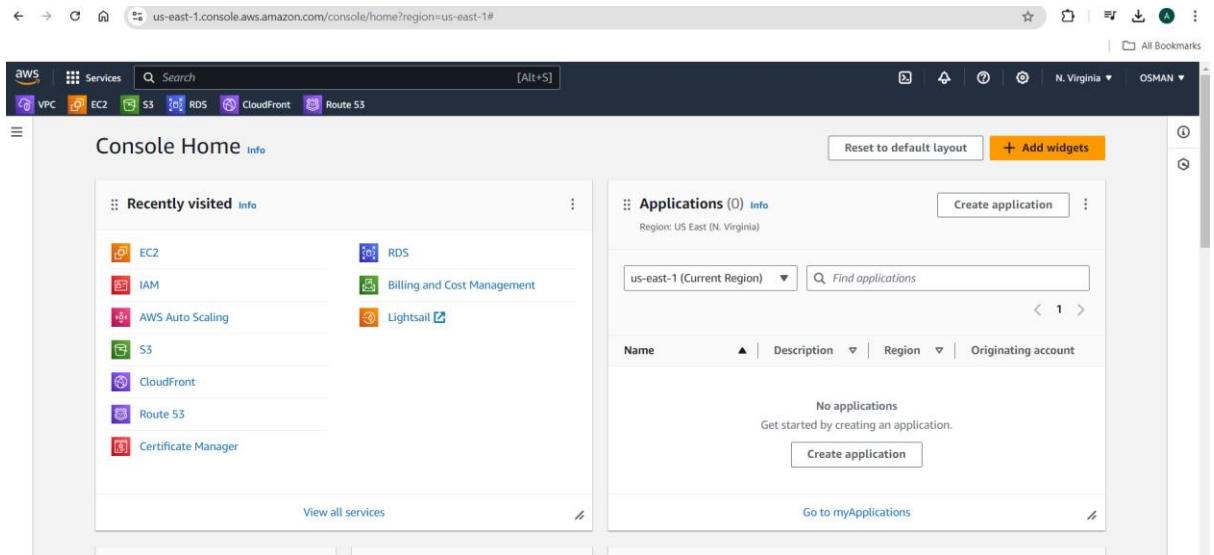


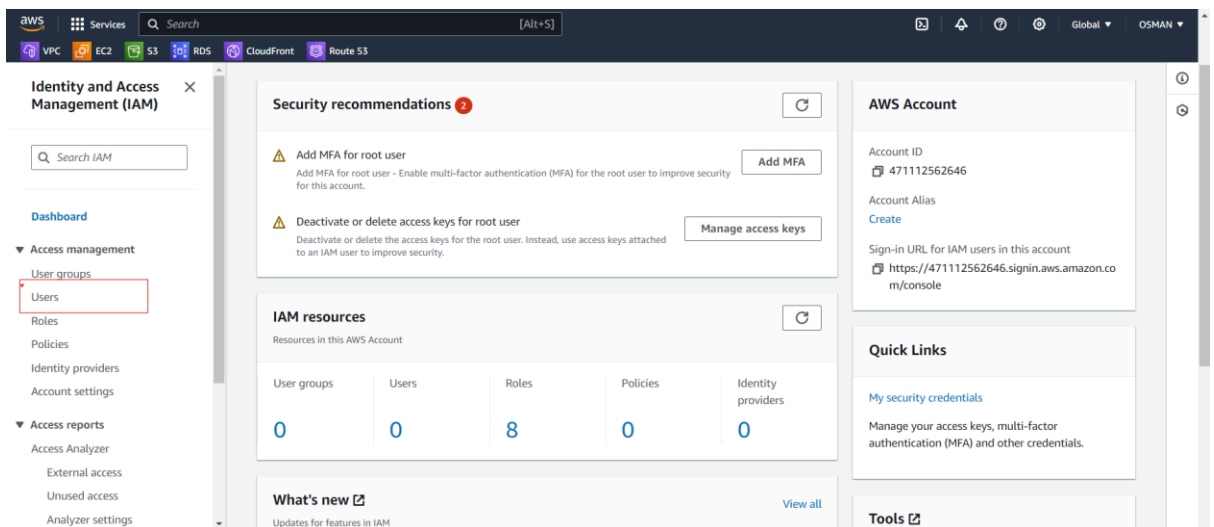
Task on IAM:

1) Create one IAM user and assign ec2,s3 full access role.

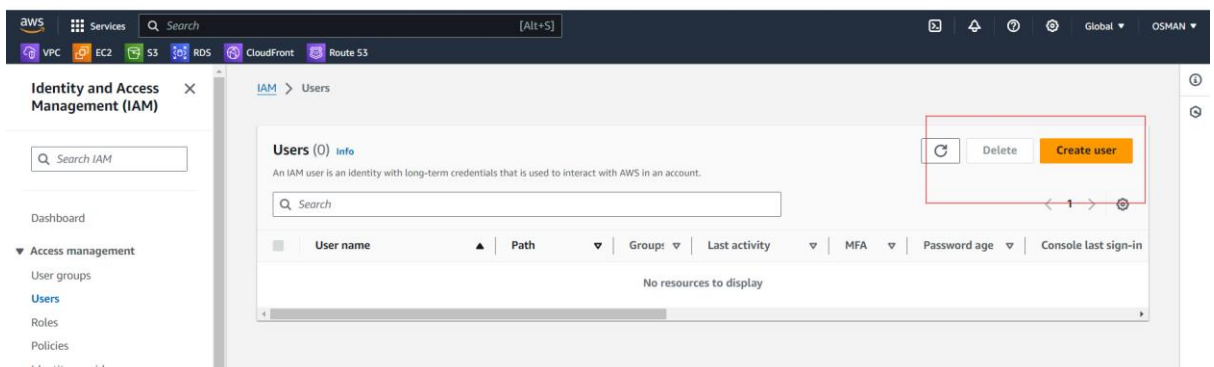
- First you have to go the AWS Console and Search for the iam.
- Click on IAM.



ON left side you see the option is users and click on that.



Click on that create user.



- Give user name ----- What you want give.
- Click on the ---- Provide user access to the AWS Management Console – *optional*
- Based on your requirement give the console access to user.
- If you have to give otherwise leave it ----- Users must create a new password at next sign-in – Recommended
- Click on next button.

- Permissions options ----< Attach policies directly.
- Search bar search for Ec2 and S3 full Access and select.

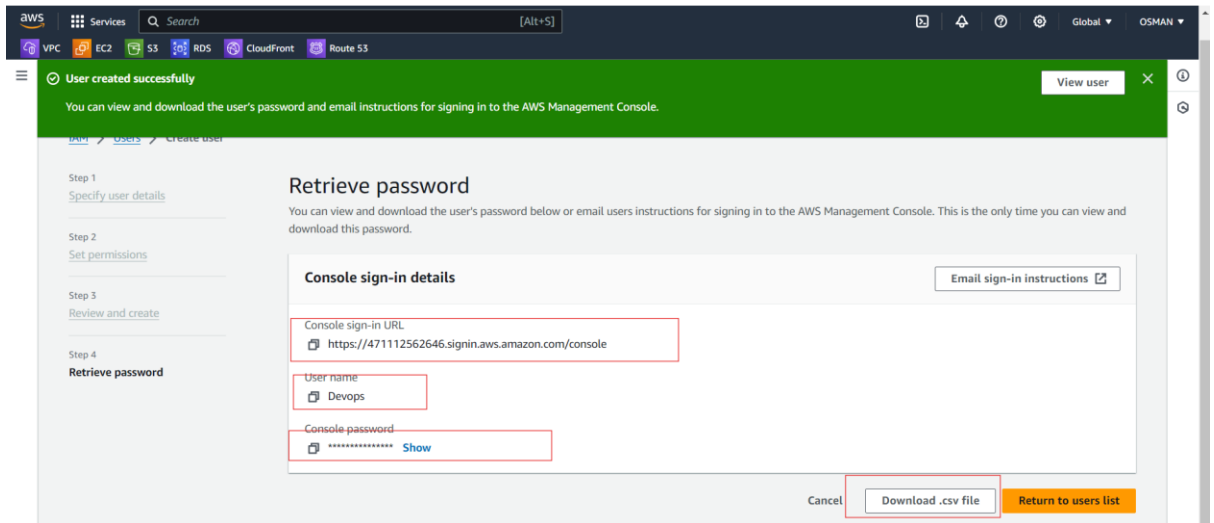
Click on Next and review the permissions and click on create user.

The screenshot shows the AWS IAM console interface during the 'Review and create' step of creating a new user. The left sidebar contains navigation links for 'Specify user details', 'Set permissions', 'Review and create', and 'Retrieve password'. The main content area is titled 'Review and create' and includes a sub-header 'User details' with fields for 'User name' (Devops), 'Console password type' (Custom password), and 'Require password reset' (Yes). Below this is the 'Permissions summary' section, which is highlighted with a red box. It displays a table of permissions assigned to the user:

| Name | Type | Used as |
|---------------------------------------|-------------|--------------------|
| AmazonEC2FullAccess | AWS managed | Permissions policy |
| AmazonS3FullAccess | AWS managed | Permissions policy |
| IAMUserChangePassword | AWS managed | Permissions policy |

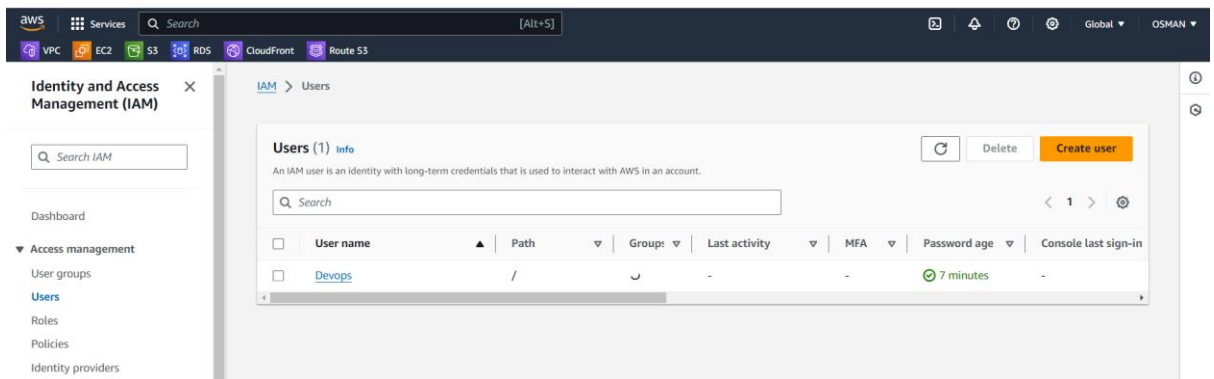
User will be created.

The below interface you will receive the URL, Username, Password and Csv file.
IN Csv file have the the user details all.

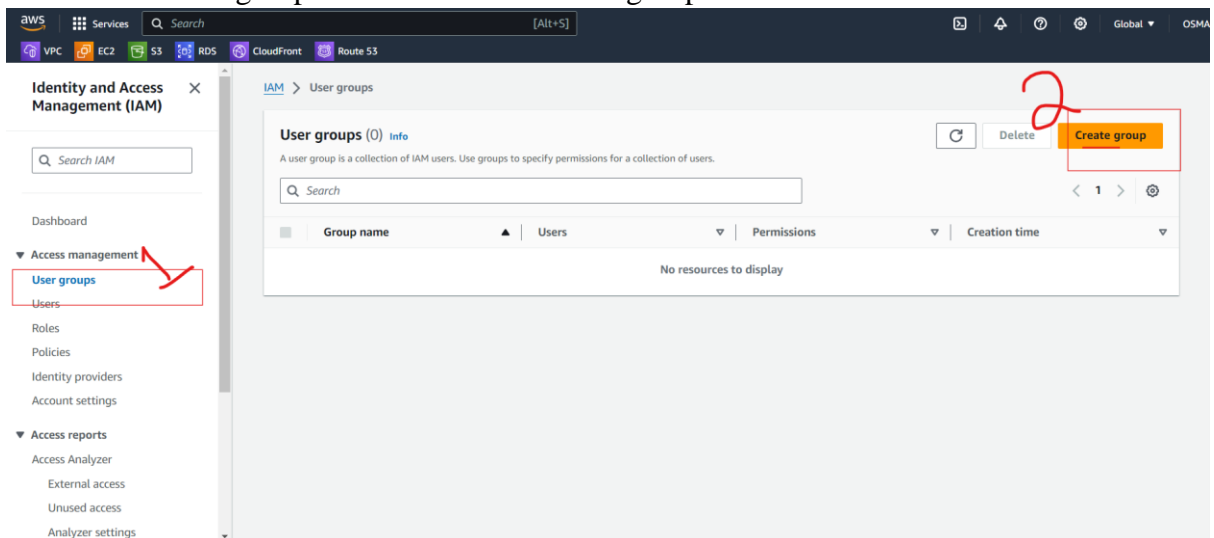


Just click on user or return to user List.

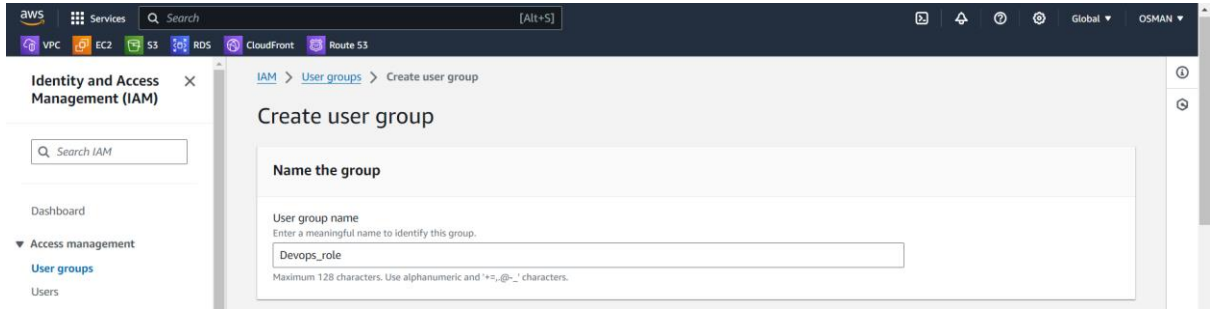
User have crated.



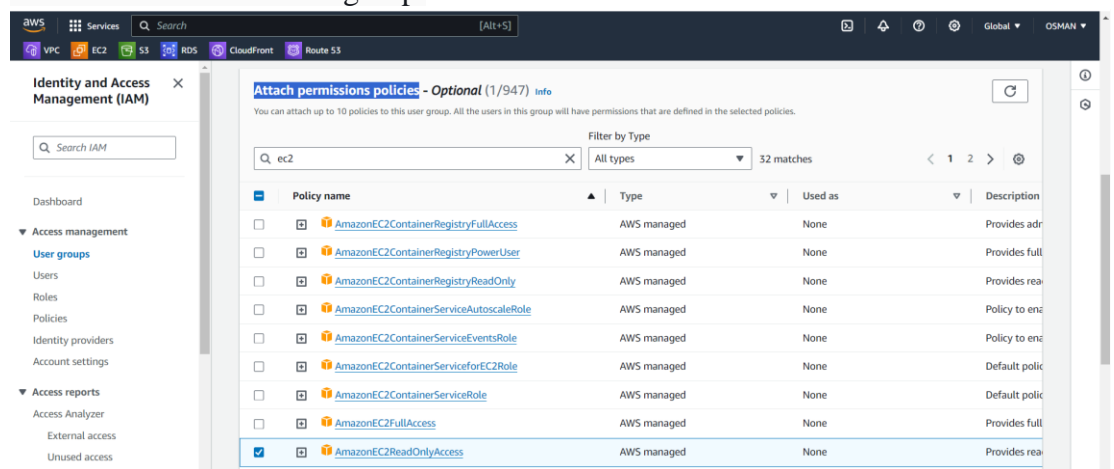
- 2) Create one Group in IAM and Assign Read access for ec2.
Just click on user groups and click on the create group.



Give name of role ---- based on your requirement.

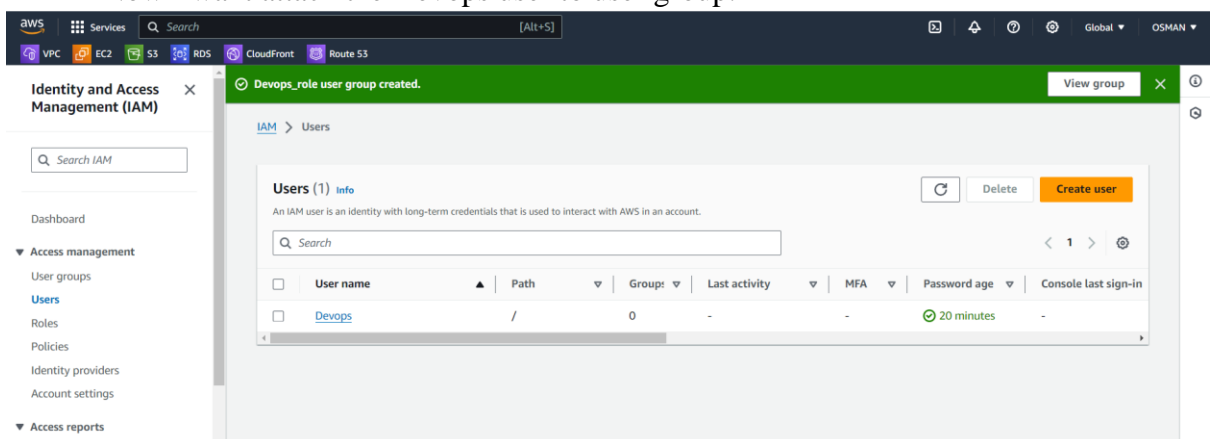


- Next go to the----- Attach permissions policies and select the EC2 read access only.
- The below I am selecting the ec2 read access only.
- Next click on create User group.

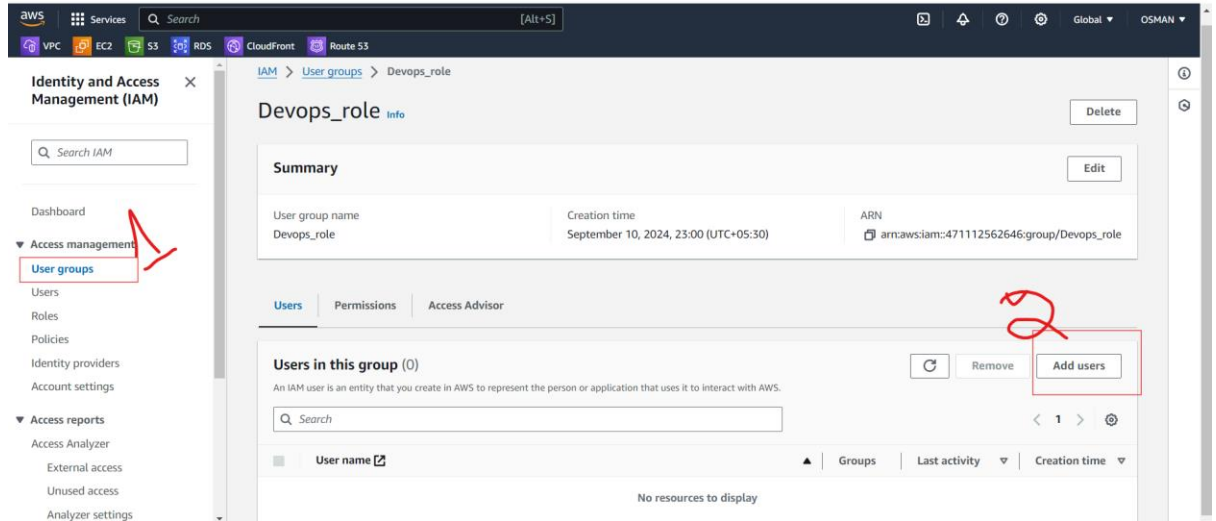


3) Create a new user with name Devops and add to the group created in task2.

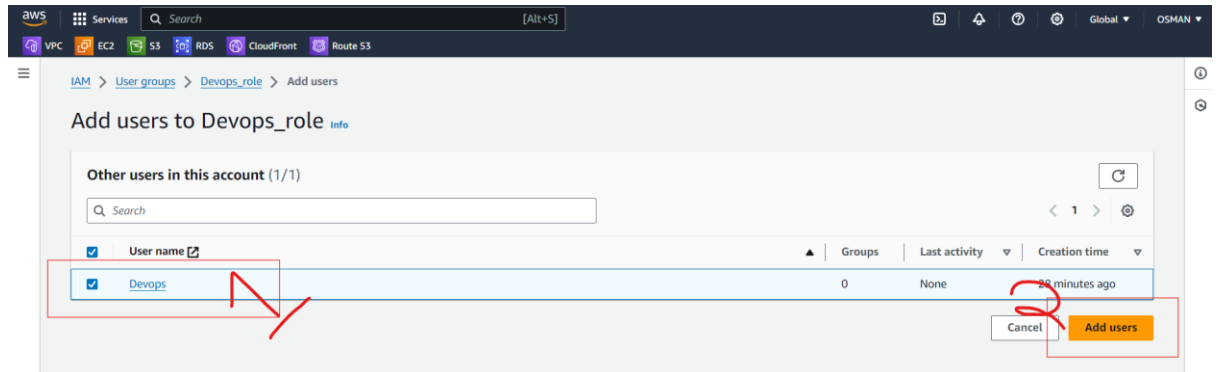
- I am created the Devops user.
- Now I want attach the Devops user to user group.



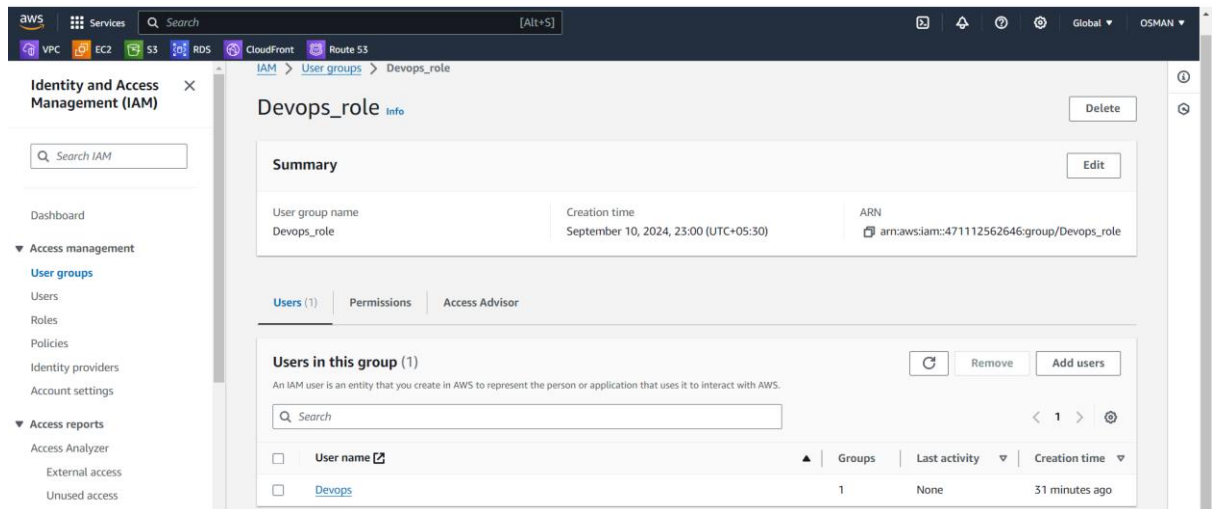
- Now click on the user group.w
- Click on Add users



First click on chek box of user and Add user.



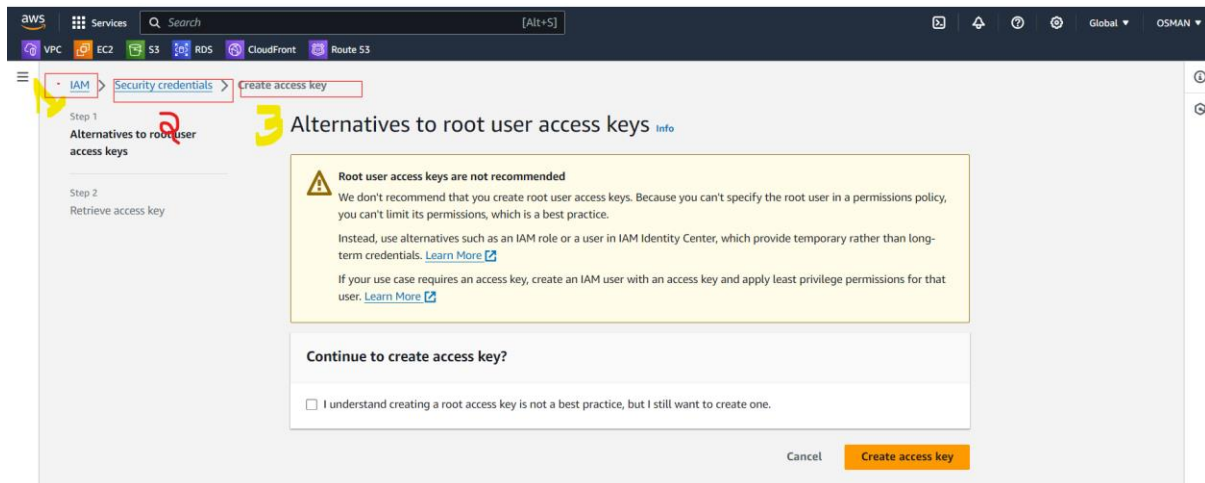
Now Devops user added in Devop_role group.



- 4) Write a bash script to create a IAM user with VPC full access.
- Now I am Going to connect ec2 instance.
 - There check CMD----→ AWS --version.
 - Then you have to do the aws configuration you need to give the access key and Secret access key.
 - To generate the access key follow steps.

STEPS:

Go to The IAM , Security Credential and create access key.



- Click on check box.
- Just click on create access key.
- You see the below Access key and Secret access key.
- Copy In Note pad.
- Now go to the server and give the details.

```
[ec2-user@ip-172-31-13-14 ~]$ sudo -i
[root@ip-172-31-13-14 ~]# aws --version
aws-cli/2.15.30 Python/3.9.16 Linux/6.1.106-116.188.amzn2023.x86_64 source/x86_64.amzn.2023 prompt/off
[root@ip-172-31-13-14 ~]# aws configure
AWS Access Key ID [None]: AKIAW3MD7G7LKU2ZD7MG
AWS Secret Access Key [None]: PE+C41tK3089fga0od+C6DTo6AAxutLo022DDU
Default region name [None]: us-west-1
Default output format [None]: json
[root@ip-172-31-13-14 ~]# touch user_Ramesh
[root@ip-172-31-13-14 ~]# ls
user_Ramesh
[root@ip-172-31-13-14 ~]# mv user_Ramesh user_Ramesh.bash
[root@ip-172-31-13-14 ~]# ls
user_Ramesh.bash
[root@ip-172-31-13-14 ~]# vi user_Ramesh.bash
[root@ip-172-31-13-14 ~]# 34B written
[root@ip-172-31-13-14 ~]# chmod 755 user_Ramesh.bash
[root@ip-172-31-13-14 ~]# ./user_Ramesh.bash
{
  "User": {
    "Path": "/",
    "UserName": "Ramesh",
    "UserId": "AIDAW3MD7G7LKU2ZD7MG",
    "Arn": "arn:aws:iam::47112562646:user/Ramesh",
    "CreateDate": "2024-09-11T07:19:05+00:00"
  }
}
{
  "LoginProfile": {
    "UserName": "Ramesh",
    "CreateDate": "2024-09-11T07:19:08+00:00",
    "PasswordResetRequired": false
  }
}
IAM user Ramesh created with VPC Full Access, IAM Full Access, and console login enabled.
```

```
[root@ip-172-31-13-14 ~]# cat user_Ramesh.bash
#!/bin/bash

# Step 1: Define the IAM user name
USER_NAME="Ramesh"

# Step 2: Create the IAM user
# This command creates the IAM user with the specified username
aws iam create-user --user-name $USER_NAME

# Step 3: Attach VPC Full Access policy
# AmazonVPCFullAccess policy provides full access to manage VPC resources.
VPC_POLICY_ARN="arn:aws:iam::aws:policy/AmazonVPCFullAccess"
aws iam attach-user-policy --user-name $USER_NAME --policy-arn $VPC_POLICY_ARN

# Step 4: Attach IAM Policy for Console Access
# "IAMFullAccess" policy allows the user to manage IAM roles, users, and groups.
IAM_POLICY_ARN="arn:aws:iam::aws:policy/IAMFullAccess"
aws iam attach-user-policy --user-name $USER_NAME --policy-arn $IAM_POLICY_ARN

# Step 5: Create login profile (for console access)
# This command sets the password for the IAM user and enables console access
aws iam create-login-profile --user-name $USER_NAME --password 'Devops@333'

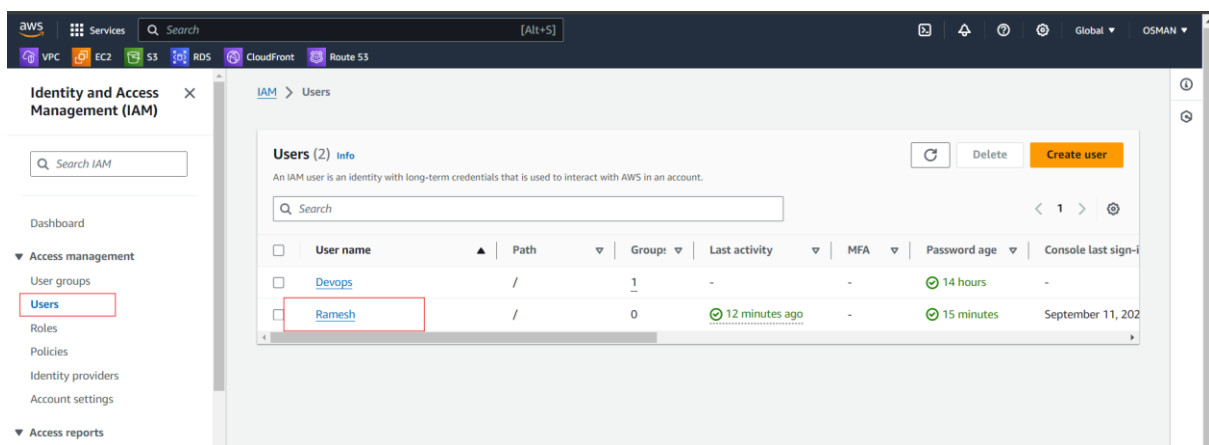
echo "IAM user $USER_NAME created with VPC Full Access, IAM Full Access, and console login enabled."

[root@ip-172-31-13-14 ~]#
```

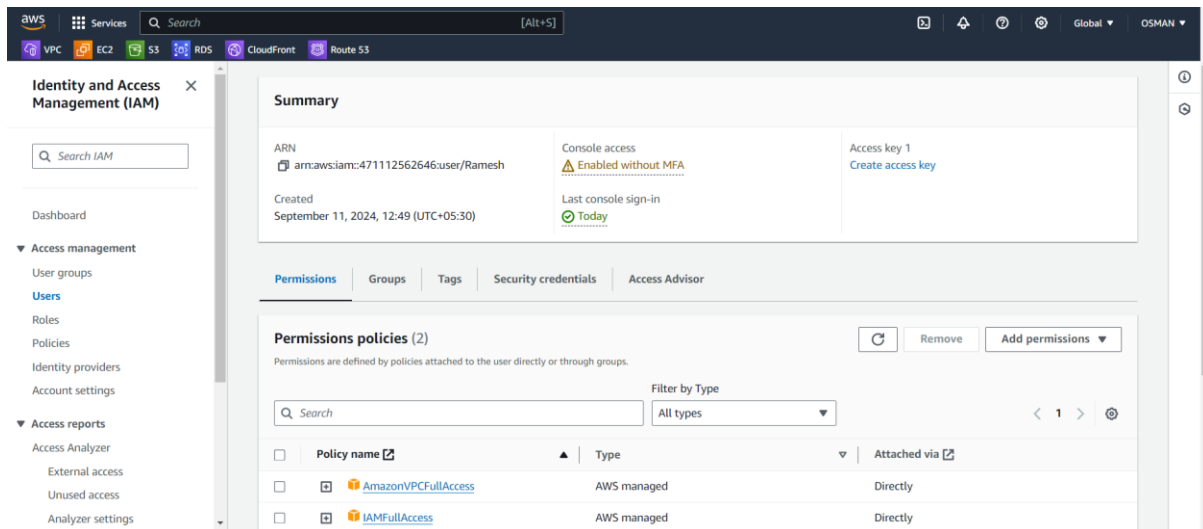
- Now user created and user have full access of the vpc.
- Once we Login user and check the user created or not and permission are working or not.

Once checkin in root account.

The below user is created.

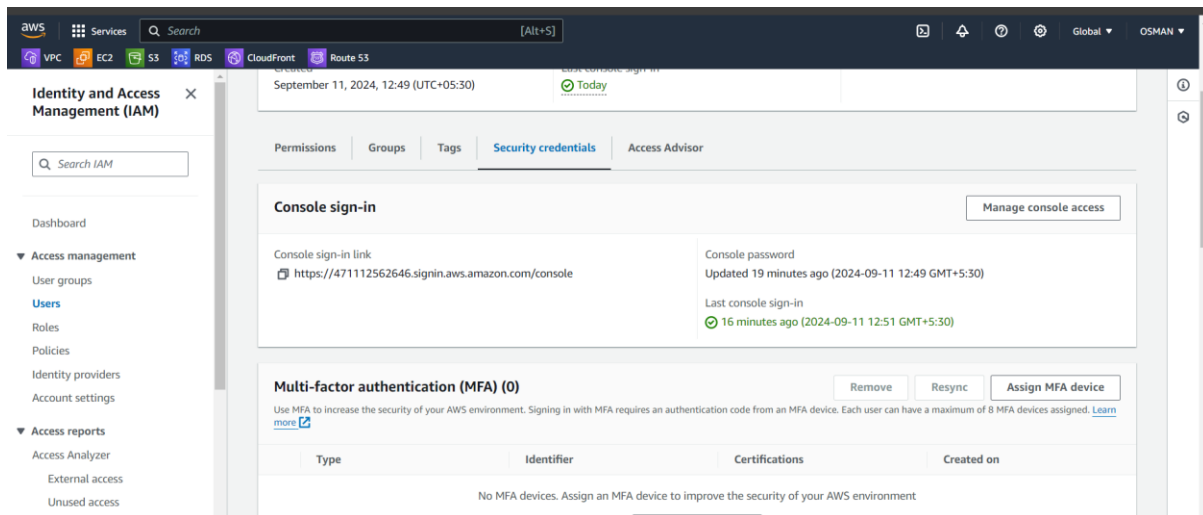


The Ramesh user have access vpc full Access.

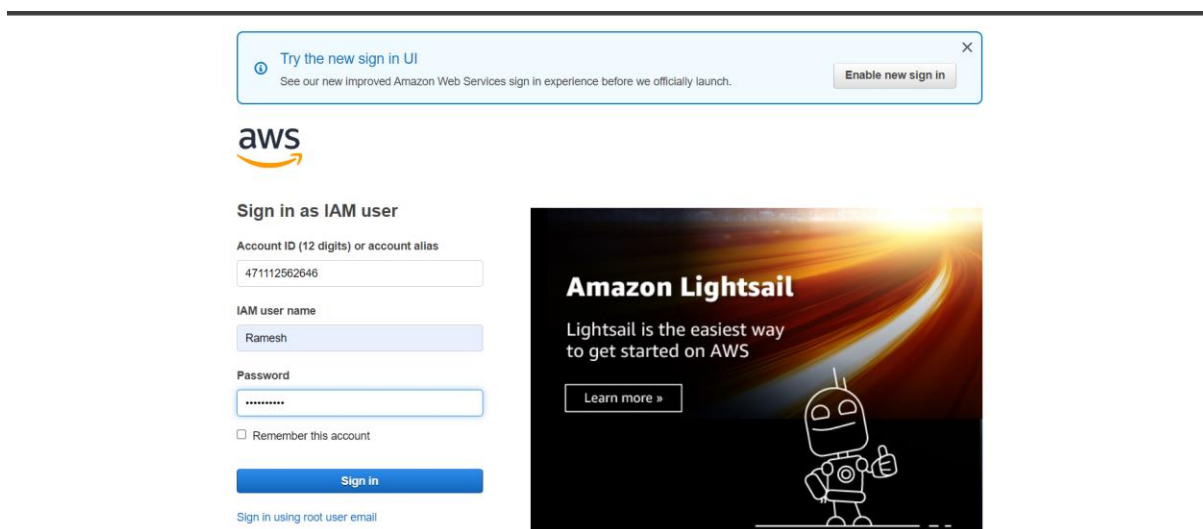


Now to root user provided to Ramesh user credentials.

To Provide details give him to the console sign-in link and Password now he will access.

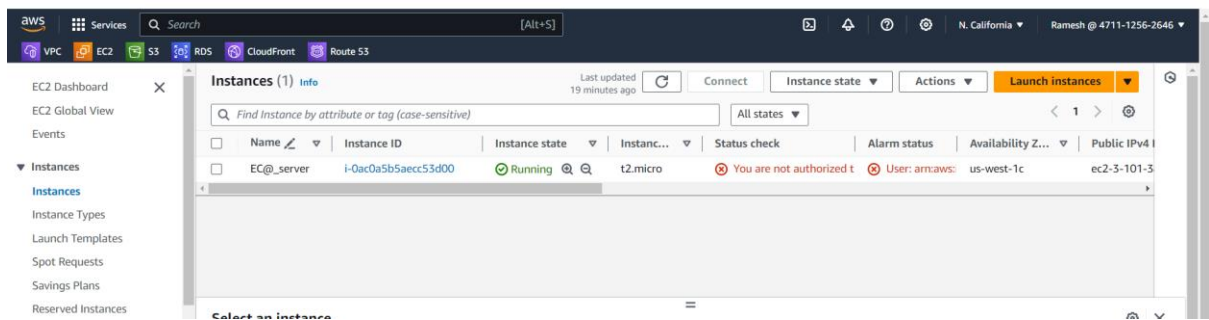


Here give user name and Password then you able to Login.



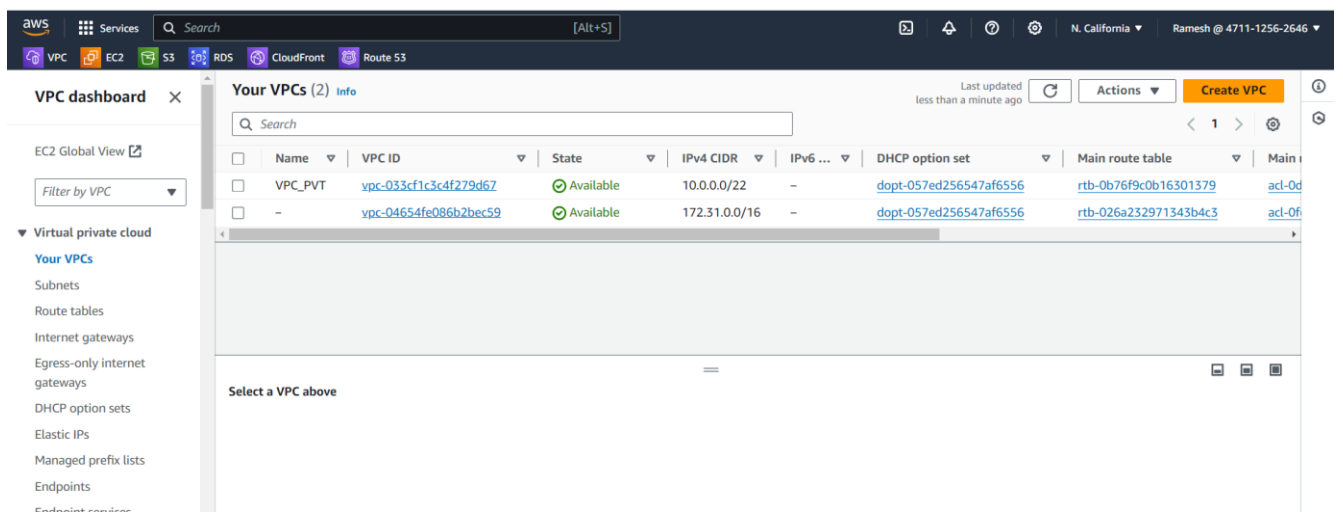
Now I am in Ramesh.

See here I don't have any access to ec2 service.

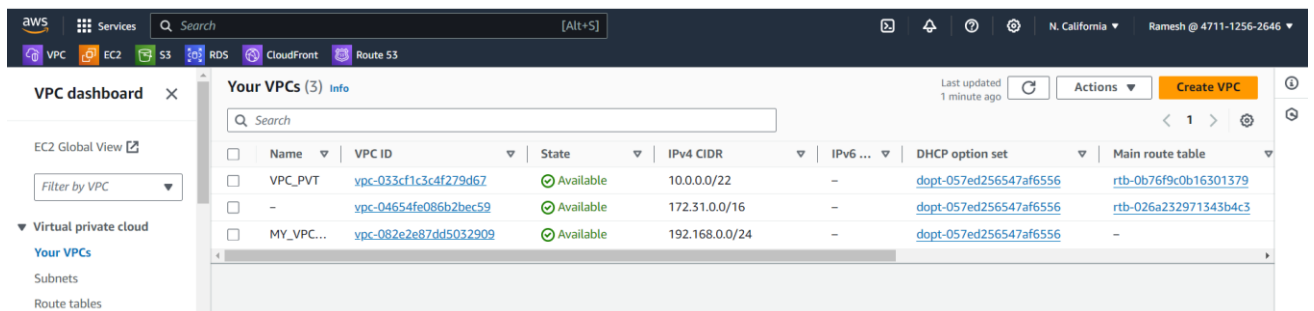


Now go to the vpc create there one vpc there you have access to create vpc.

Here only two's vpc is there.

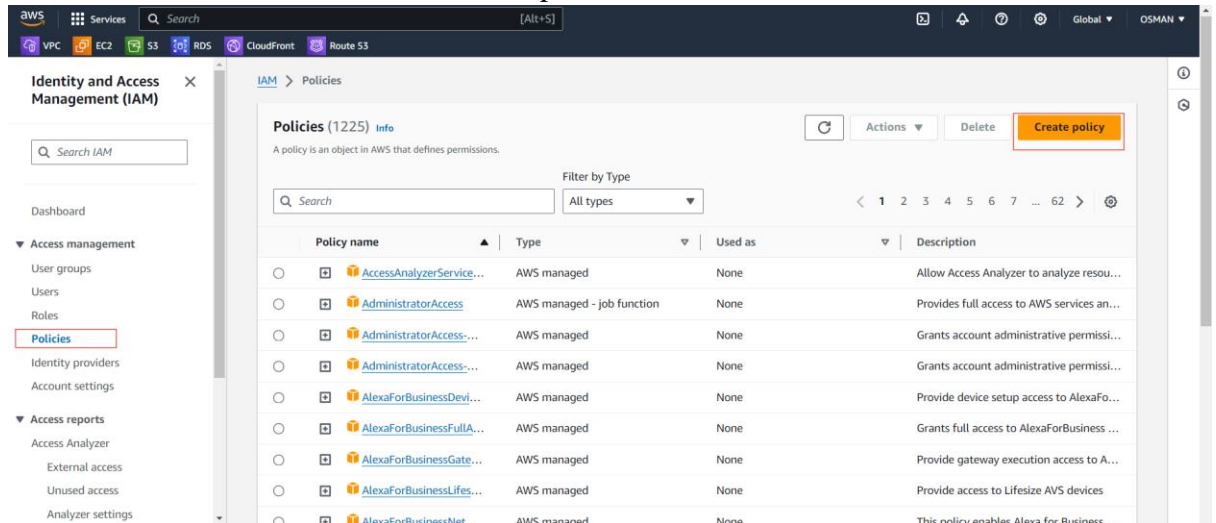


Now I am created vpc.

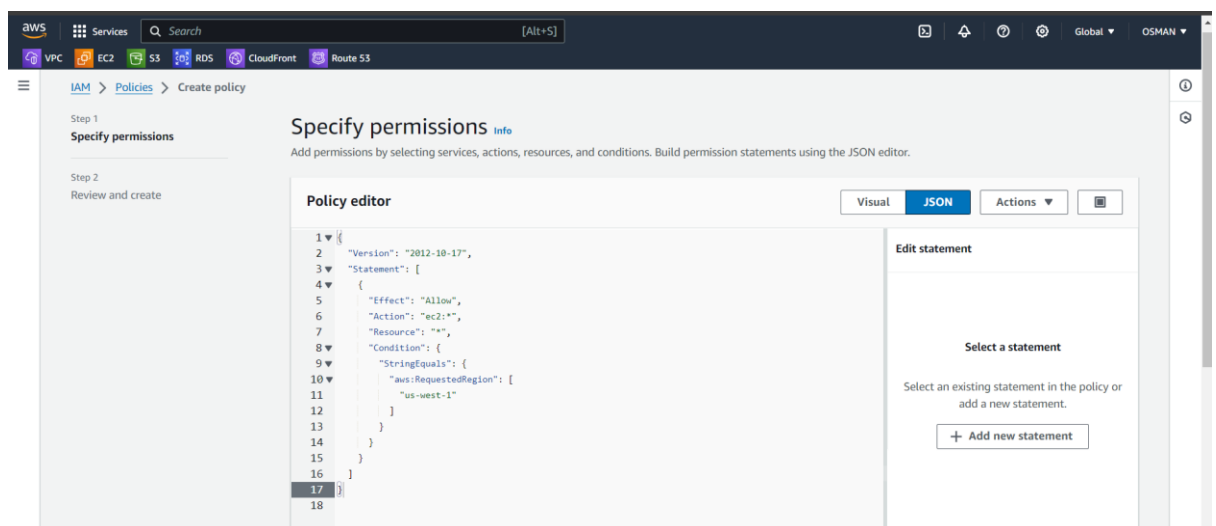


Now task is Done .

- 5) Create a IAM policy to access ec2 for a specific user in specific regions only.
Go to the Policies and click on the create policies.



Here paste the json code



Just click on Next Button.

Give Policie name and Description and click on create Policie.

These is the details of the policie

