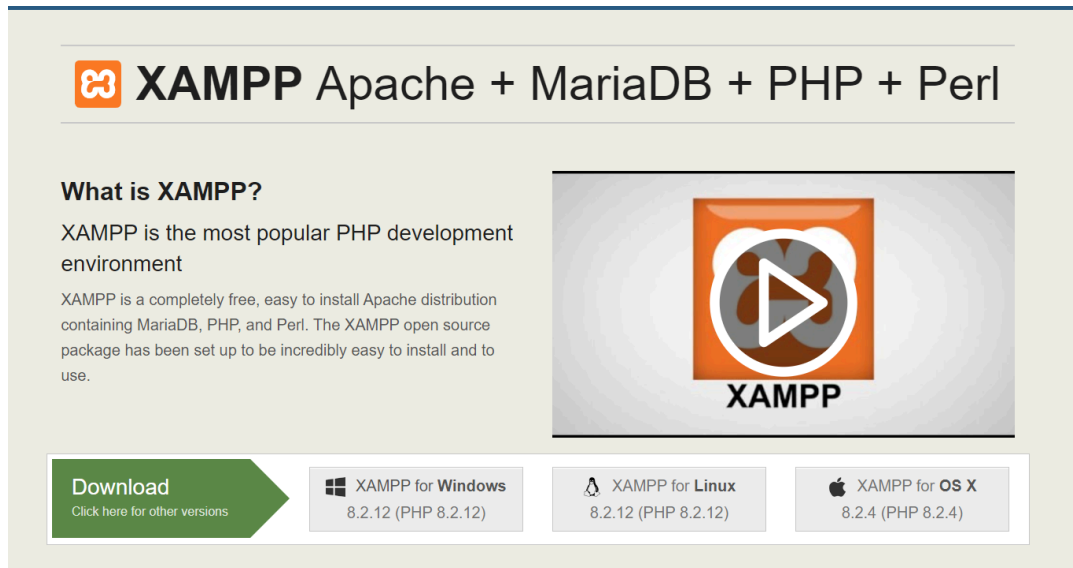
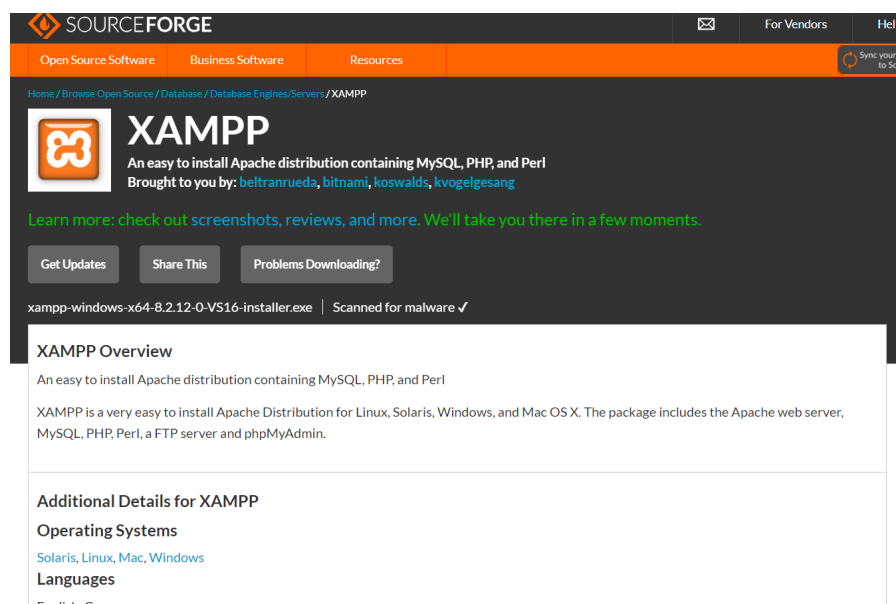


Exp : 1A**Aim : AWS (EC2) Installation steps for Linux instance
Hosting a website on Local Virtual Machine using Xampp**

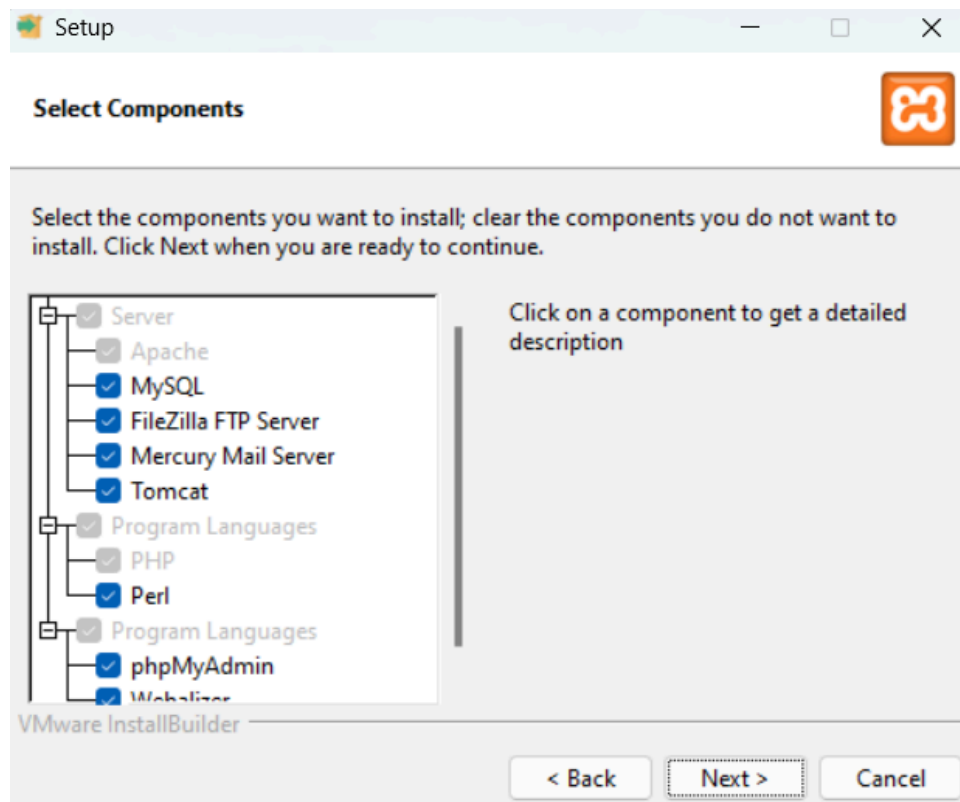
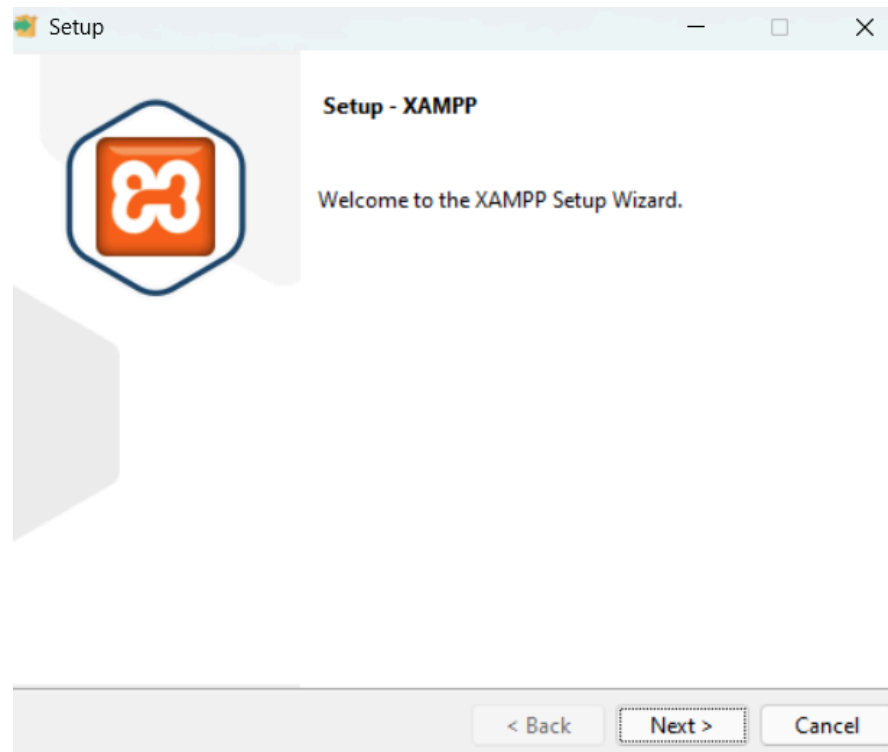
1) Go to official website of xampp



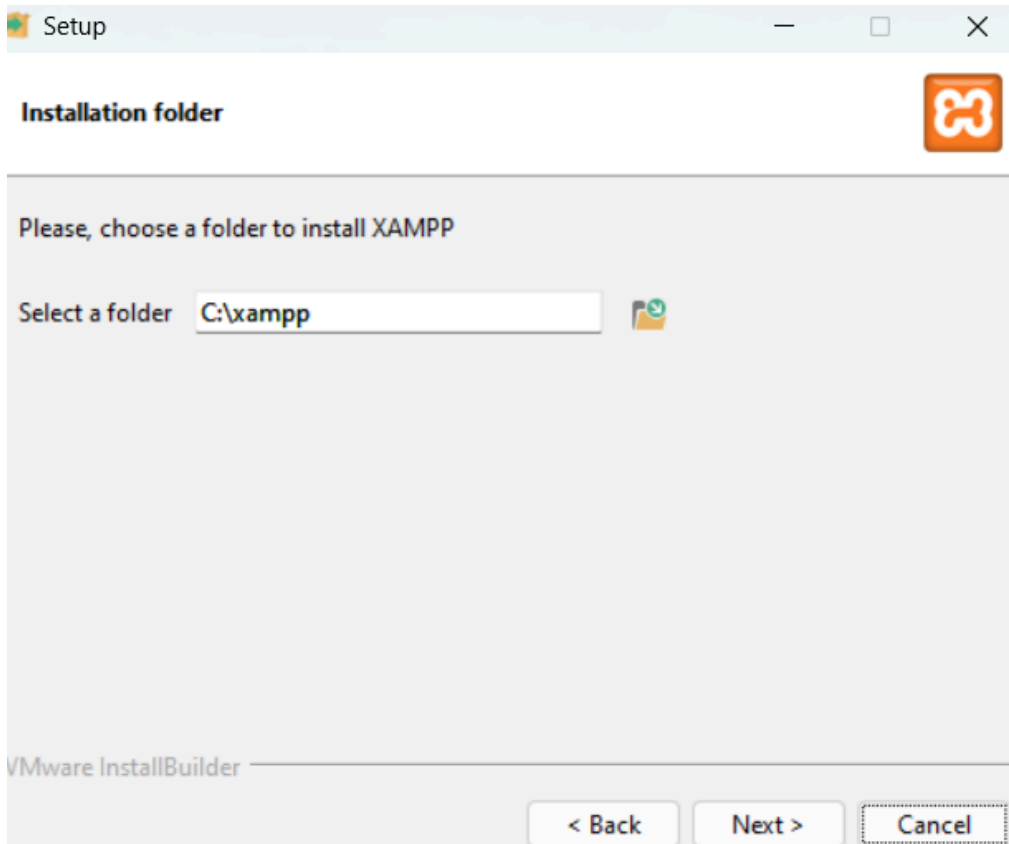
2) click on download and it will automatically get downloaded



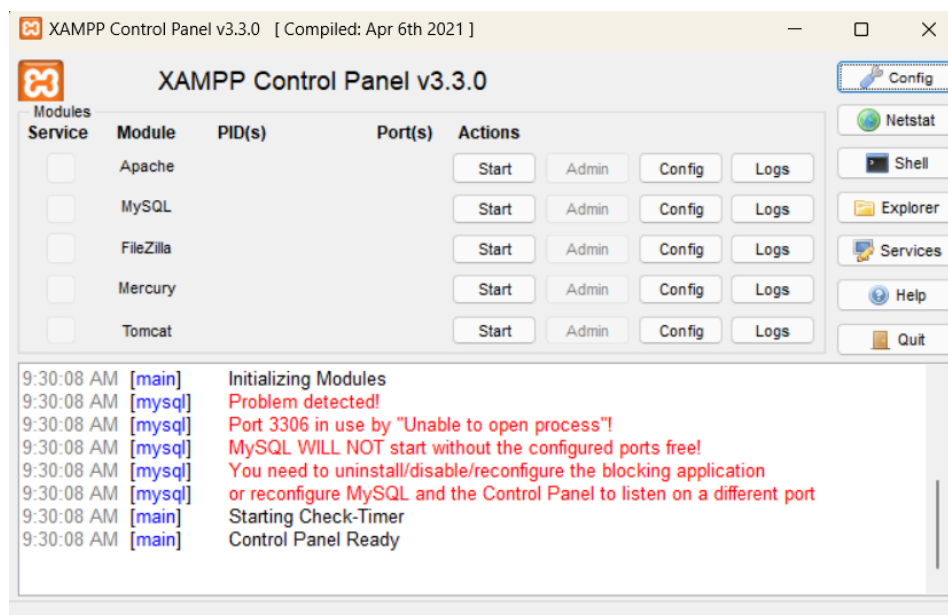
3)click next



4)click on next till the setup gets complete



5)Open Xampp

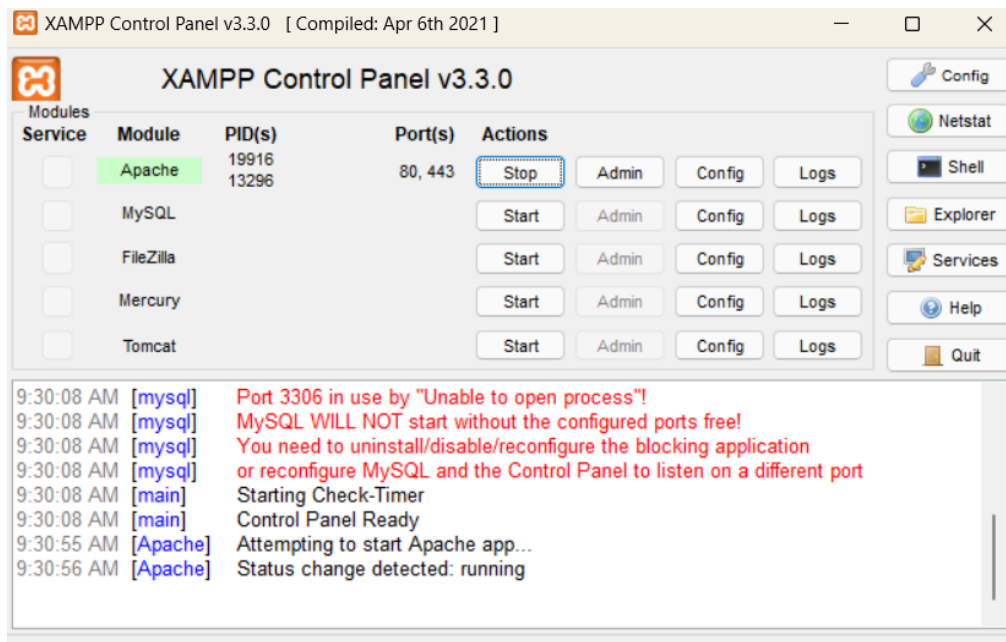


6)Write a php code

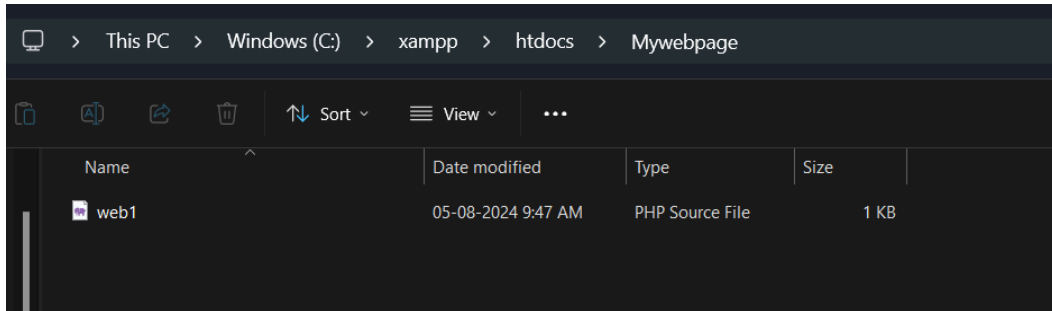
```
<?php
echo "Hello, My Name is Atharv Nikam";

echo "<br>";
echo "My roll no is 36";
echo "<br>";
echo "Welcome to Adv Devops Lab";
?>
```

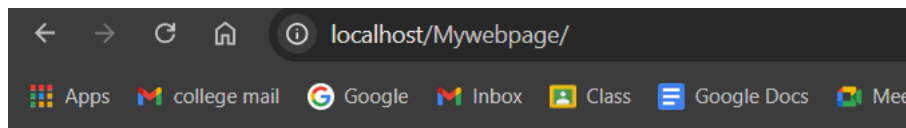
7)Starting Xampp



8)put your php file in the xampp ->htdocs



9)Open this

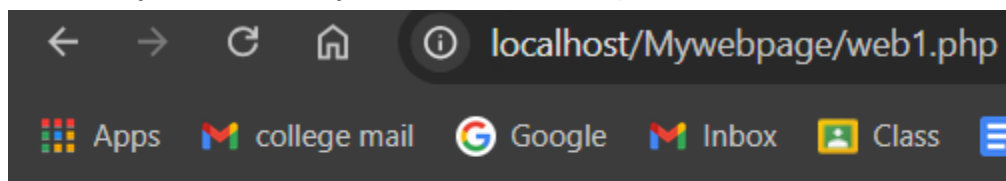


Index of /Mywebpage

Name	Last modified	Size	Description
Parent Directory	-	-	-
web1.php	2024-08-05 09:47	140	

Apache/2.4.58 (Win64) OpenSSL/3.1.3 PHP/8.2.12 Server at localhost Port 80

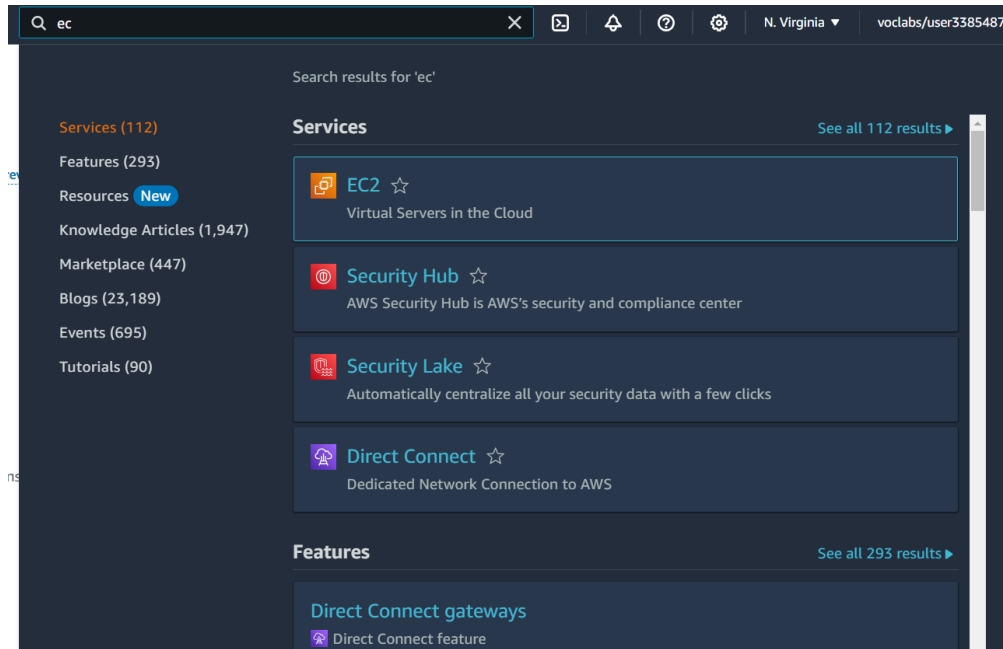
Click on your file and your website will open



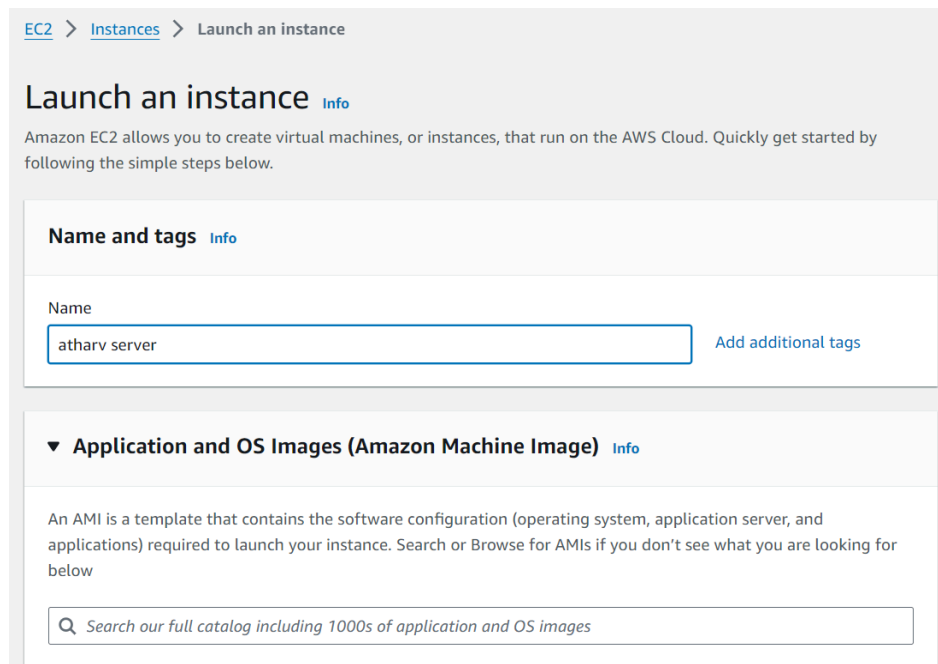
Hello, My Name is Atharv Nikam
My roll no is 36
Welcome to Adv Devops Lab

Name: Atharv Nikam Div D15C Roll No: 36
Aim : AWS (EC2) Installation steps for Linux instance

1) Go to aws homepage and click on ec2



2) click on ec and give a name



3)select on ubuntu


▼ 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


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

Recents

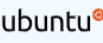
Quick Start




Amazon Linux




macOS




Ubuntu




Windows



Red Hat



SUSE Linux



Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Ubuntu Server 24.04 LTS (HVM), SSD Volume Type Free tier eligible ▼
ami-04a81a99f5ec58529 (64-bit (x86)) / ami-0c14ff330901e49ff (64-bit (Arm))
Virtualization: hvm ENA enabled: true Root device type: ebs

Description

Ubuntu Server 24.04 LTS (HVM) FRS General Purpose (SSD) Volume Type. Support available from Canonical

4)select instance type t2

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

Instance type

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: 0.026 USD per Hour
On-Demand Linux base pricing: 0.0116 USD per Hour

☒ 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:

5)see the summary and launch the instance

▼ Summary

Number of instances

[Info](#)

1

Software Image (AMI)

Canonical, Ubuntu, 24.04 LTS, ...[read more](#)
ami-04a81a99f5ec58529

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 8 GiB

❗ Free tier: In your first year includes 750 hours of t2.micro (or

×

Cancel

Launch instance

[Review commands](#)

6)Successfully instance created

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

🟢 Success

Successfully initiated launch of instance ([i-0a12db377565d1313](#))

▼ Launch log

Initializing requests

✔ Succeeded

Creating security groups

✔ Succeeded

Creating security group rules

✔ Succeeded

Launch initiation

✔ Succeeded

7)see your running instances

Instances (2)

Info

Connect

Instance state

Actions

Launch instances

Find Instance by attribute or tag (case-sensitive)

All states

<

1

>

<input type="checkbox"/>	Name <div></div>	Instance ID	Instance state <div></div>	Instance type <div></div>	Status check	Alarm status	Availability Zone
<input type="checkbox"/>	Atharv Server	i-074ec2b12248b84a0	<div><div></div>Running<div></div><div></div></div>	t2.micro	<div><div></div>Initializing</div>	<div><div>View alarms</div><div></div></div>	us-east-1c

8)click on connect

Instances (1/2) Info		Refresh	Connect	Instance state ▼	Actions ▼	Launch instances ▼	🔍
<input type="text" value="Find Instance by attribute or tag (case-sensitive)"/>		All states ▼		< 1 > Settings			
<input type="text" value="Instance state = running"/> ✕		Clear filters					
<input type="checkbox"/>	Name ✎	Instance ID	Instance state ▼	Instance type ▼	Status check	Alarm status	
<input checked="" type="checkbox"/>	Atharv Server ✕ ✓	i-074ec2b12248b84a0	Running 🔍 🔍	t2.micro	2/2 checks passed	View alarms +	
<input type="checkbox"/>	aws-cloud9-AtahrvCloud9-020b82...	i-0709c00c32c38714b	Running 🔍 🔍	t2.micro	2/2 checks passed	View alarms +	

9)you will see this page


Connect to your instance i-074ec2b12248b84a0 (Atharv Server) using any of these options


EC2 Instance Connect

Session Manager

SSH client

EC2 serial console


**Port 22 (SSH) is open to all IPv4 addresses**
Port 22 (SSH) is currently open to all IPv4 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-074ec2b12248b84a0 (Atharv Server)

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
 44.206.244.123

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.

10) this console will open

```
aws Services Search [Alt+S]
* Documentation: https://help.ubuntu.com
* Management:   https://landscape.canonical.com
* Support:       https://ubuntu.com/pro

System information as of Wed Aug 14 07:02:38 UTC 2024

System load: 0.08          Processes:           106
Usage of /:  29.7% of 6.71GB Users logged in:       0
Memory usage: 20%          IPv4 address for enX0: 172.31.90.246
Swap usage:  0%

* Ubuntu Pro delivers the most comprehensive open source security and
  compliance features.

  https://ubuntu.com/aws/pro

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: Sun Aug 11 13:48:16 2024 from 18.206.107.28
ubuntu@ip-172-31-90-246:~$

i-074ec2b12248b84a0 (Atharv Server)
PublicIPs: 44.206.244.123 PrivateIPs: 172.31.90.246
```

11) Run all the commands

```
aws Services Search [Alt+S]
Memory usage: 22%          IPv4 address for enX0: 172.31.51.5
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

The list of available updates is more than a week old.
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-172-31-51-5:~$

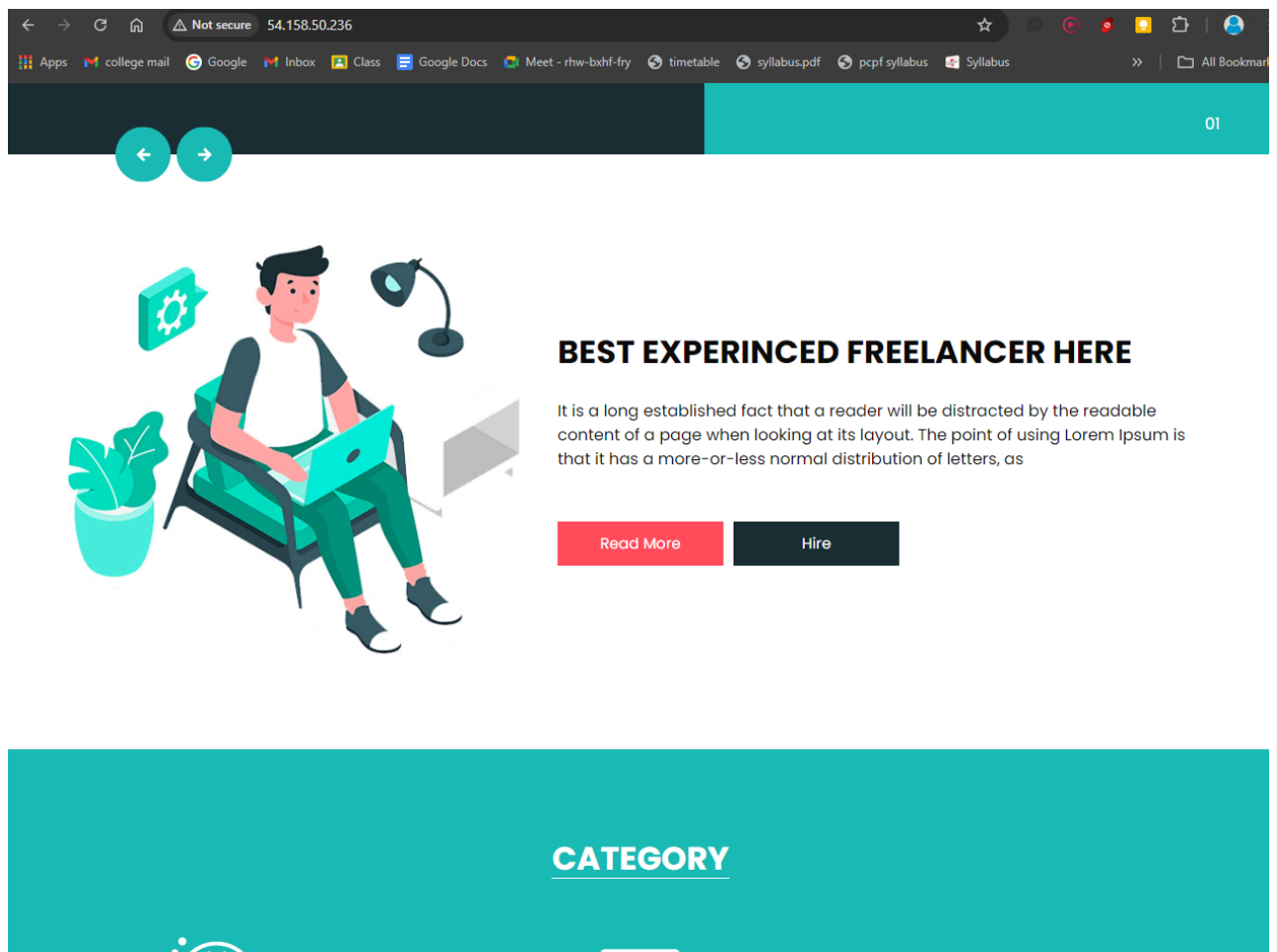
i-0a12db377565d1313 (Atharv Server)
PublicIPs: 54.209.65.33 PrivateIPs: 172.31.51.5
```

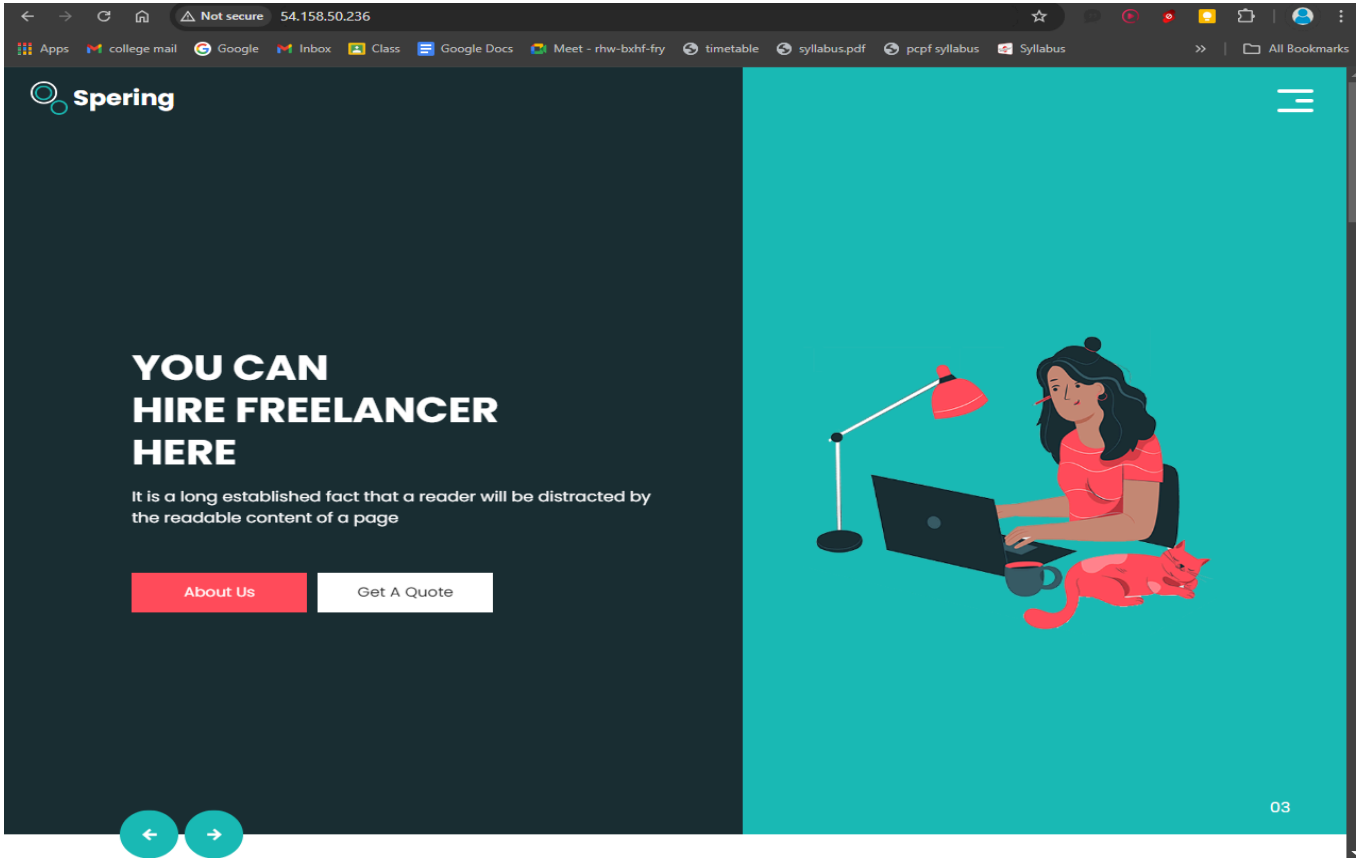
```
root@ip-172-31-90-246:~/temp# ls
spering-html  spering.zip
root@ip-172-31-90-246:~/temp# ls -lrt
total 552
drwxr-xr-x 5 root root 4096 Sep 16 2020 spering-html
-rw-r--r-- 1 root root 557415 Aug 20 2021 spering.zip
root@ip-172-31-90-246:~/temp# cd spering-html
root@ip-172-31-90-246:~/temp/spering-html# ls -lrt
total 72
-rw-r--r-- 1 root root 23212 Jul 28 2020 index.html
-rw-r--r-- 1 root root 10108 Jul 28 2020 about.html
-rw-r--r-- 1 root root 9824 Jul 28 2020 category.html
-rw-r--r-- 1 root root 11825 Jul 28 2020 work.html
drwxr-xr-x 2 root root 4096 Sep 16 2020 js
drwxr-xr-x 2 root root 4096 Sep 16 2020 images
drwxr-xr-x 2 root root 4096 Sep 16 2020 css
root@ip-172-31-90-246:~/temp/spering-html# mv * /var/www/html/
root@ip-172-31-90-246:~/temp/spering-html# cd /var/www/html/
root@ip-172-31-90-246:/var/www/html# ls -lrt
total 72
-rw-r--r-- 1 root root 23212 Jul 28 2020 index.html
-rw-r--r-- 1 root root 10108 Jul 28 2020 about.html
-rw-r--r-- 1 root root 9824 Jul 28 2020 category.html
-rw-r--r-- 1 root root 11825 Jul 28 2020 work.html
drwxr-xr-x 2 root root 4096 Sep 16 2020 js
drwxr-xr-x 2 root root 4096 Sep 16 2020 images
drwxr-xr-x 2 root root 4096 Sep 16 2020 css
root@ip-172-31-90-246:/var/www/html#
```

12) Enter the public domain from here

	Name	Instance ID	Instanc...	Instanc...	Status check	Alarm status	Availabi...	Public I...	Public IPv4 ...
<input checked="" type="checkbox"/>	Atharv Server	i-074ec2b1...	🟢 Runn...	t2.micro	🟢 2/2 checks p...	View alarms	us-east-1c	ec2-44-20...	44.206.244.123

13) Enter the domain and open it on your browser and you will see the website





Experiment 1B**Aim : AWS (EC2) Installation steps for Linux instance**

1. Open your AWS account and search for Cloud9 service inside Developer tools. Create a new Cloud9 environment by filling in the required details. Make sure you use an EC2 instance to create your environment.

Create environment [Info](#)

Details

Name

Limit of 60 characters, alphanumeric, and unique per user.

Description - optional

Limit 200 characters.

Environment type [Info](#)
Determines what the Cloud9 IDE will run on.

☒ **New EC2 instance**
Cloud9 creates an EC2 instance in your account. The configuration of your EC2 instance cannot be changed by Cloud9 after creation.

☐ **Existing compute**
You have an existing instance or server that you'd like to use.

2) Select T2 Micro

New EC2 instance

Instance type [Info](#)
The memory and CPU of the EC2 instance that will be created for Cloud9 to run on.

☒ **t2.micro (1 GiB RAM + 1 vCPU)**
Free-tier eligible. Ideal for educational users and exploration.

☐ **t3.small (2 GiB RAM + 2 vCPU)**
Recommended for small web projects.

☐ **m5.large (8 GiB RAM + 2 vCPU)**
Recommended for production and most general-purpose development.

☐ **Additional instance types**
Explore additional instances to fit your need.

Platform [Info](#)
This will be installed on your EC2 instance. We recommend Amazon Linux 2023.

Timeout
How long Cloud9 can be inactive (no user input) before auto-hibernating. This helps prevent unnecessary charges.

3) See your summary

AtharvCloud9

[Delete](#)[Open in Cloud9](#)

Details

[Edit](#)

Name	Owner ARN	Status
AtharvCloud9	<code>arn:aws:sts::742555988891:assumed-role/voclabs/user3385487=NIKAM_ATHARV_SANJAY</code>	Ready
Description		Lifecycle status
Cloud9 installation		Created
Environment type	Number of members	
EC2 instance	1	

[AWS Cloud9](#) > [Environments](#)

Environments (1)

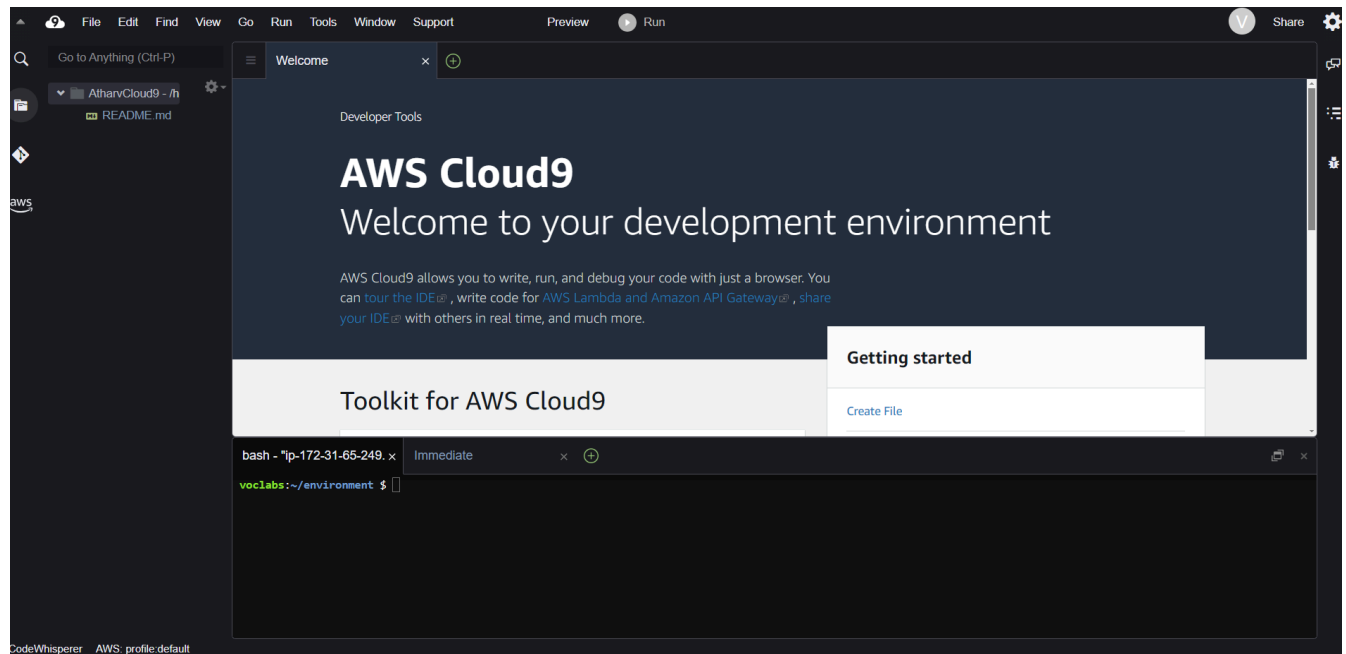
[Delete](#)[View details](#)[Open in Cloud9](#)[Create environment](#)

My environments

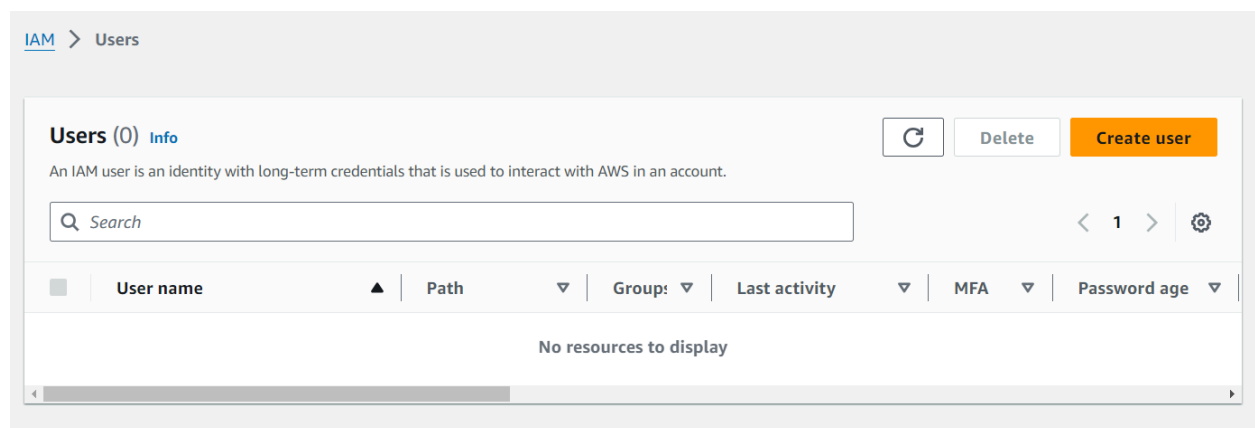
< 1 >

	Name ▲	Cloud9 IDE	Environment type	Connection	Permission	Owner ARN
	AtharvCloud9	Open	EC2 instance	Secure Shell (SSH)	Owner	<code>arn:aws:sts::742555988891:assumed-role/voclabs/user3385487=NIKAM_ATHARV_SANJAY</code>

4)Your Aws Cloud9 Console will open



5)Click On IAM and create a new user



6) Enter your userName

[IAM](#) > [Users](#) > Create user

Step 1
Specify user details

Step 2
Set permissions

Step 3
Review and create

Specify user details

User details

User name

The user name can have up to 64 characters. Valid characters: A-Z, a-z, 0-9, and + = , . @ _ - (hyphen)

☐ Provide user access to the AWS Management Console - *optional*
If you're providing console access to a person, it's a [best practice](#) to manage their access in IAM Identity Center.

i If you are creating programmatic access through access keys or service-specific credentials for AWS CodeCommit or Amazon Keyspaces, you can generate them after you create this IAM user. [Learn more](#)

CancelNext

7) Enter a Password

Center, you can centrally manage user access to their AWS accounts and cloud applications.

i I want to create an IAM user
We recommend that you create IAM users only if you need to enable programmatic access through access keys, service-specific credentials for AWS CodeCommit or Amazon Keyspaces, or a backup credential for emergency account access.

Console password

☐ Autogenerated password
You can view the password after you create the user.

☒ Custom password
Enter a custom password for the user.

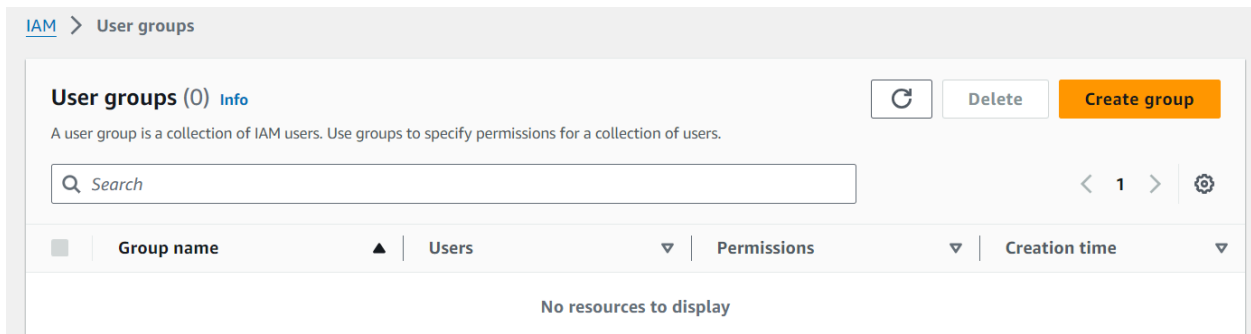
☐ Show password

☒ Users must create a new password at next sign-in - Recommended
Users automatically get the [IAMUserChangePassword](#) policy to allow them to change their own password.

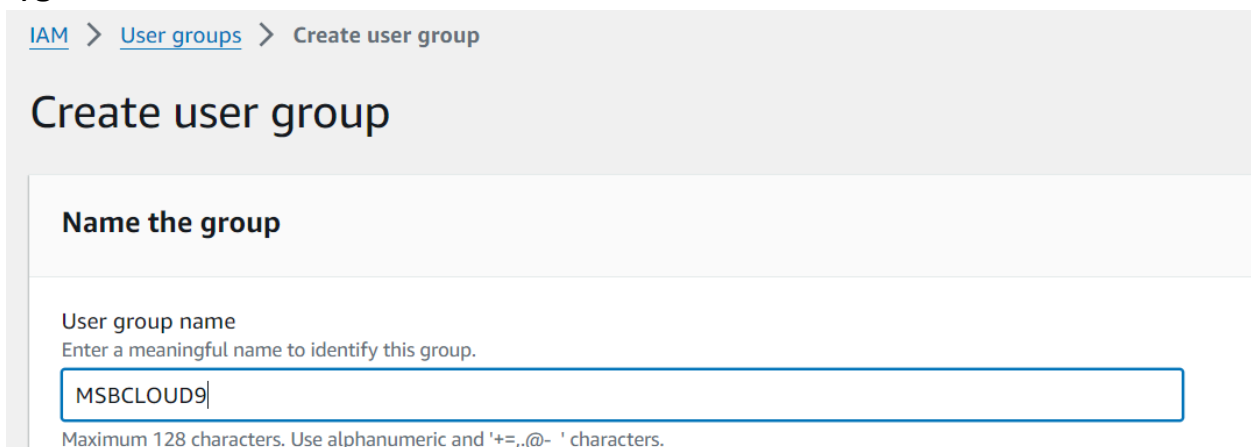
i If you are creating programmatic access through access keys or service-specific credentials for AWS CodeCommit or Amazon Keyspaces, you can generate them after you create this IAM user. [Learn more](#)

CancelNext

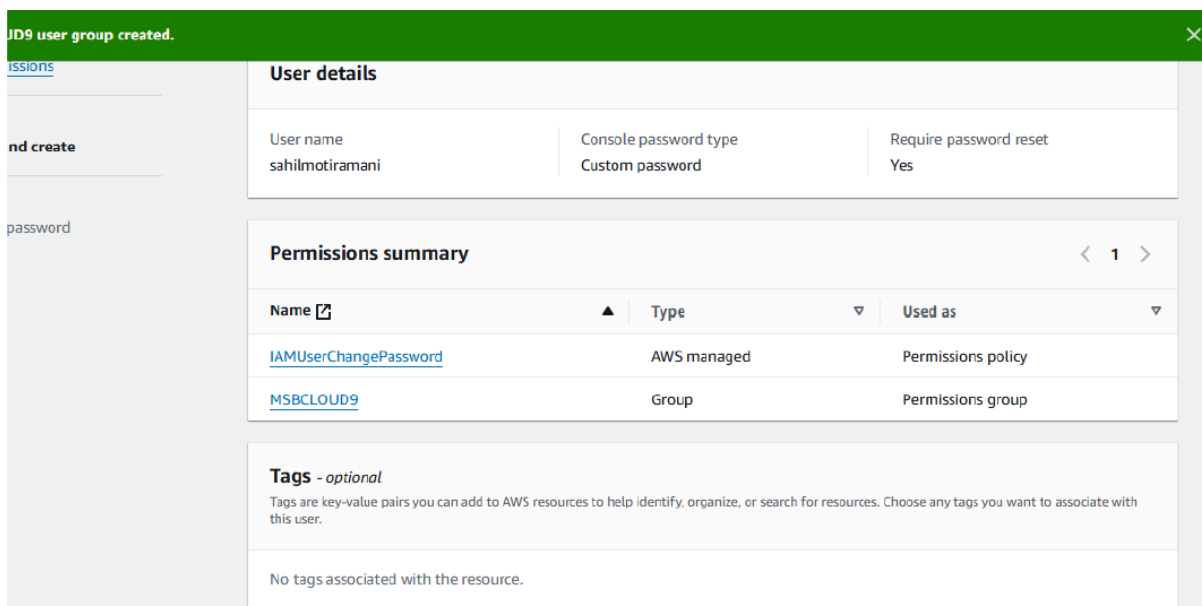
8) Now similarly Create a group



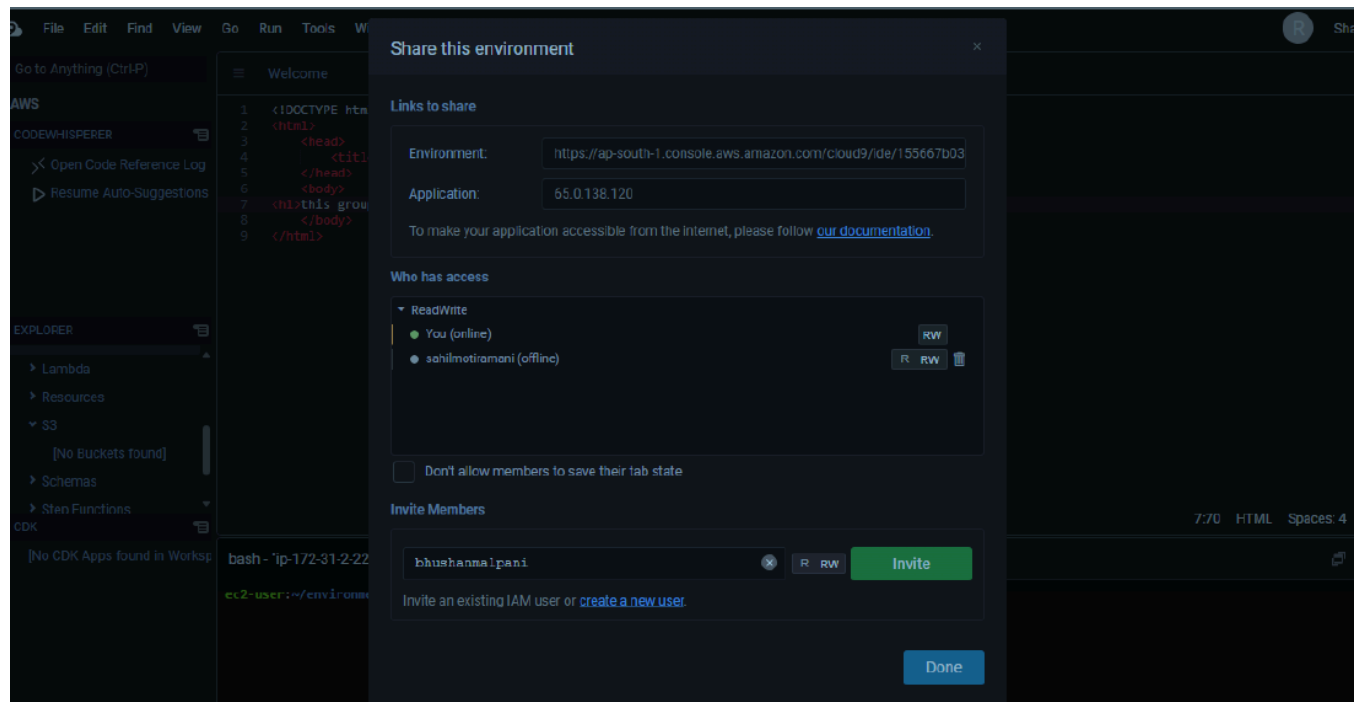
9) give a name



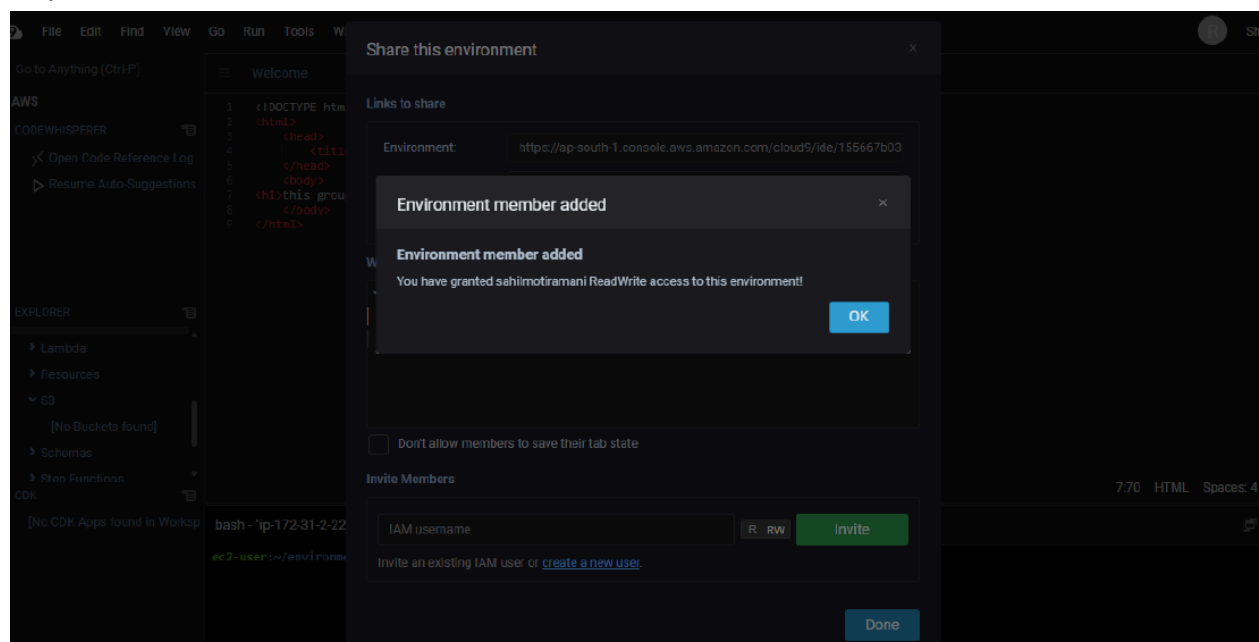
10) The user has successfully been created i.e There is a custom made username and a password for the IAM user.



11) Now you can share your environment now you can add collaborators



12) New Member added



We were required to log in from another browser using the IAM user's credentials to gain access to the shared Cloud9 environment. Unfortunately, we were unable to complete these steps because the Cloud9 services were disrupted, which also blocked remote access to the IAM user account. This disruption has prevented us from performing the necessary actions, leaving us unable to access the shared environment as intended.