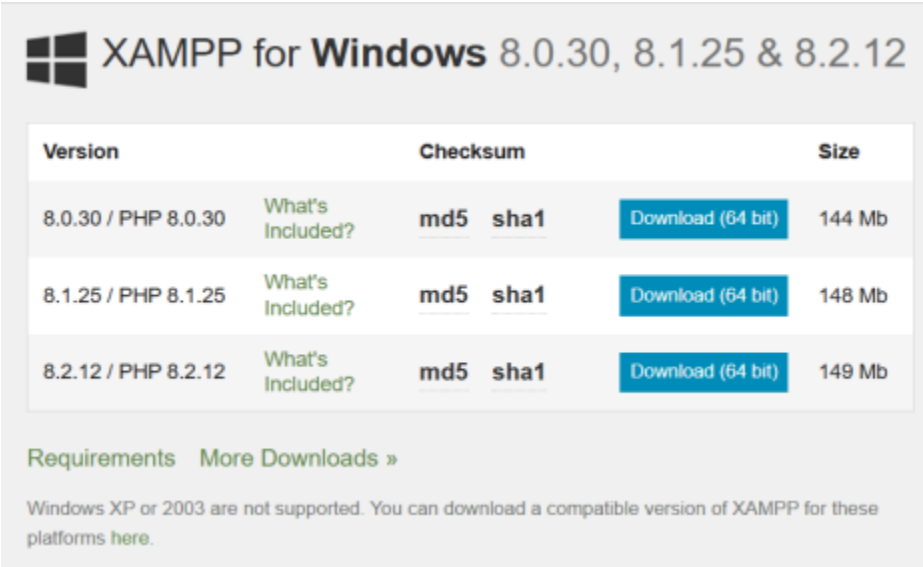
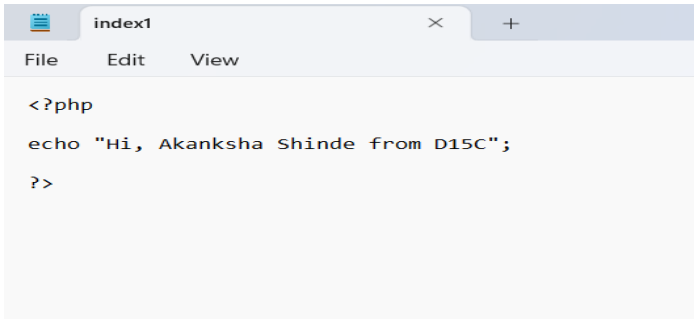
Experiment 1

Part 1 : a) To develop a website and host it on your local machine on a VM

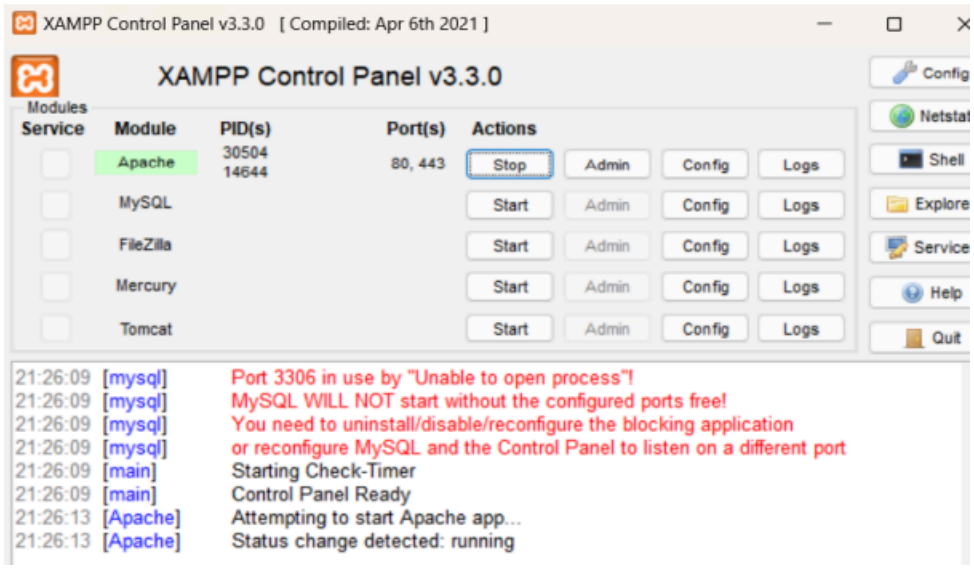
Download xampp from this website https://www.apachefriends.org/download.html



After downloading just select Apache and MySQL you can skip other options as it is not required.
Now go in the xampp folder and inside the htdocs file create a php file just like this

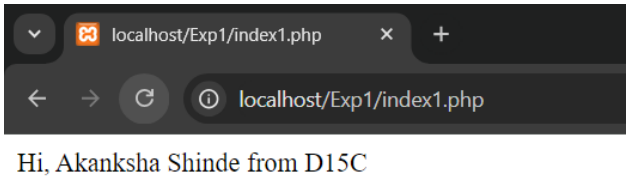


Save it and go to the xampp control panel and start the Apache and MySQL



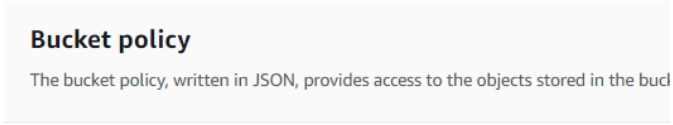
Go in the browser and type localhost and hit enter you will get to see the file you created like in this case index1.php

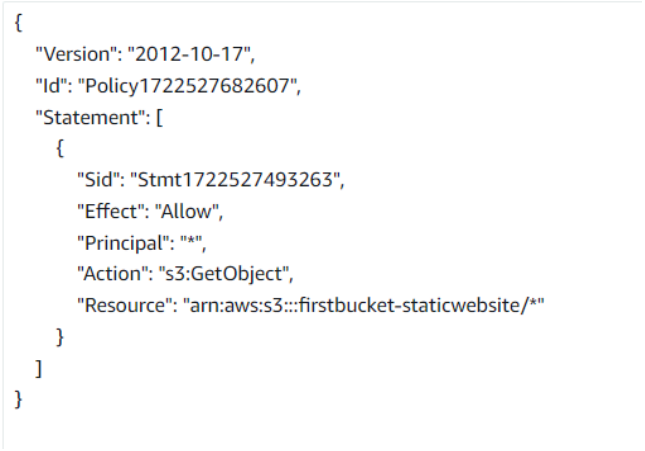
Click on the index1.php and the website is hosted locally.



Hosting a static website on Amazon S3

After creating the bucket on AWS add the file in it that is to be hosted and configure the visibility as public and add /* at the end of the resource key.

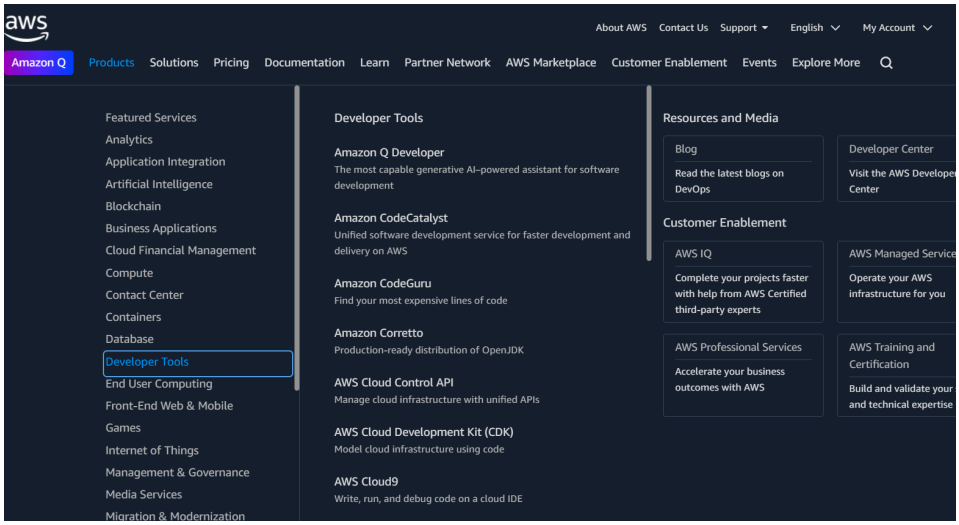




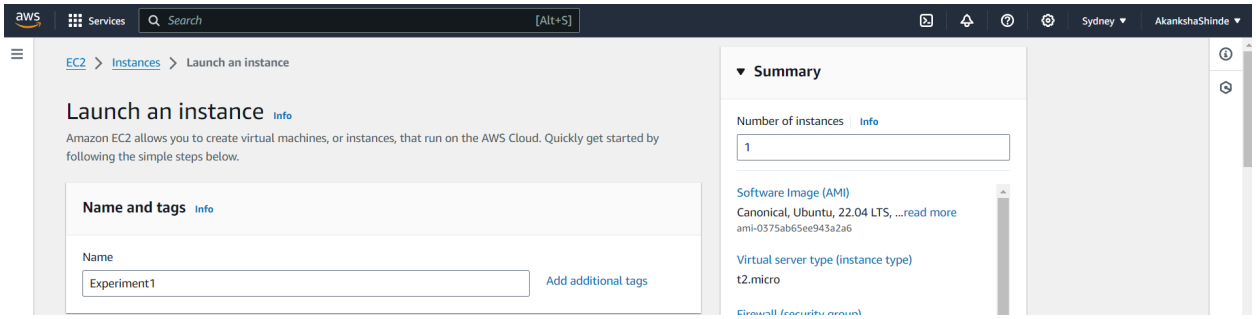
Copy the url from the Bucket ARN and paste it in the browser and the static website is hosted.

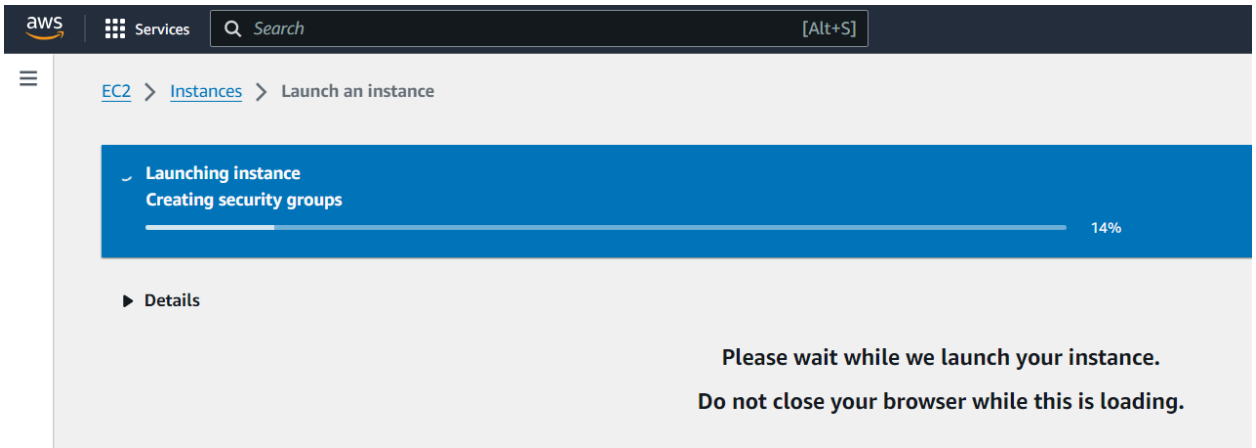
To Create EC2 instance

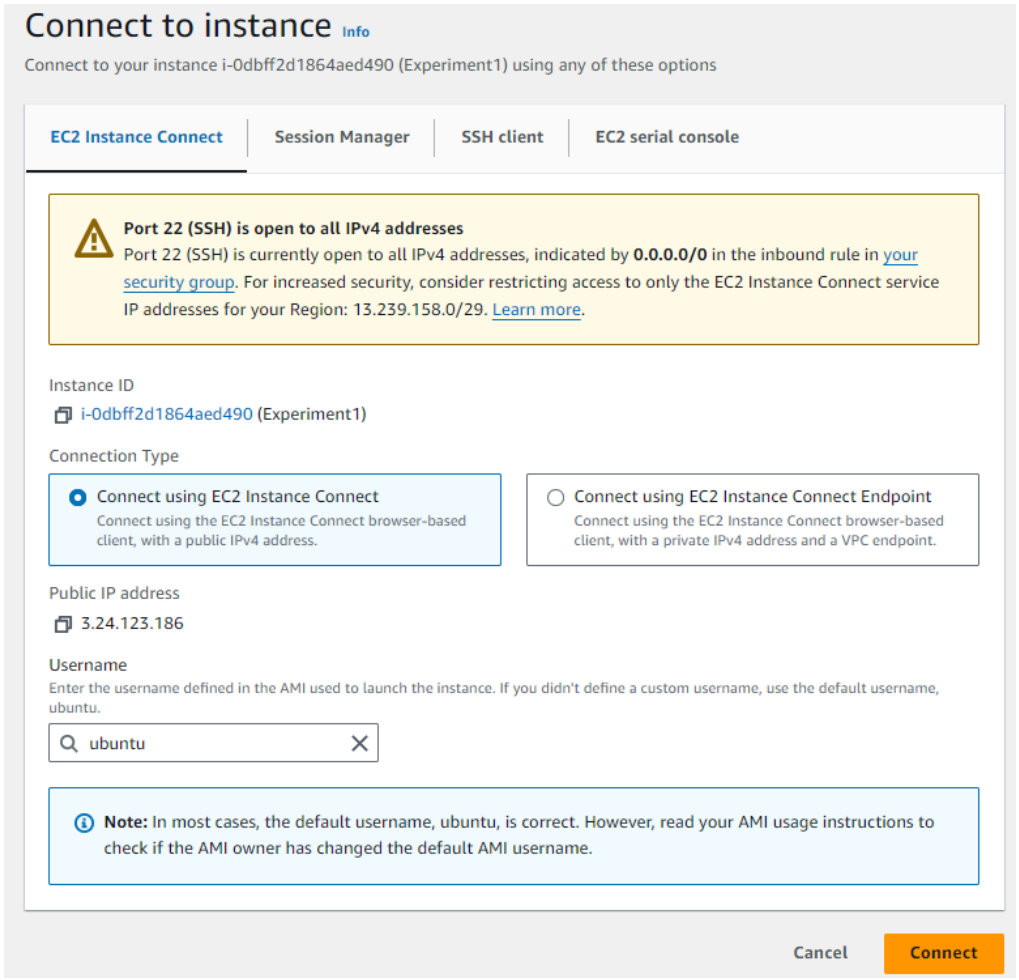
Go to AWS services and search for developer tools



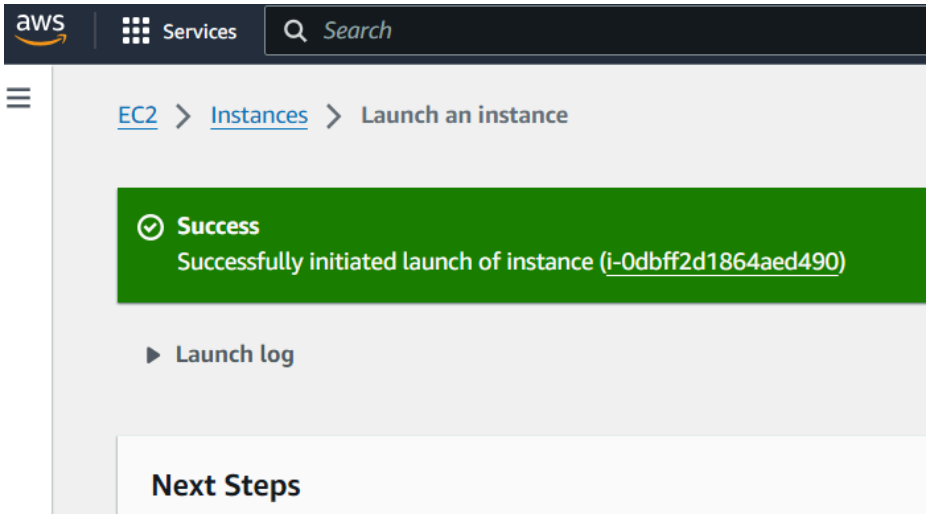
Search for EC2 instance and launch an instance



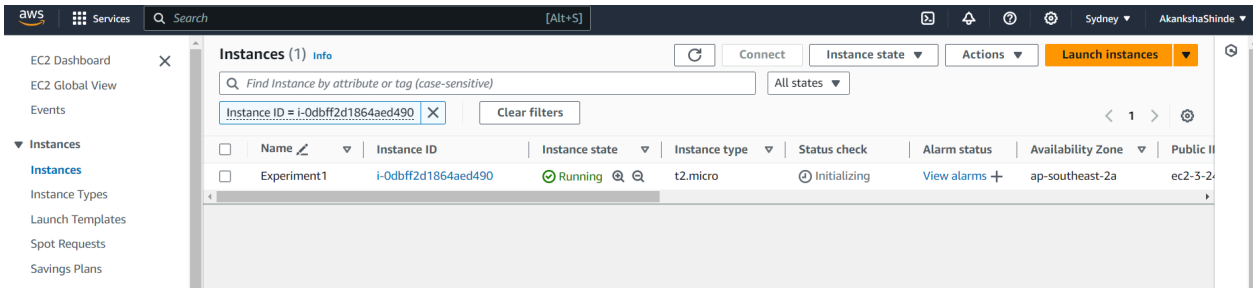




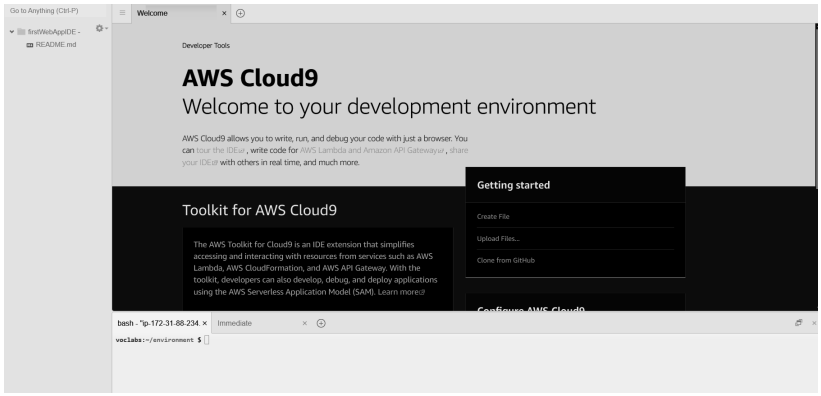

```
  System load:  0.03              Processes:             107
  Usage of /:   6.5% of 24.05GB   Users logged in:       0
  Memory usage: 21%               IPv4 address for eth0: 172.31.15.82
  Swap usage:   0%

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-172-31-15-82:~$
```

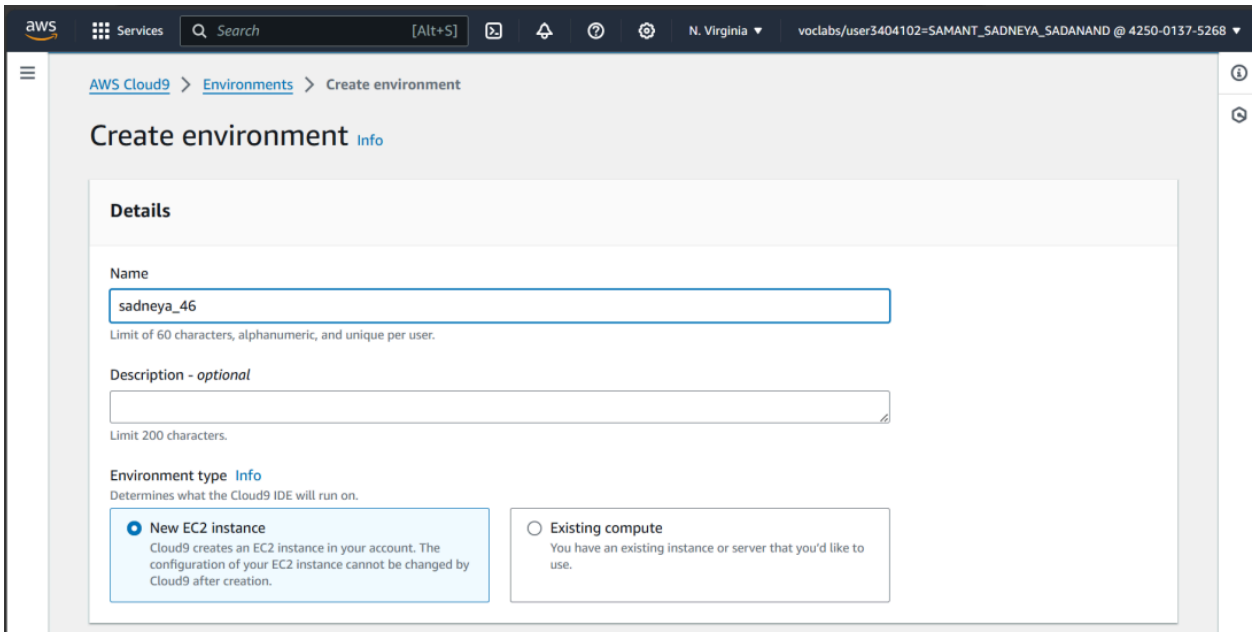


An instance would be recorded with the name you created.



Experiment 1 B





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.

Amazon Linux 2023 ▼

Timeout

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

30 minutes ▼

Network settings Info

Connection

How your environment is accessed.

- (●) **AWS Systems Manager (SSM)**
  Accesses environment via SSM without opening inbound ports (no ingress).
- ( ) **Secure Shell (SSH)**
  Accesses environment directly via SSH, opens inbound ports.

▶ VPC settings Info

▼ Tags - *optional* Info

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

No tags associated with the resource.

Add new tag

You can add up to 50 more tags.

Network settings Info

Connection

How your environment is accessed.

- ○ AWS Systems Manager (SSM)
  Accesses environment via SSM without opening inbound ports (no ingress).
- ◉ Secure Shell (SSH)
  Accesses environment directly via SSH, opens inbound ports.

▼ VPC settings Info

Amazon Virtual Private Cloud (VPC)

The VPC that your environment will access. To allow the AWS Cloud9 environment to connect to its EC2 instance, attach an internet gateway (IGW) to your VPC. Create new VPC

vpc-051bba342b3626898
Name -

Subnet

Used to setup your VPC configuration. To use a private subnet, select AWS Systems Manager (SSM) as the connection type. Create new subnet

No preference
Uses default subnet in any Availability Zone

AWS Cloud9

My environments

Shared with me

All account environments

Documentation

Creating sadneya_46. This can take several minutes. While you wait, see Best practices for using AWS Cloud9

For capabilities similar to AWS Cloud9, explore AWS Toolkits in your own IDE and AWS CloudShell in the AWS Management Console.

Learn more

AWS Cloud9 > Environments

Environments (1) Delete | View details | Open in Cloud9 | Create environment

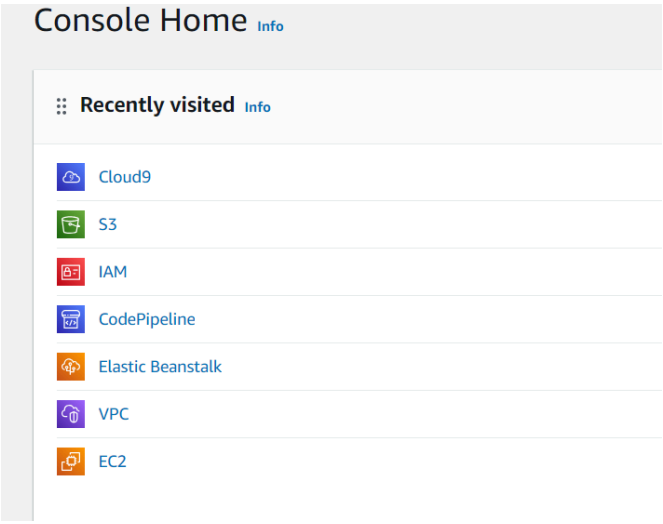
My environments

1

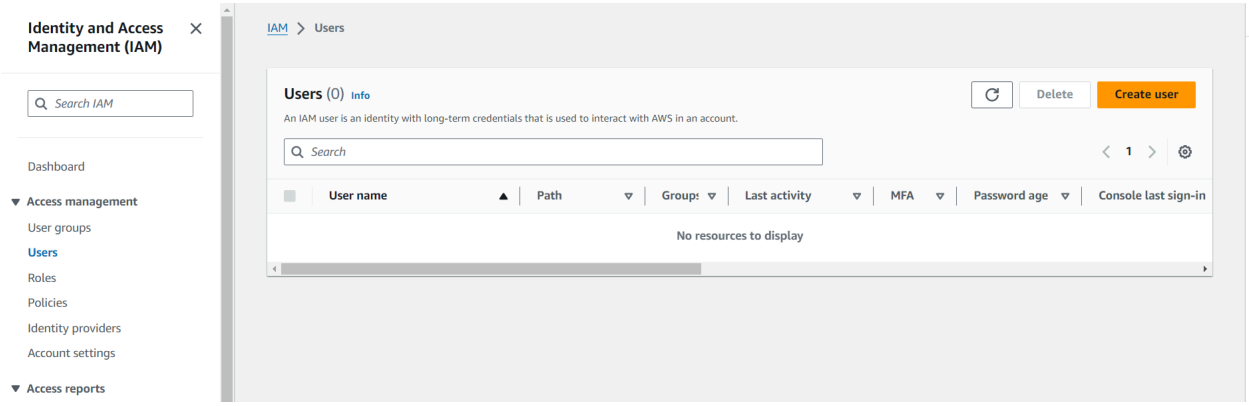
	Name	Cloud9 IDE	Environment type	Connection	Permission	Owner ARN
○	sadneya_46	Open	EC2 instance	Secure Shell (SSH)	Owner	arn:aws:sts::42500137526 role/voclabs/user3404102=S/

IAM

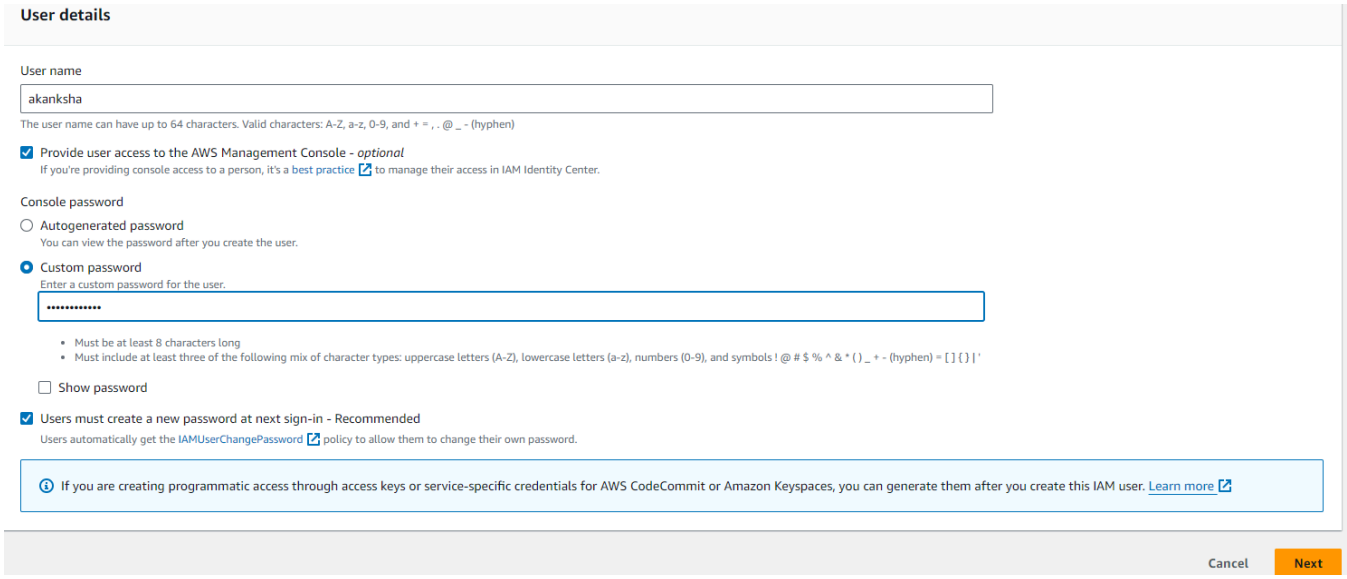
Go to IAM services



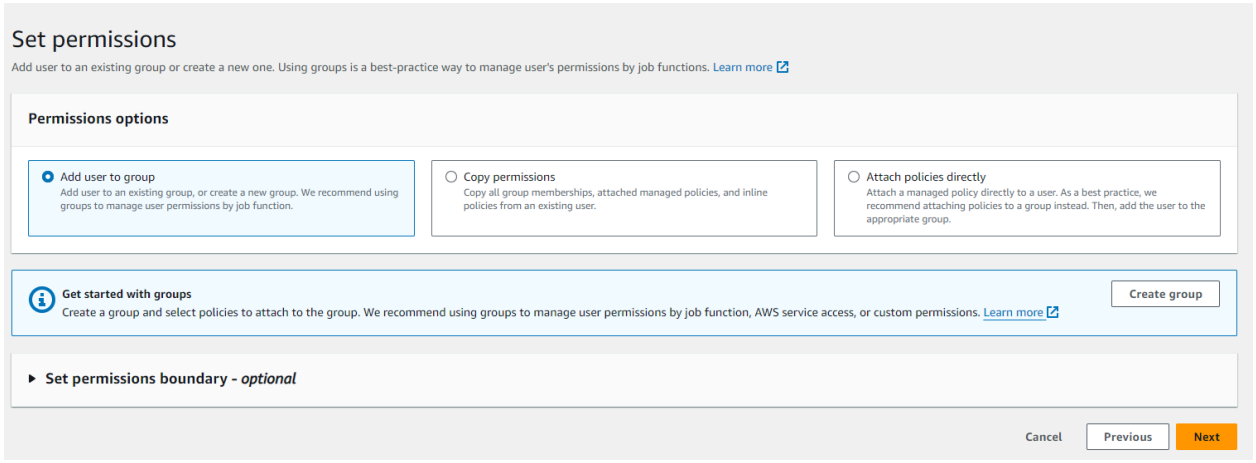
Click on create user



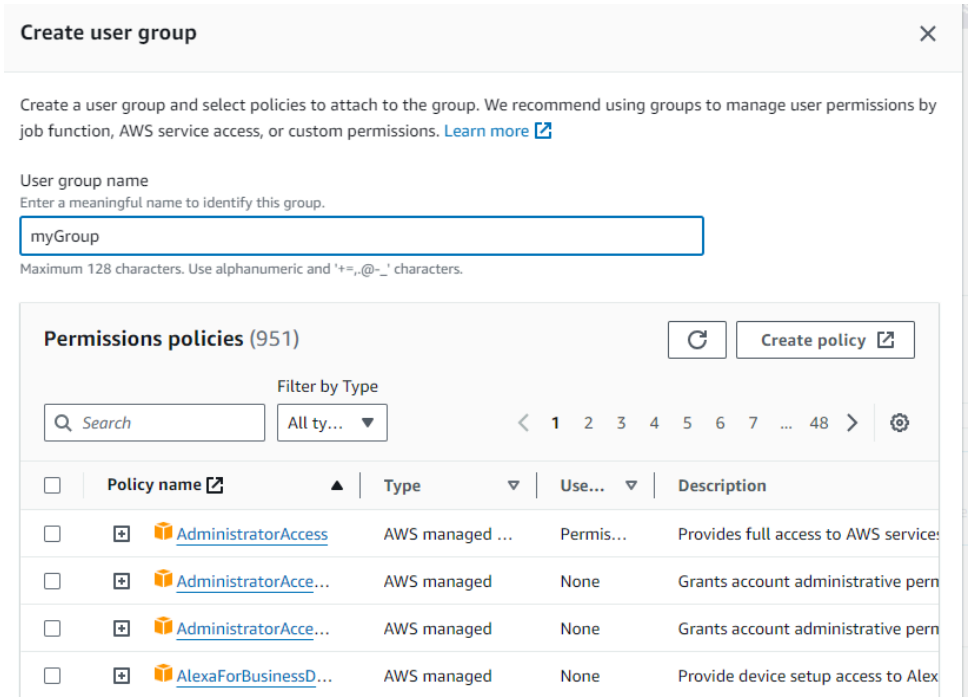
Give username and set password



Set permissions as below



Create user group



You must see the below screen