" user profile.

- ⇒ And paste example ssh prompt in cmd And press enter to connect to the instances
- ⇒ Now our system is connected to our ec2

```
C:\Users\Ajay shivaram>cd Downloads

C:\Users\Ajay shivaram\Downloads>ssh -i "assignment3Key.pem" ec2-user@ec2-51-20-132-185.eu-north-1.compute.amazonaws.com
The authenticity of host 'ec2-51-20-132-185.eu-north-1.compute.amazonaws.com (51.20.132.185)' can't be established.
ED25519 key fingerprint is SHA256:0TL+34KEkN3cK0+VeHacIdQdmUMq1VULEA5NcxafEXM.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-51-20-132-185.eu-north-1.compute.amazonaws.com' (ED25519) to the list of known hosts.
```

The terminal window shows the user navigating to the Downloads folder and running an SSH command to connect to an EC2 instance. The output displays the host's identity, its ED25519 key fingerprint, and a warning about adding it to the known hosts list. A progress bar indicates the connection status. Finally, the user is prompted to confirm the connection, and upon confirmation, they are logged into the Amazon Linux 2023 environment as the ec2-user.

```
#_      Amazon Linux 2023
~ \_    #####
~~ \_   #####
~~~ \_  #####
~~~~ \# /
~~~~ V ~ !  i -> https://aws.amazon.com/linux/amazon-linux-2023
~~~~ . _ . _ /
~~~~ _ / m / !
```

```
[ec2-user@ip-172-31-29-214 ~]$ |
```

- ⇒ Now install nginx python in that ec2 using “sudo apt update && sudo apt install -y nginx python3 python3-pip”