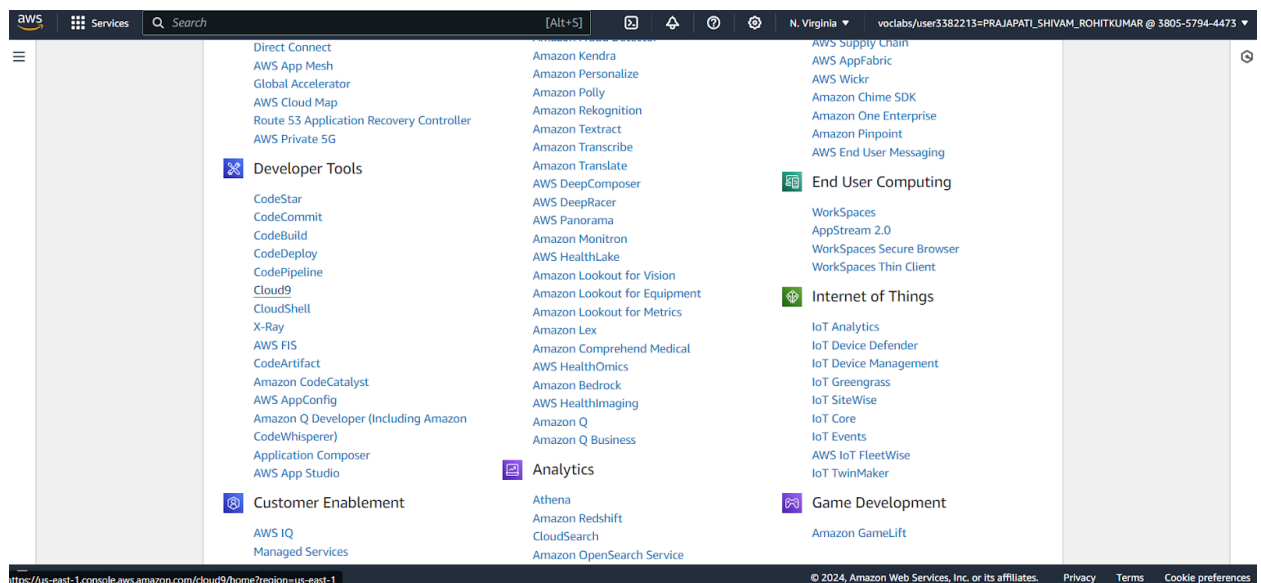


Experiment No: 1(B)

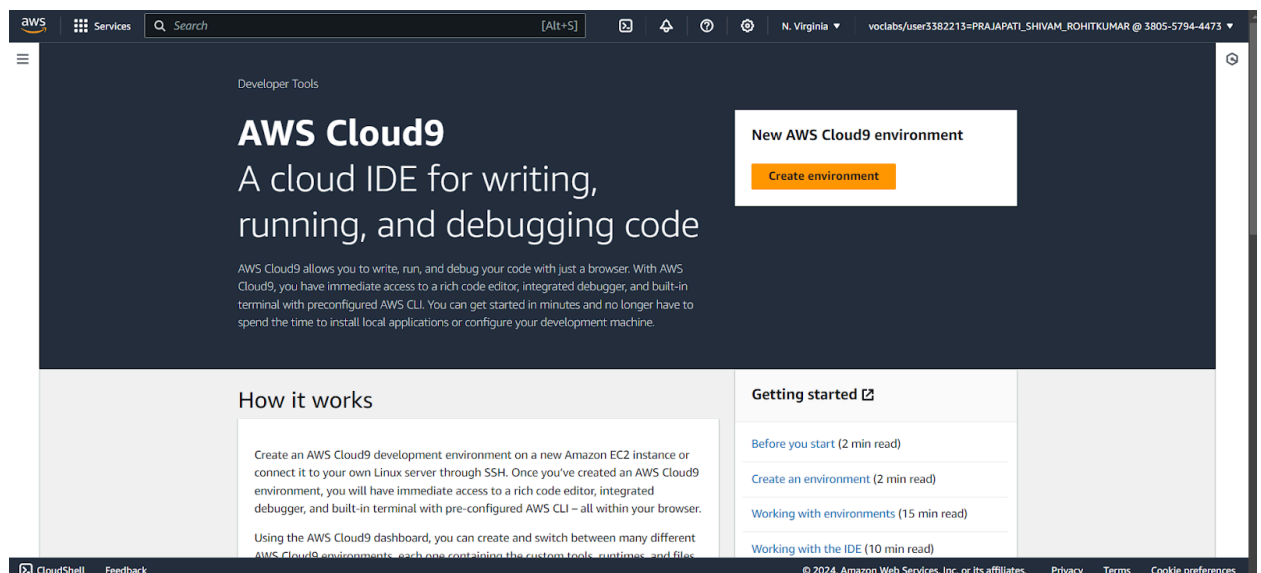
Aim: To understand the benefits of Cloud Infrastructure and Setup AWS Cloud9 IDE, Launch AWS Cloud9 IDE and Perform Collaboration Demonstration.

Step 1: Set up Cloud9 environment.

- 1) Go to Cloud9 services under developers tool in All services



- 2) Click on create environment



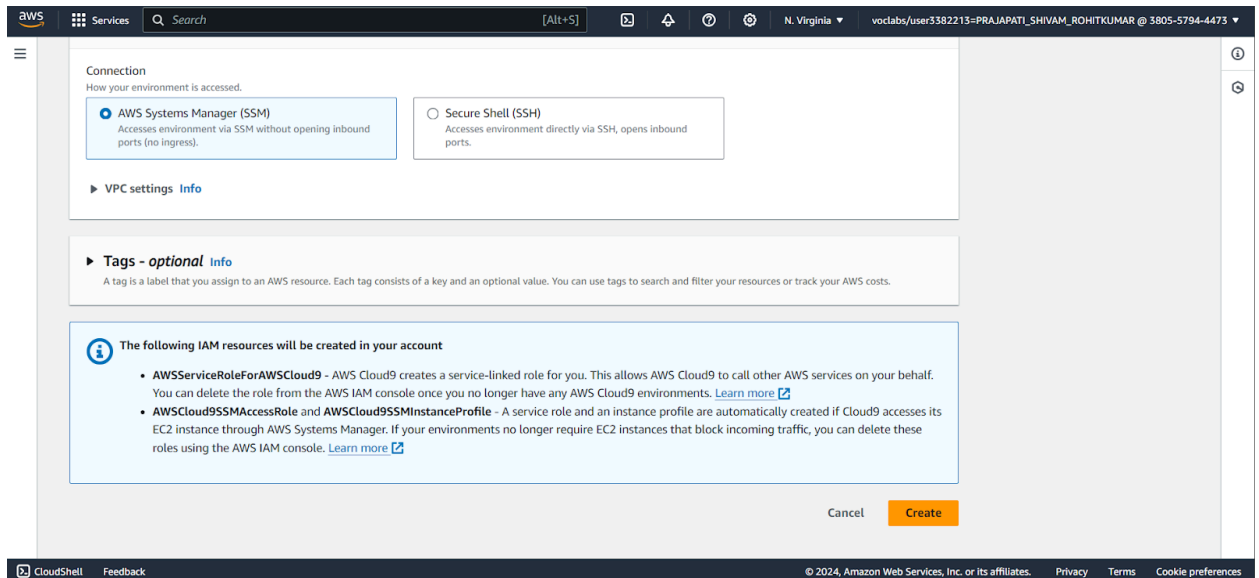
3) Give the name to your Environment ,keeping the other settings as default like environment type should be New EC2 instance

The screenshot shows the AWS Cloud9 'Create environment' page. The 'Name' field is filled with 'WebAppIDE'. The 'Description' field is empty. The 'Environment type' is set to 'New EC2 instance'. The 'New EC2 instance' section is expanded, showing the 'Instance type' as 't2.micro (1 GiB RAM + 1 vCPU)'. The 'Platform' is set to 'Amazon Linux 2023'. The 'Timeout' is set to '30 minutes'.

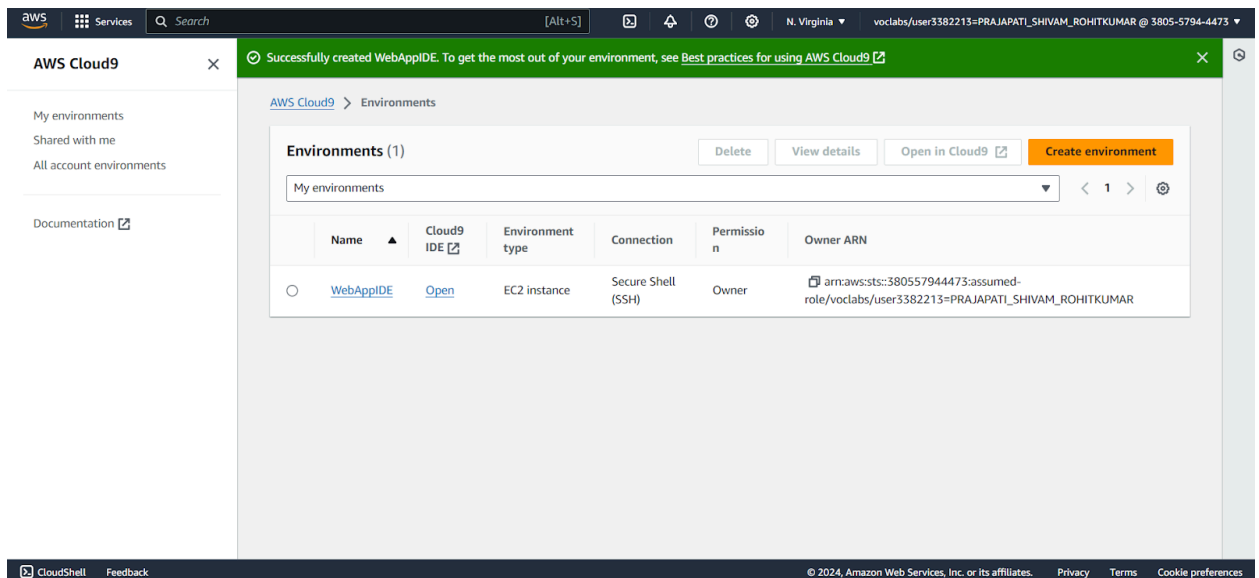
4) Select the correct platform type as shown below and keep the others details as default like instance type as t2.micro which gives the user 1GB RAM + 1 Virtual CPU

The screenshot shows the AWS Cloud9 'New EC2 instance' page. The 'Instance type' is set to 't2.micro (1 GiB RAM + 1 vCPU)'. The 'Platform' is set to 'Amazon Linux 2023'. The 'Timeout' is set to '30 minutes'. The 'Network settings' section is expanded, showing the 'Subnet' as 'default'.

5) Click on SSH under connection type in network settings if we go for AWS Manager(SSM) then it won't allow to create an environment then click on Create

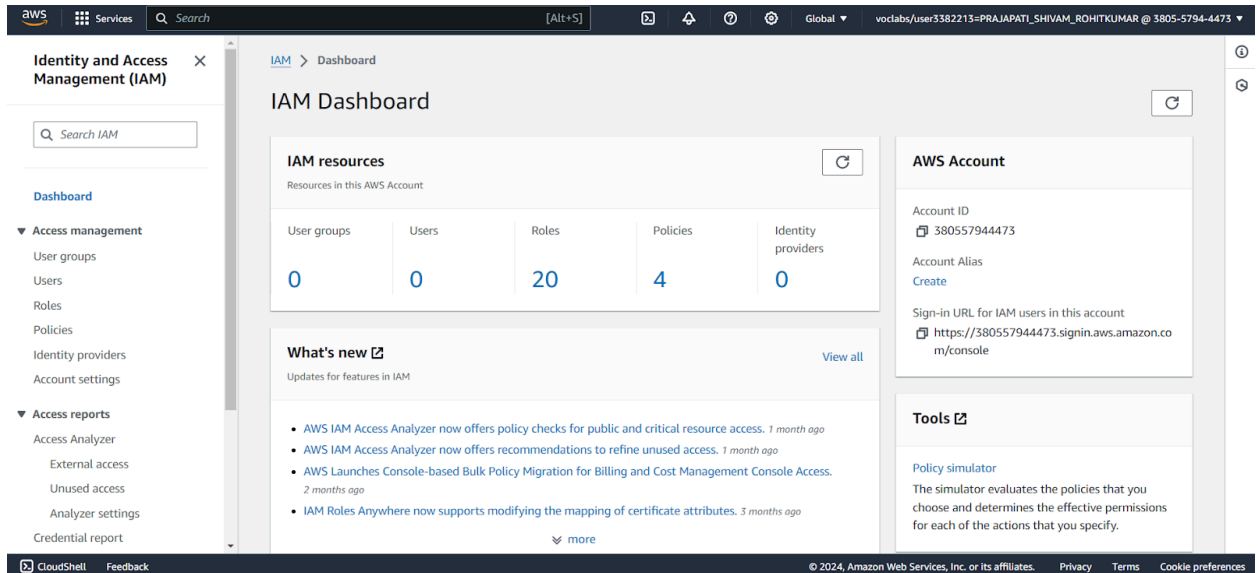


6) Successfully created the environment so now click on open

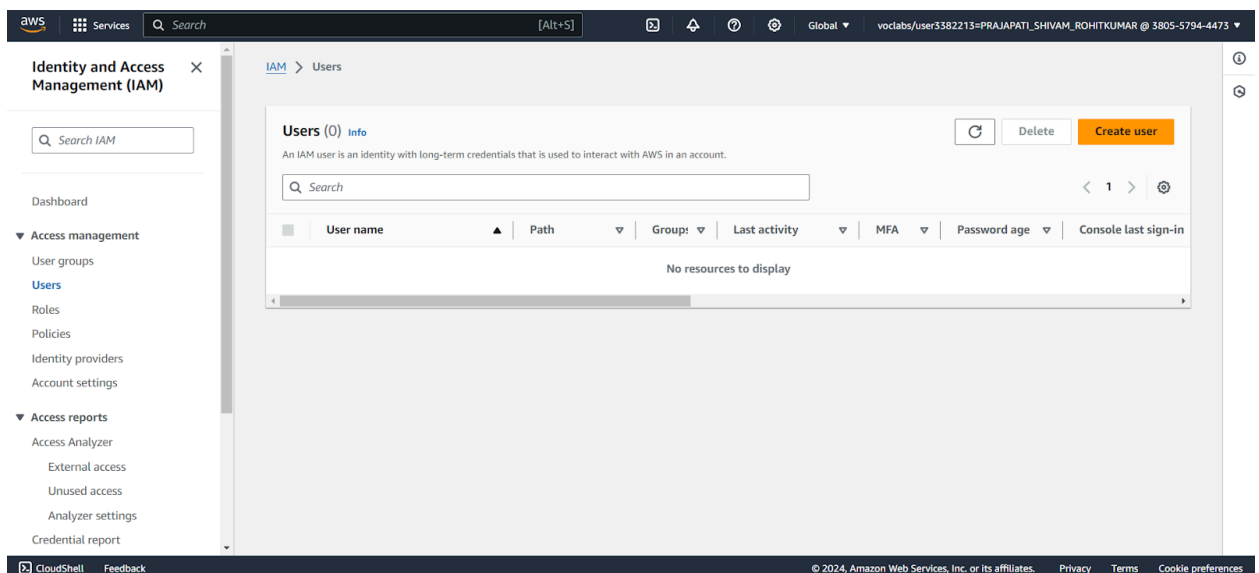


Step 2: Creating IAM user.

1) Search IAM on the services search bar and open it. Click on Create User



2) Click on the create user



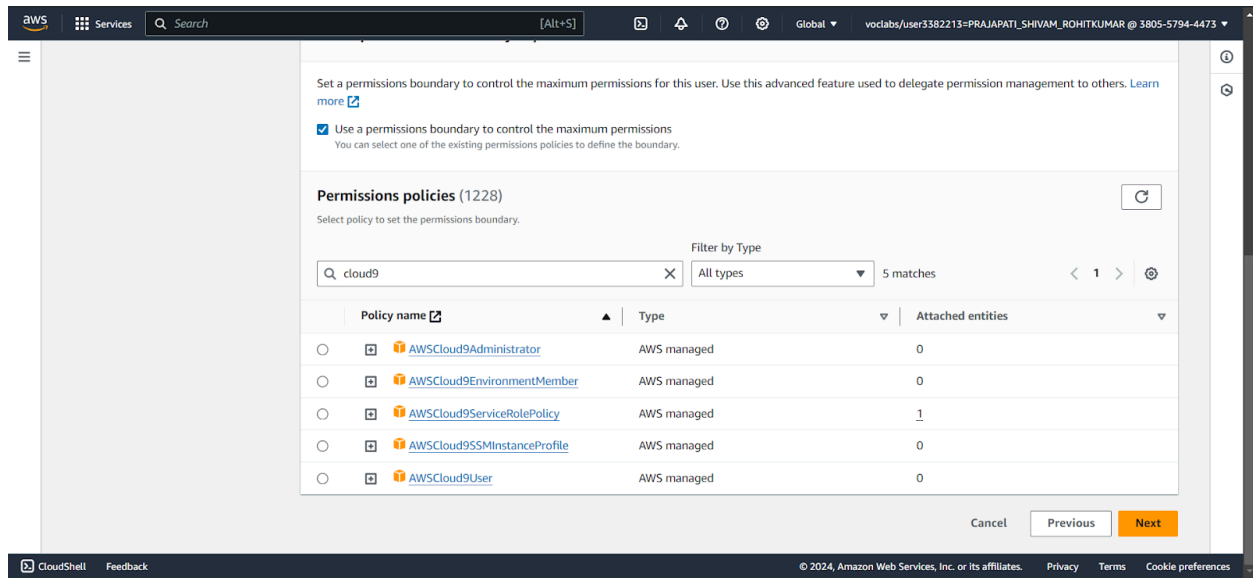
3) Write the name of the user you want to add and click on next

The screenshot shows the AWS IAM console's 'Specify user details' step. The 'User name' field is populated with 'apsit'. Below it, a note states: 'The user name can have up to 64 characters. Valid characters: A-Z, a-z, 0-9, and +, -, @, _ (hyphen)'. There is an unchecked checkbox for 'Provide user access to the AWS Management Console - optional'. A blue information box contains a tip about generating access keys. At the bottom right, there are 'Cancel' and 'Next' buttons.

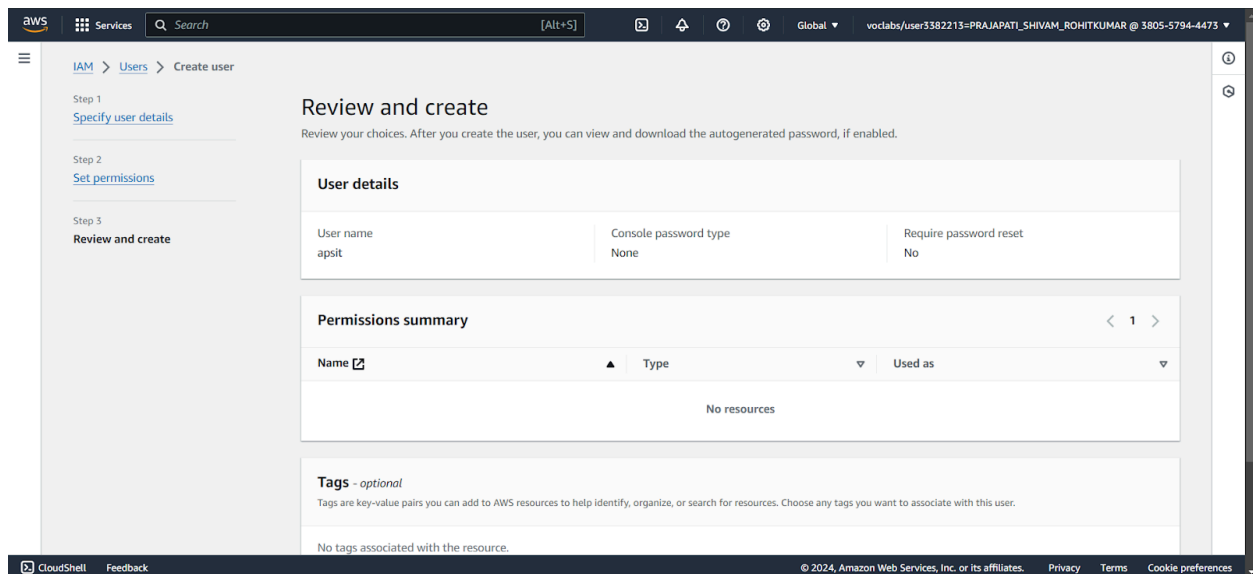
4) Select add User to Group. If there are no user groups on your accounts, you will have to create one. Click on Create Group. Click on the drop down menu of the set permissions boundary

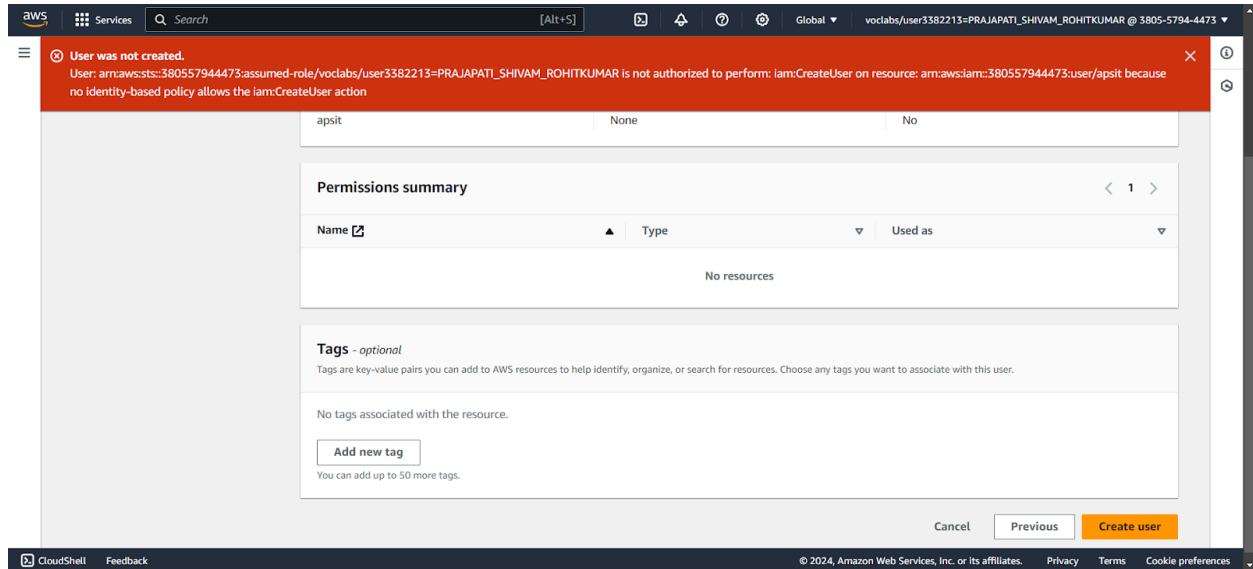
The screenshot shows the AWS IAM console's 'Set permissions' step. Under 'Permissions options', the 'Add user to group' radio button is selected. Below this, the 'Get started with groups' section includes a 'Create group' button. At the bottom right, there are 'Cancel', 'Previous', and 'Next' buttons.

5)Click on the checkbox and search for cloud9 under permissions policies ,click on next



6) Scroll down and click on create user

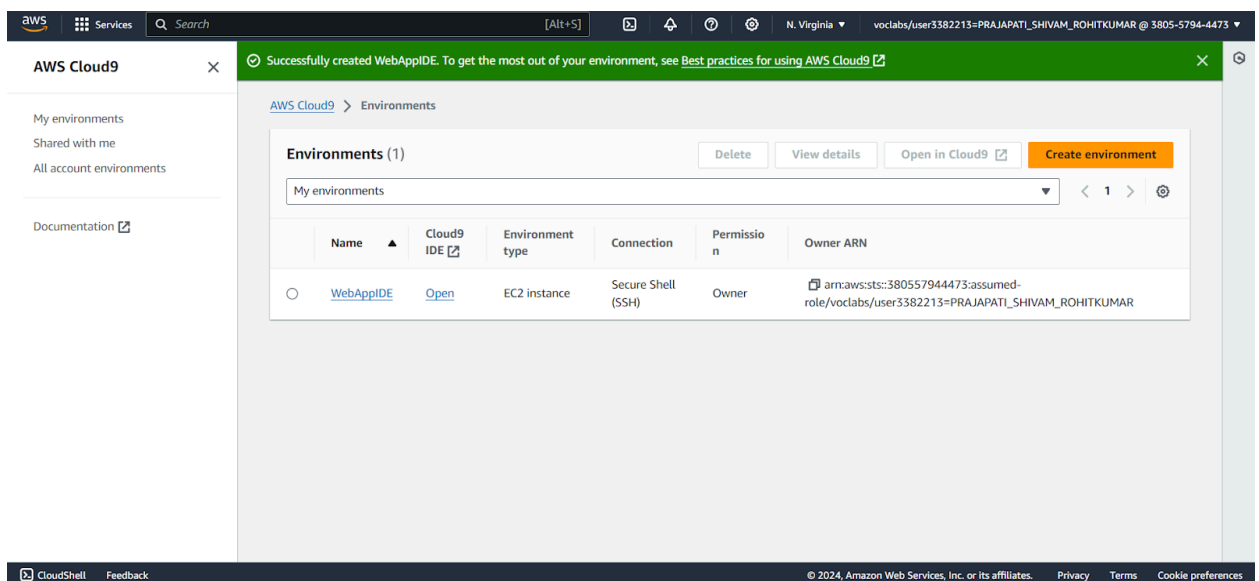




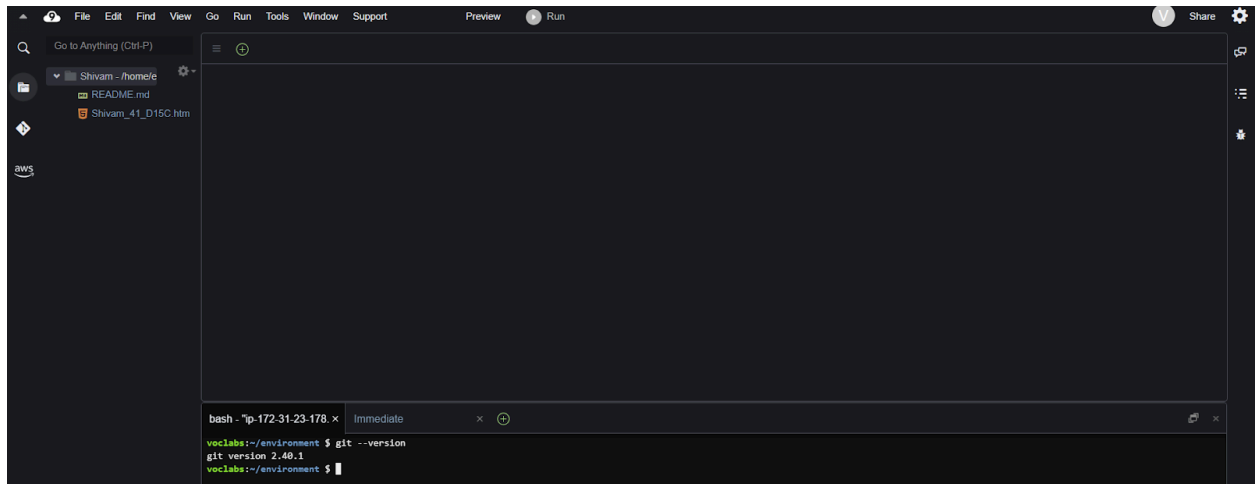
When we go to add user to a group, the AWS Academy account throws an error as we do not have the permissions to create a group. So we have to use our personal AWS account for this part.

Step 3: Working on Cloud9 IDE

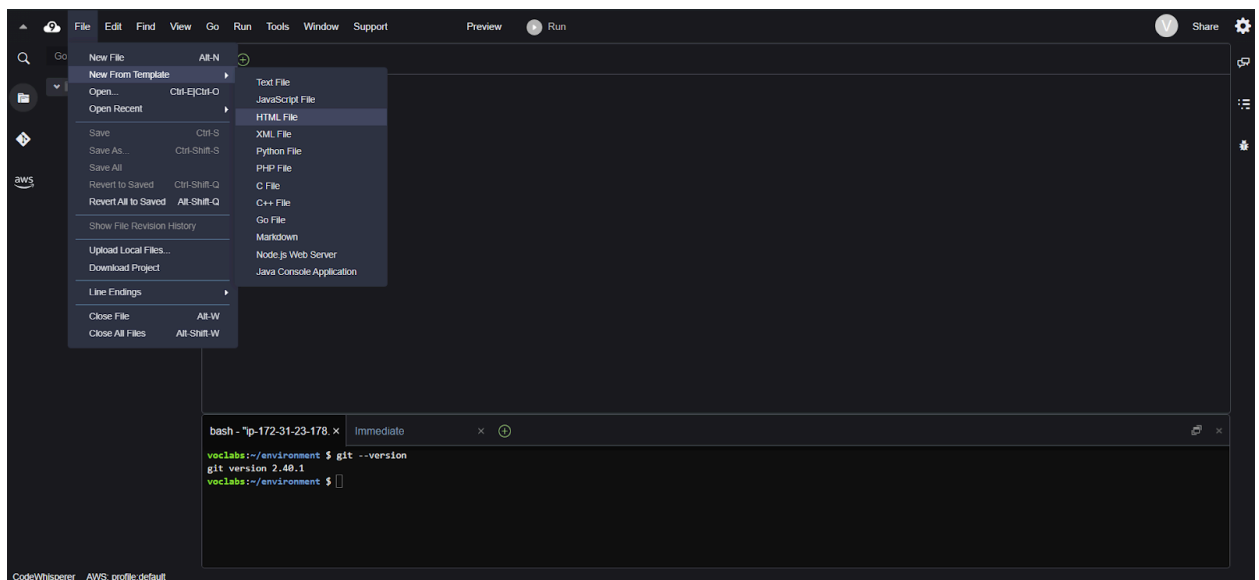
1) Go to Cloud9 services. Click on Open under Cloud9 IDE



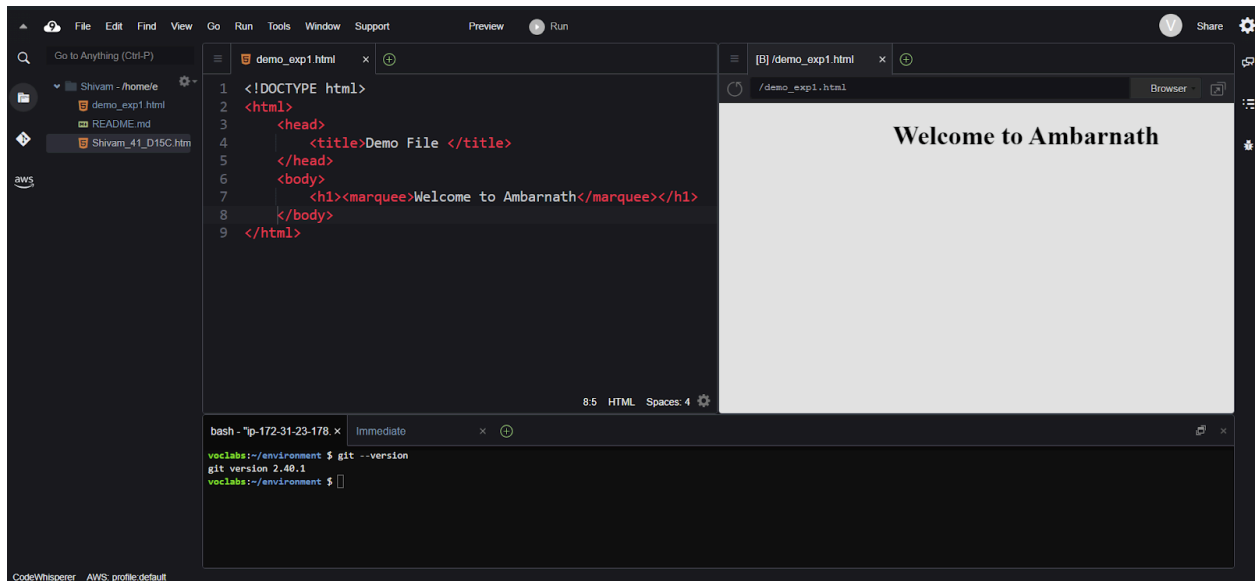
2) This is the Cloud9 IDE interface. The major part of the screen is the coding IDE. There is a command console just below it. For example, the command `git --version` is run.



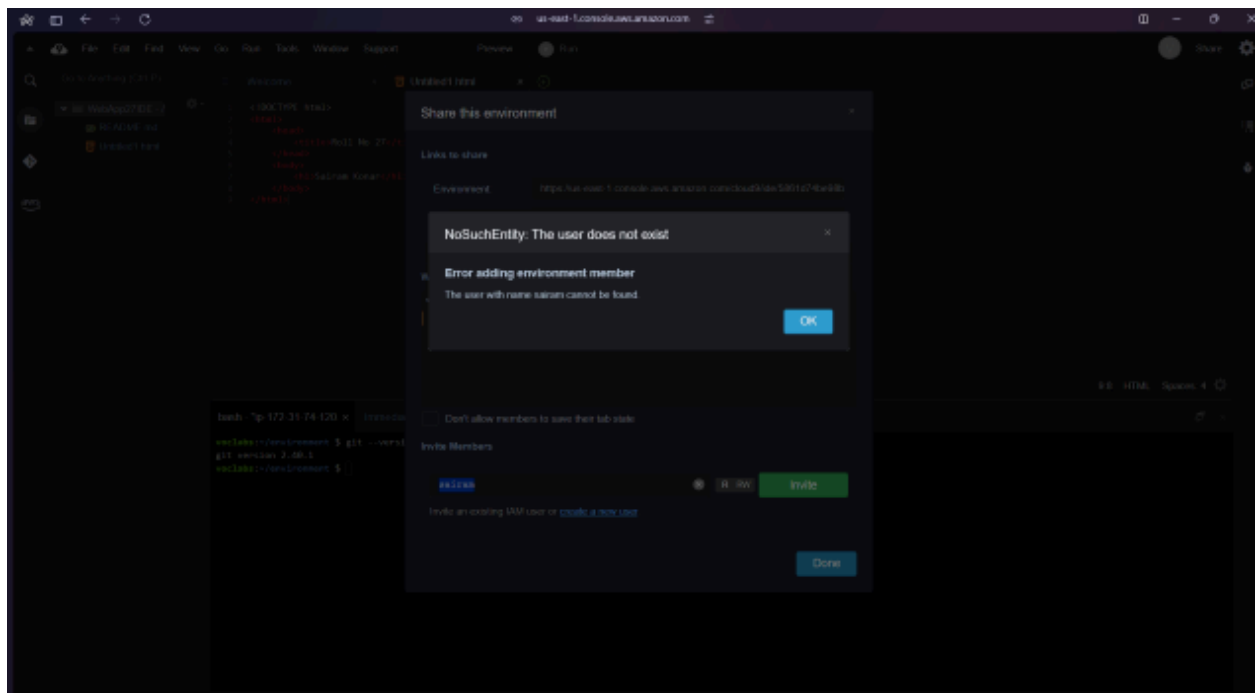
3) To add a file, click on file. For this experiment, we are to add an HTML file. So go to File → New From Template → HTML file. This gives a basic HTML template on the coding IDE



4) Make a basic website on the HTML template and save it.



After saving, on the toolbar towards far right, click on Share. Then put the username that you had put during creating IAM user.



Here, it gives an error as Cloud9 was created on the academy account where creating an IAM group is not available, meanwhile on the personal account, the services of Cloud9 have been deprecated. So currently, it is not possible to integrate the cloud9 and IAM parts of the experiment.
