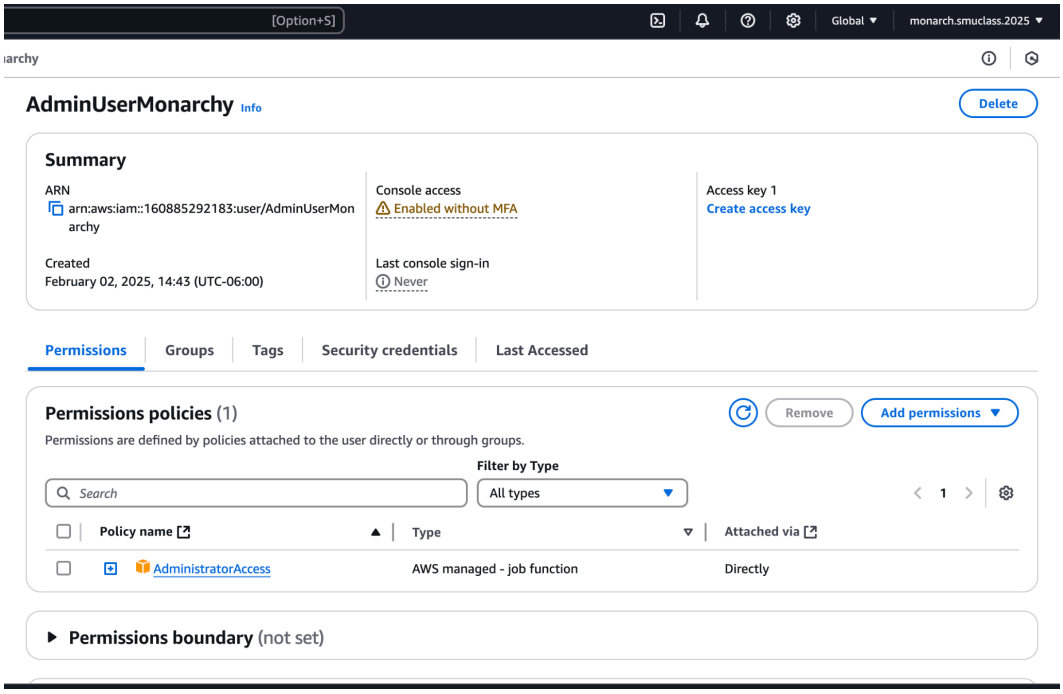
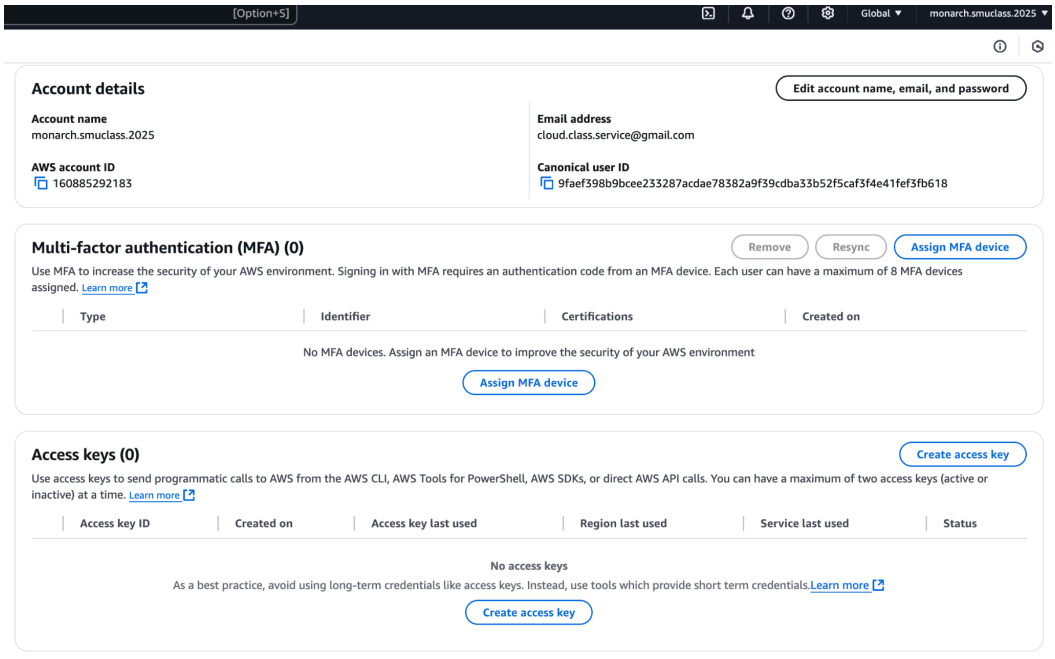
Lab 1: AWS Identity and Access Management | Monarch Nigam

Exercise 6.1: **Lock Down the Root User -**

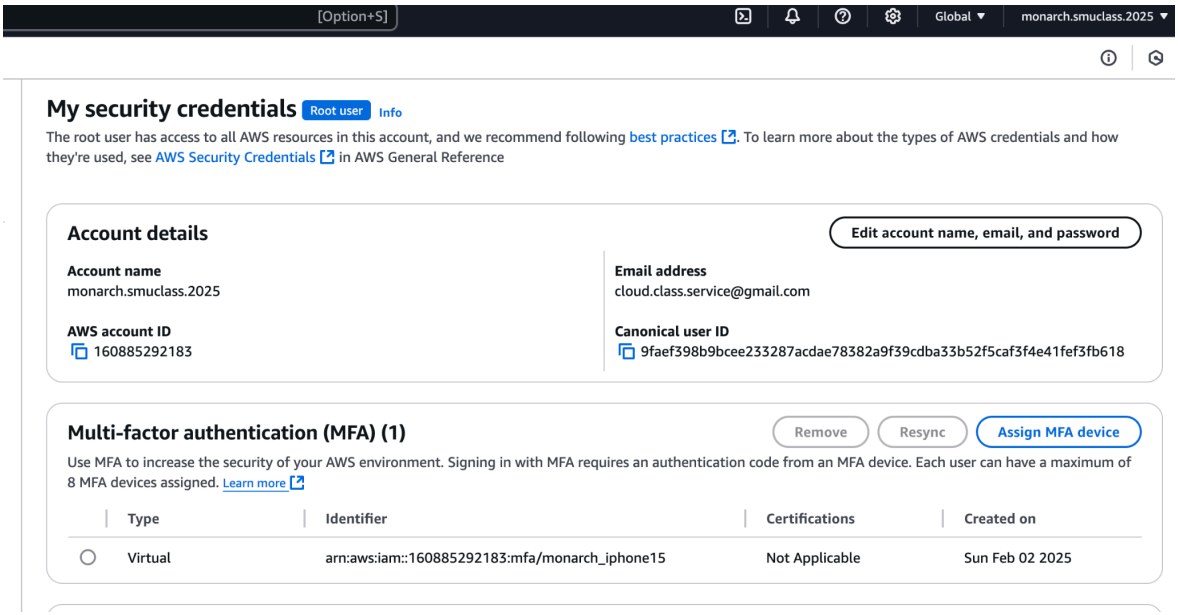
1. I have created a regular user named AdminUserMonarchy and then assigned it the AdministratorAccess policy as shown in the below screenshot. My email is cloud.class.service@gmail.com and my account name is monarch.smuclass.2025



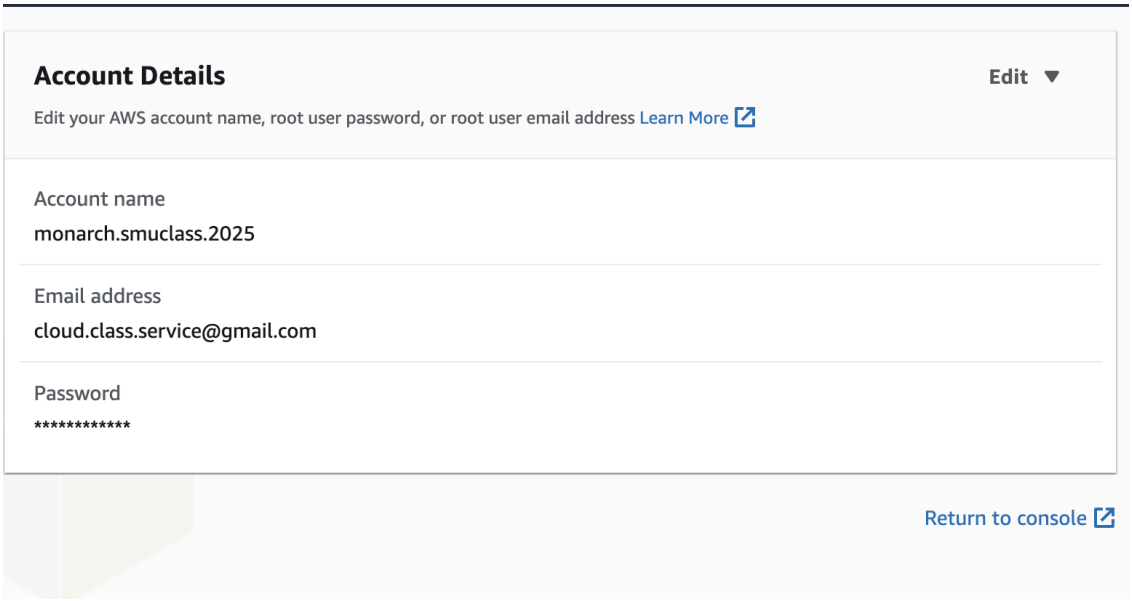
2. I have made sure that there are no active access keys associated with my root account, as shown in the below screenshot



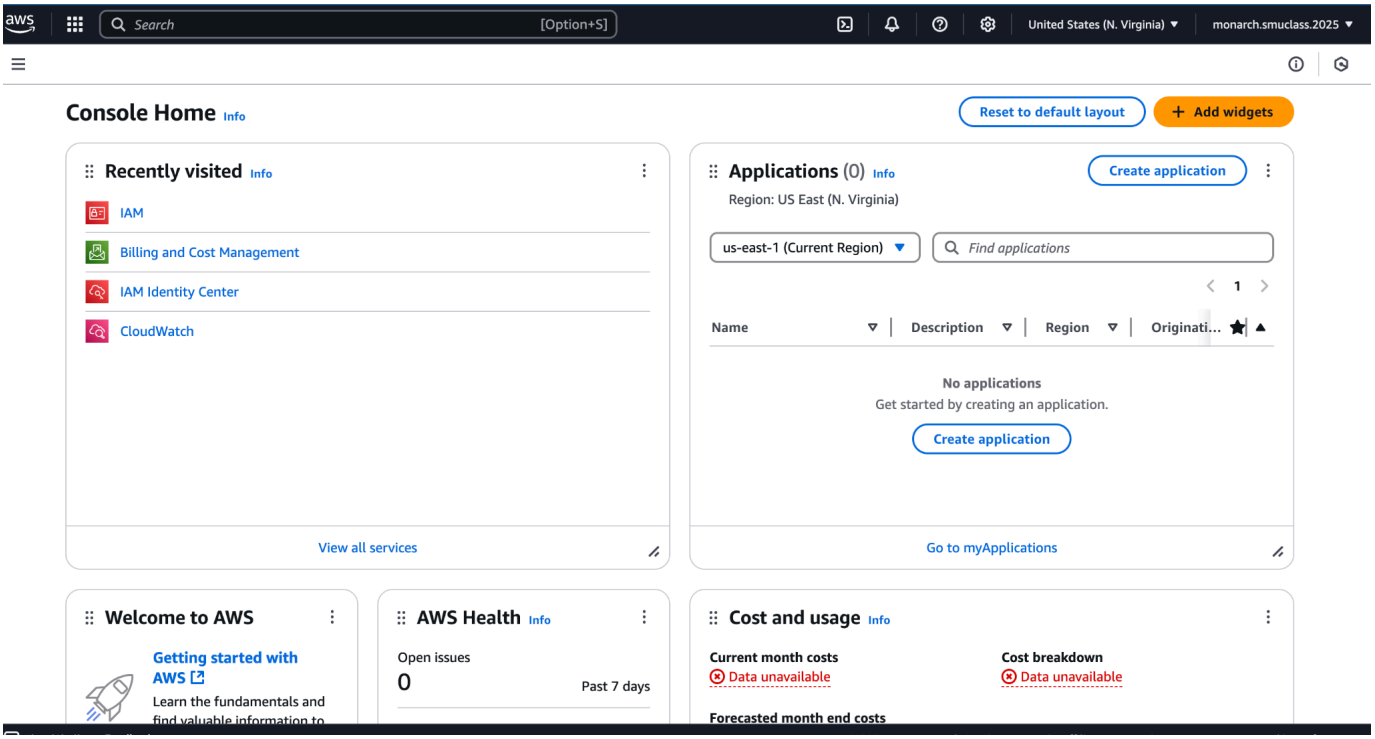
3. I have Enable MFA for the root account to confirm a user's identity, as you can see in the below screenshot



4. I Updated my root login to a password that's long and complex and that includes nonalphanumeric characters



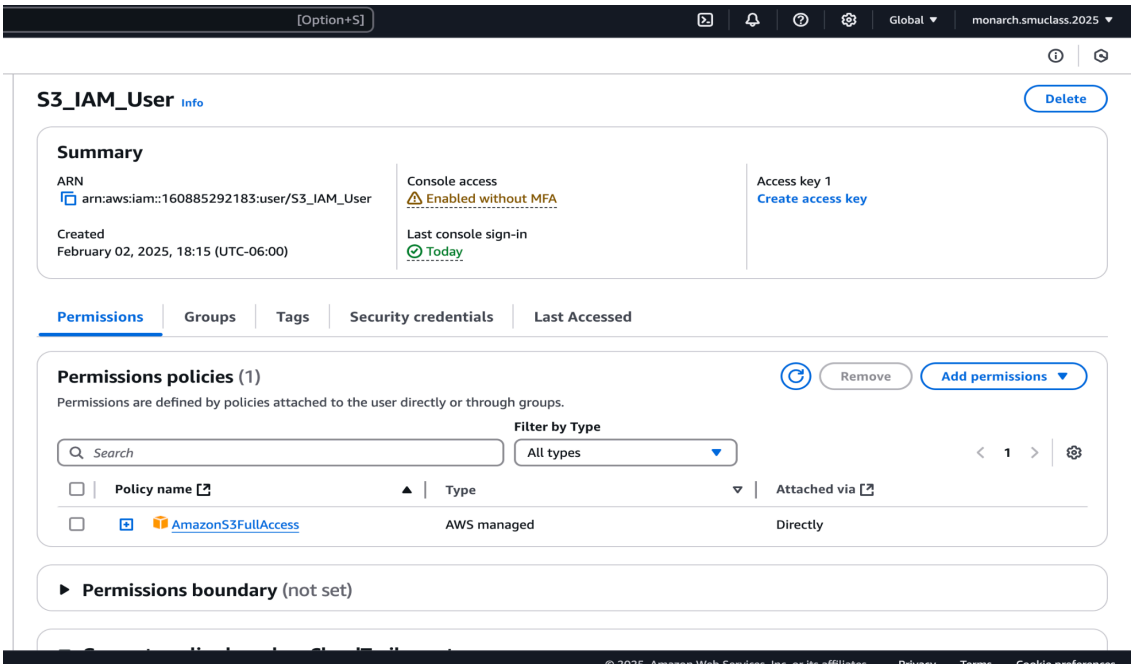
5. The below screenshot is a proof that I am able to login successfully-



So to summarise in Exercise 6.1: I am locking down the root user by creating a regular user with **AdministratorAccess**. I am ensuring no active access keys exist and enabling **MFA** for authentication. I am updating the root password to a strong one and confirming login before securely storing it.

Exercise 6.2: **Assign and Implement an IAM Policy**

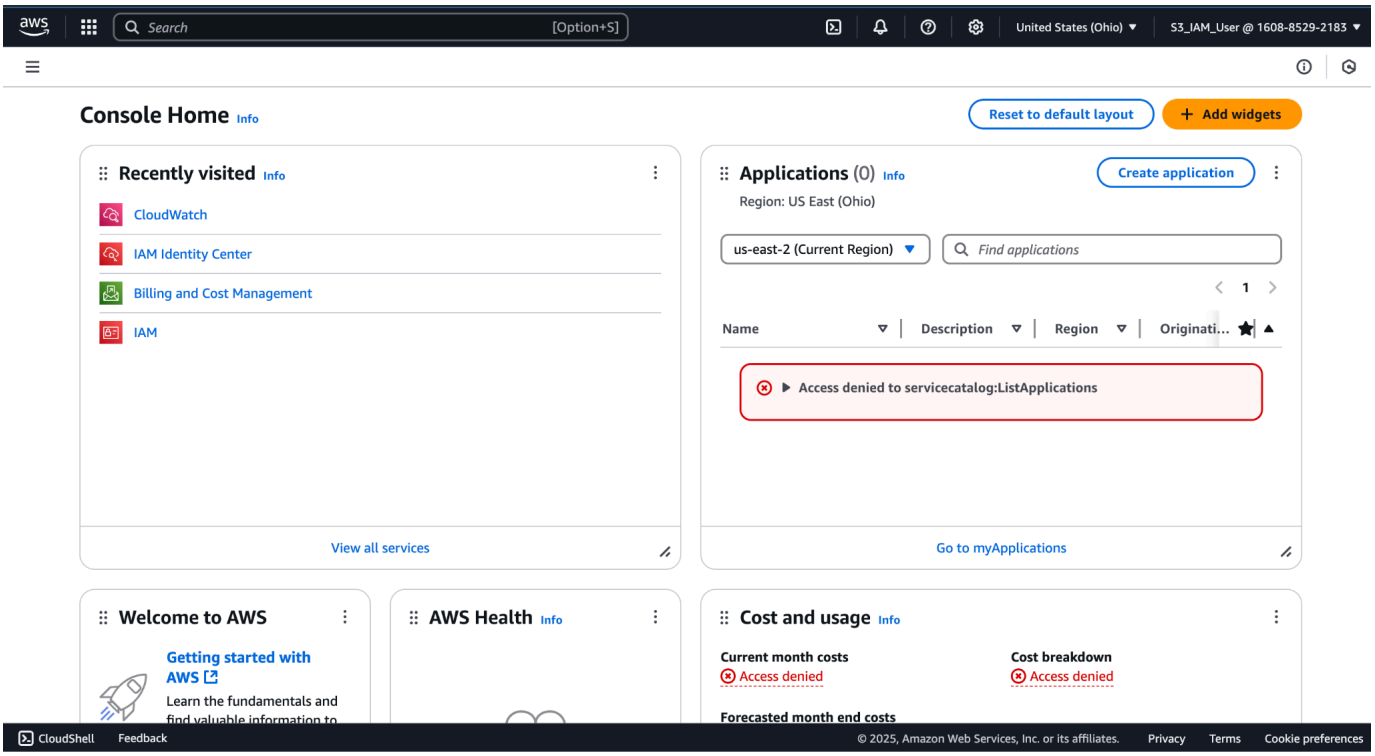
1. Create a new user in the IAM Dashboard- The New User is S3_IAM_User



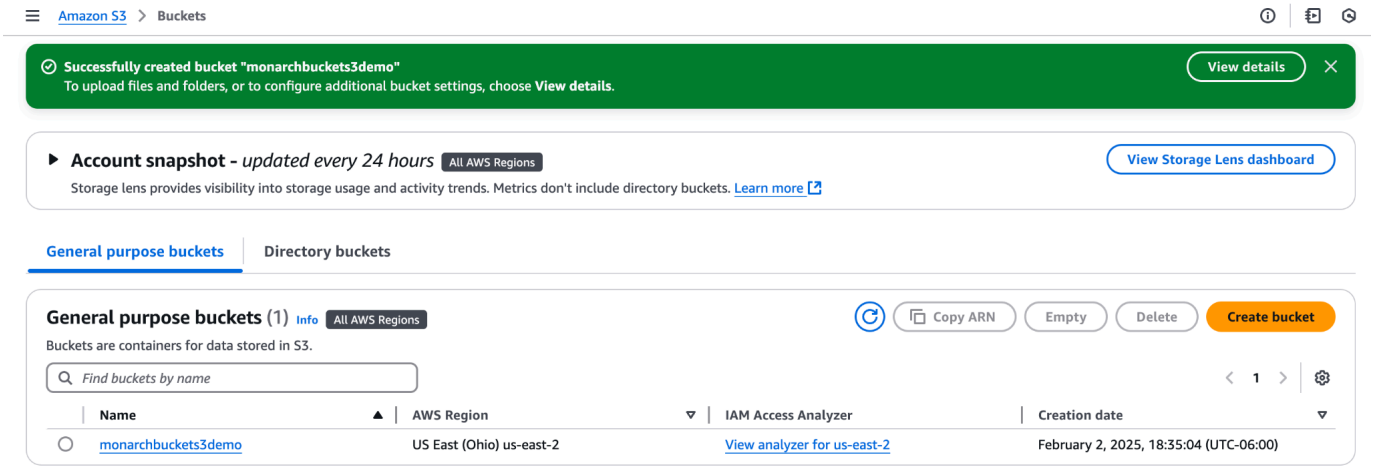
2. Attach the AmazonS3FullAccess policy that will permit your user to create, edit, and delete S3 buckets. (In the above screenshot we can see that the AmazonS3FullAccess policy has been implemented)

3. Note the user login instructions that will be displayed - the user login is https://1608XXXXXXX3.signin.aws.amazon.com/console, FOR S3_IAM_User

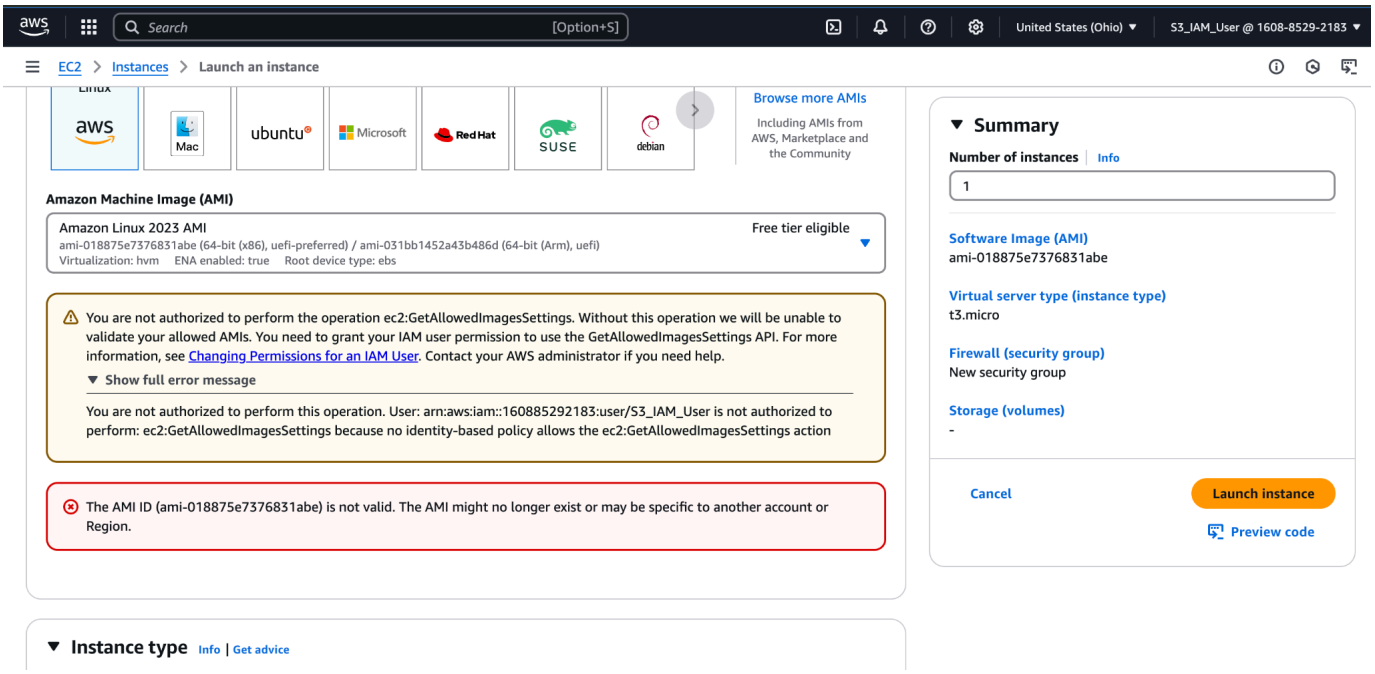
4. Log in as your new user and try creating a new S3 bucket. As we can see the login is successful and the S3 Bucket is created successfully with the bucket name **monarchbuckets3demo**

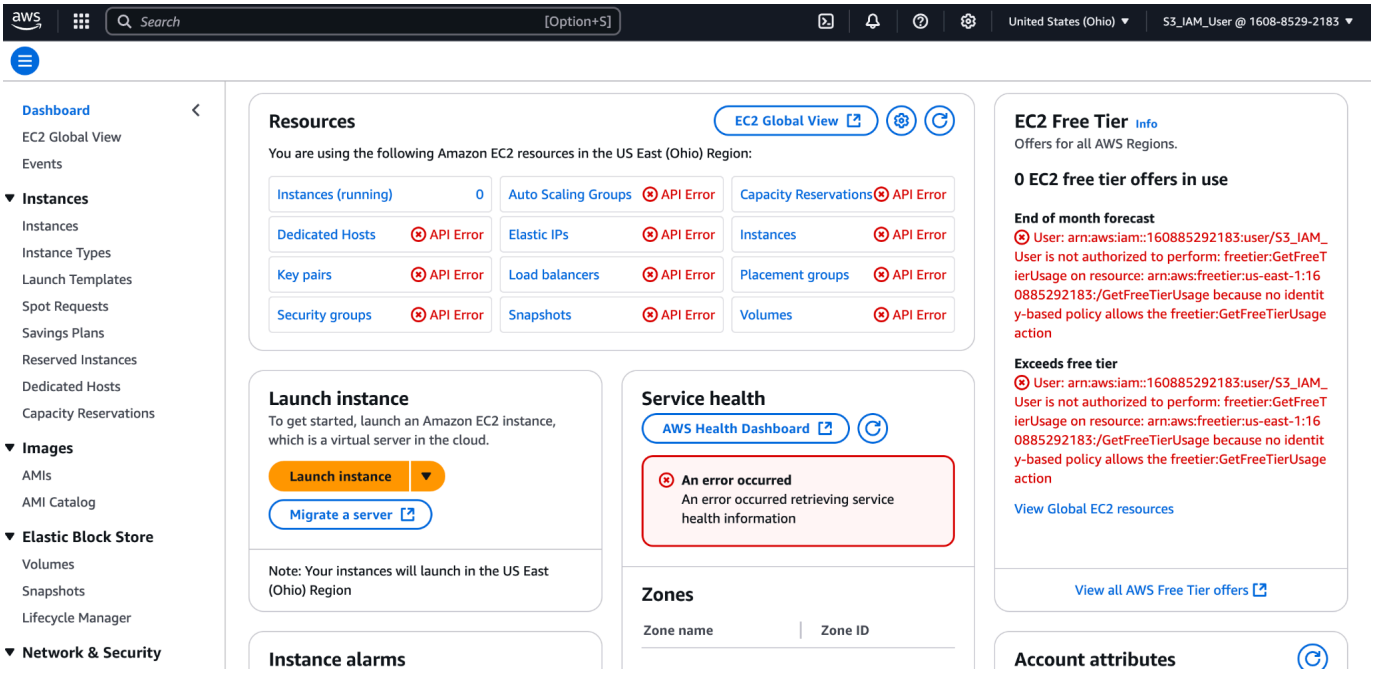


Login S3_IAM_USER Success



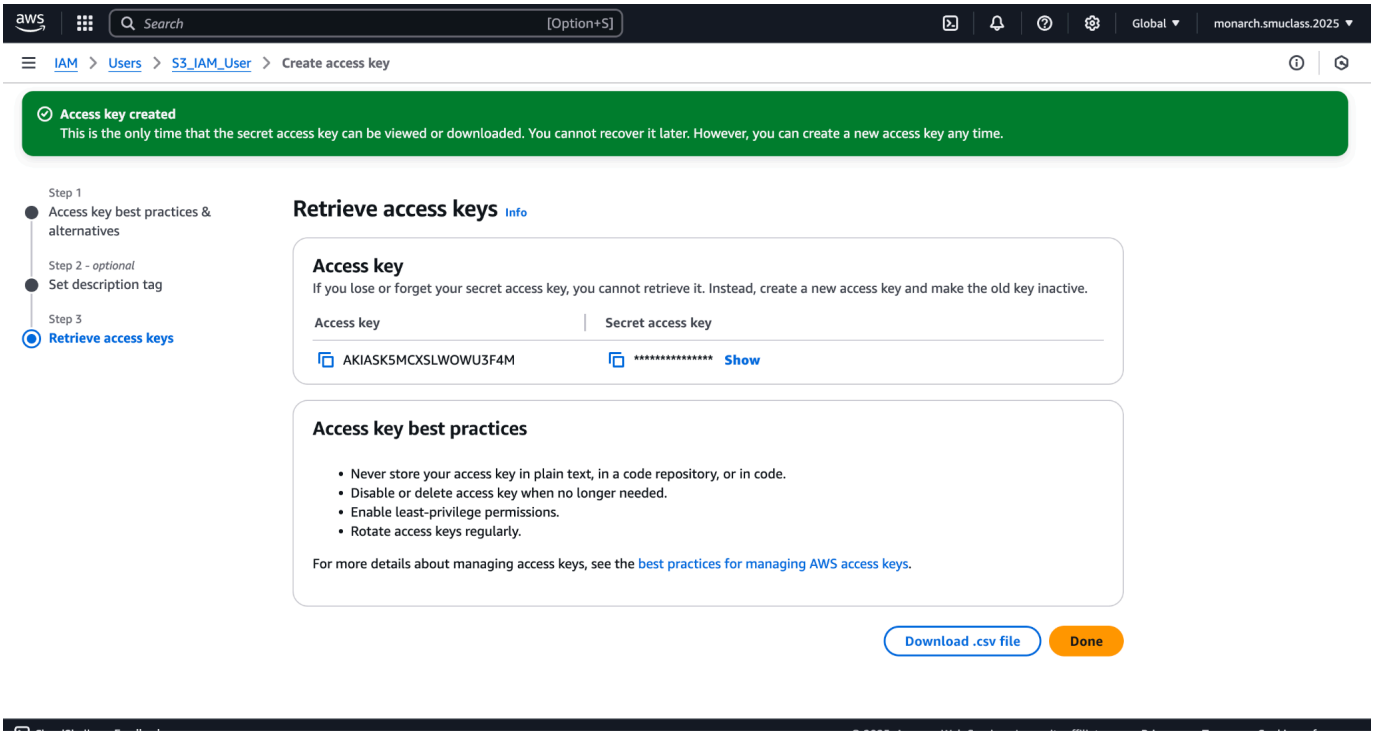
5. Just to prove everything is working, try launching an EC2 instance. Your request should be denied. - The below screenshots depicts that I am not able to create the EC2 Instance which clearly means the IAM Permissions are working.



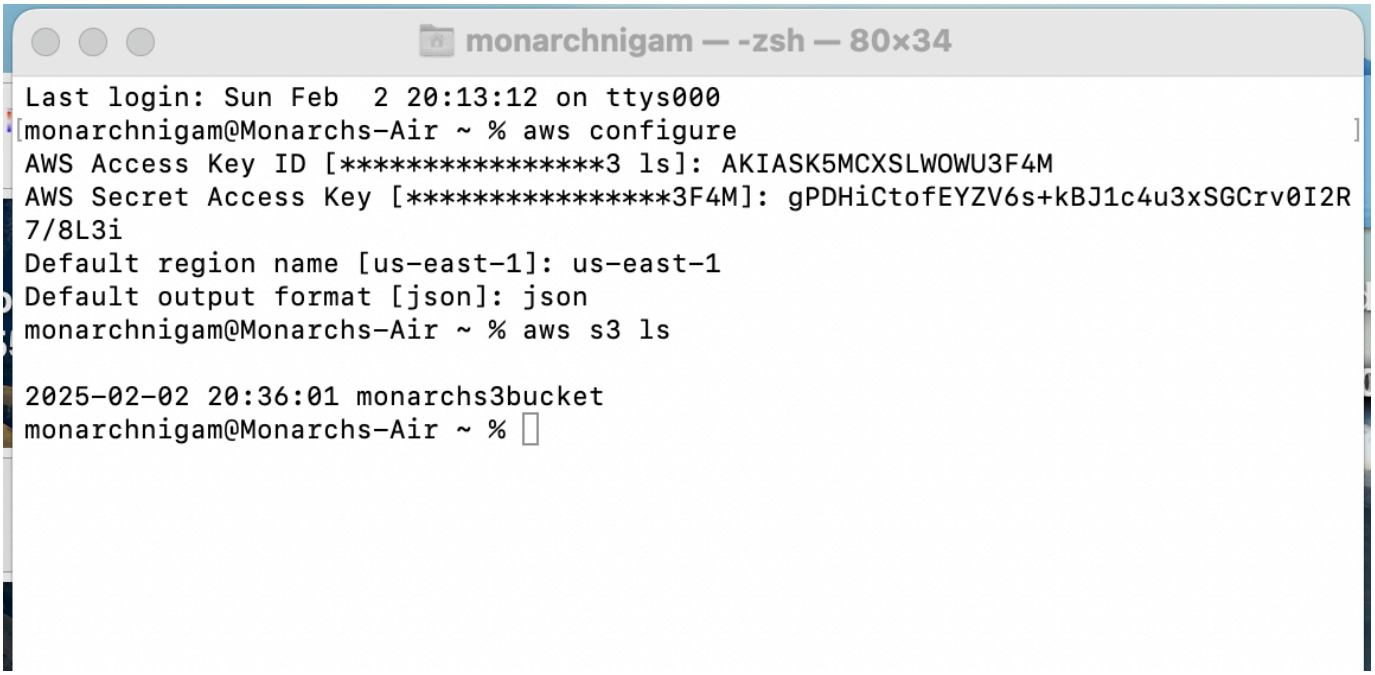


EXERCISE 6.3 : **Create, Use, and Delete an AWS Access Key**

1. Create a new AWS access key, and save both the access key ID and secret access key somewhere secure- the new Access key has been created:

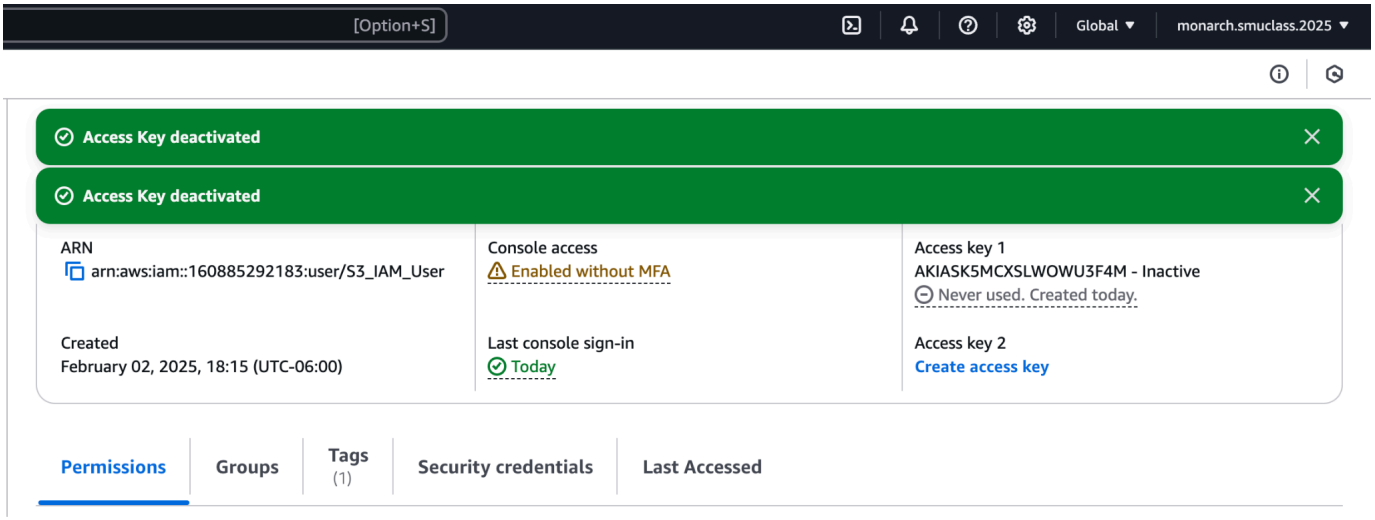


2. Enter aws configure at your local command line to add the key to your AWS CLI configuration- as shown in the screenshot I have configured AWS CLI in my terminal.

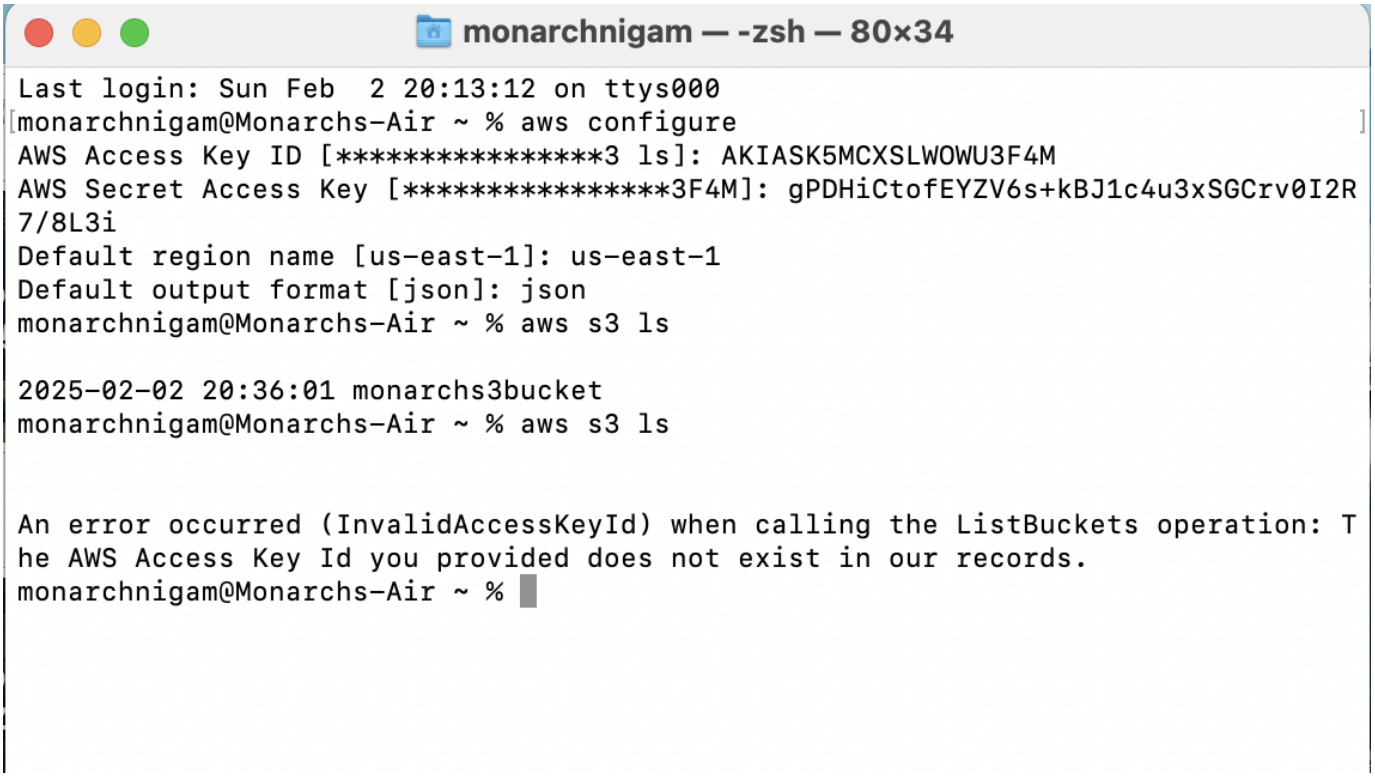


3. Try performing some operation—such as listing your S3 buckets - in the above screen shot, I have listed the s3 buckets, since there is only one bucket named monarch3bucket, it gets listed here.

4. In the console, disable (select Make Inactive) or delete the key you just created from the IAM Dashboard.- as shown in the below screenshot the access key has been deactivated

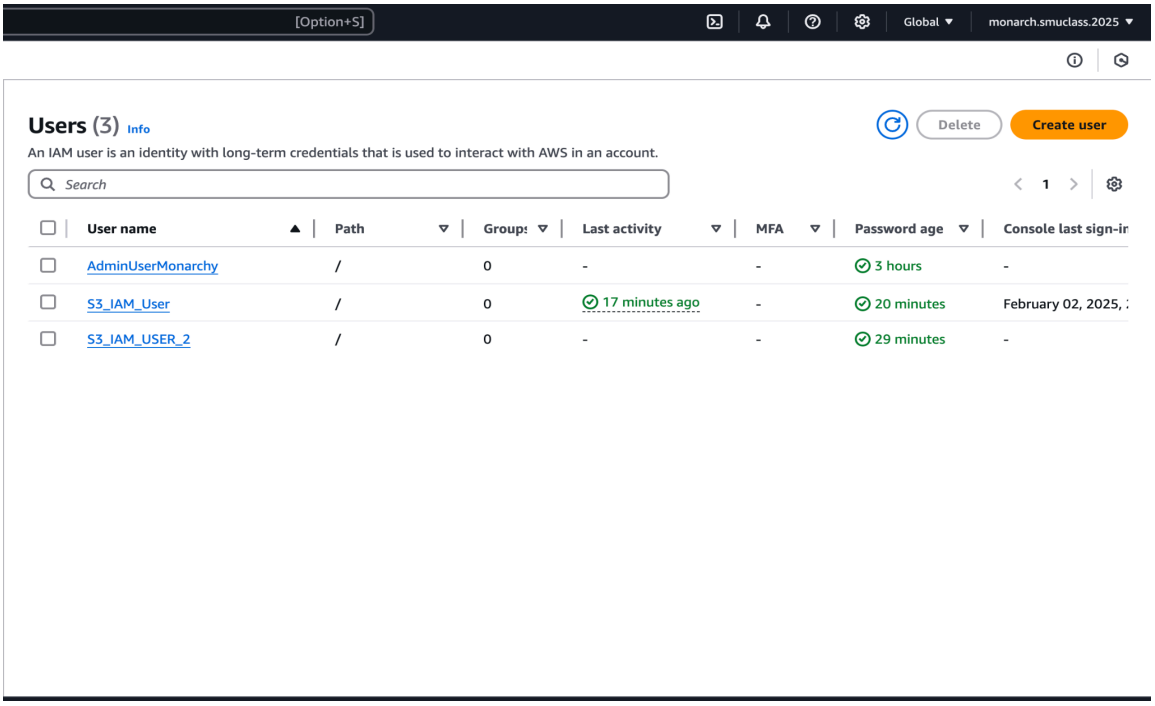


5. Confirm that you are now unable to administer your S3 buckets using the key- in the below screenshot we can see the Access key not exist error is thrown-

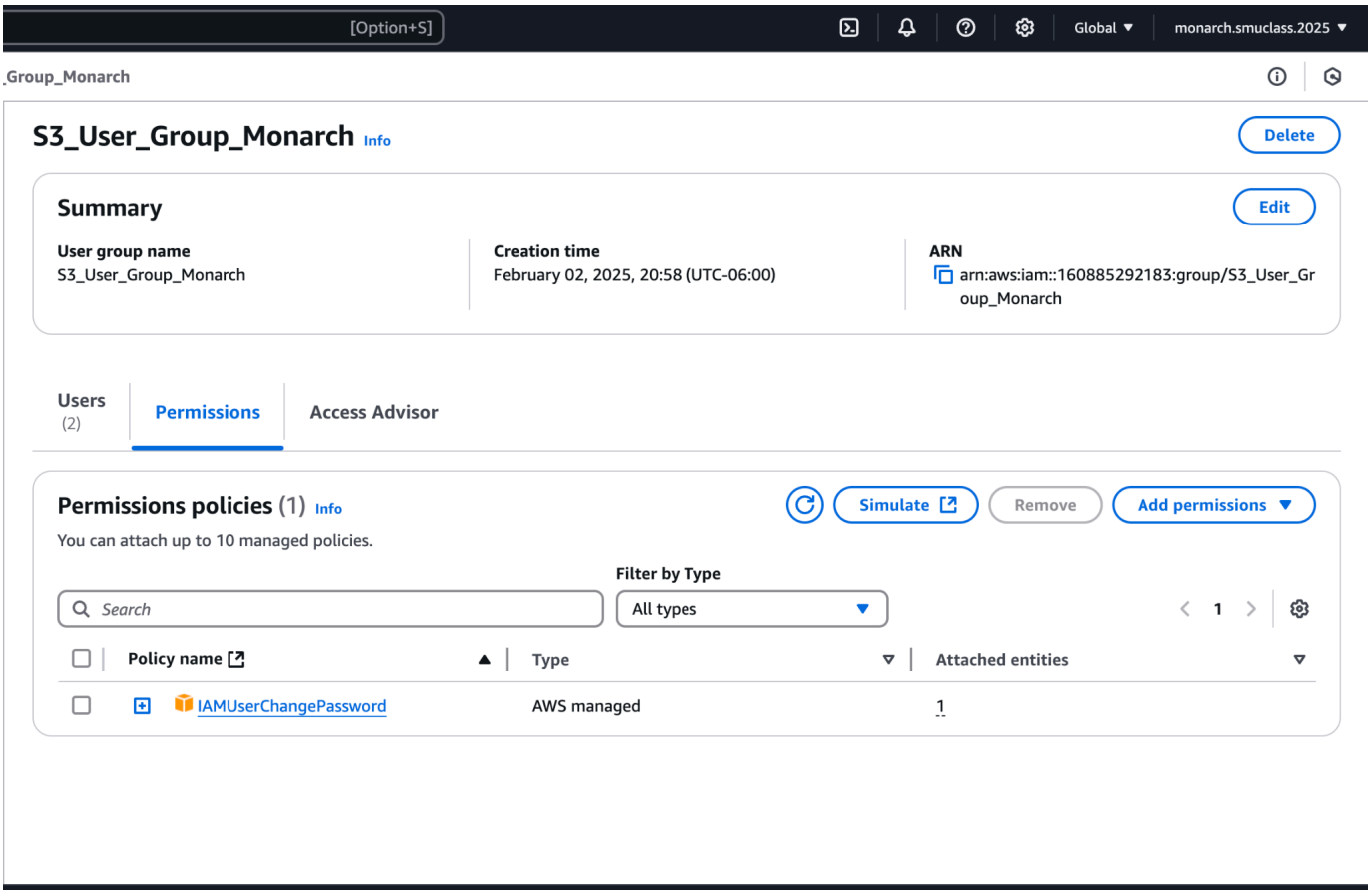


Exercise 6.2: **Create and Configure an IAM Group**

1. Make sure you have at least two IAM users in your account.

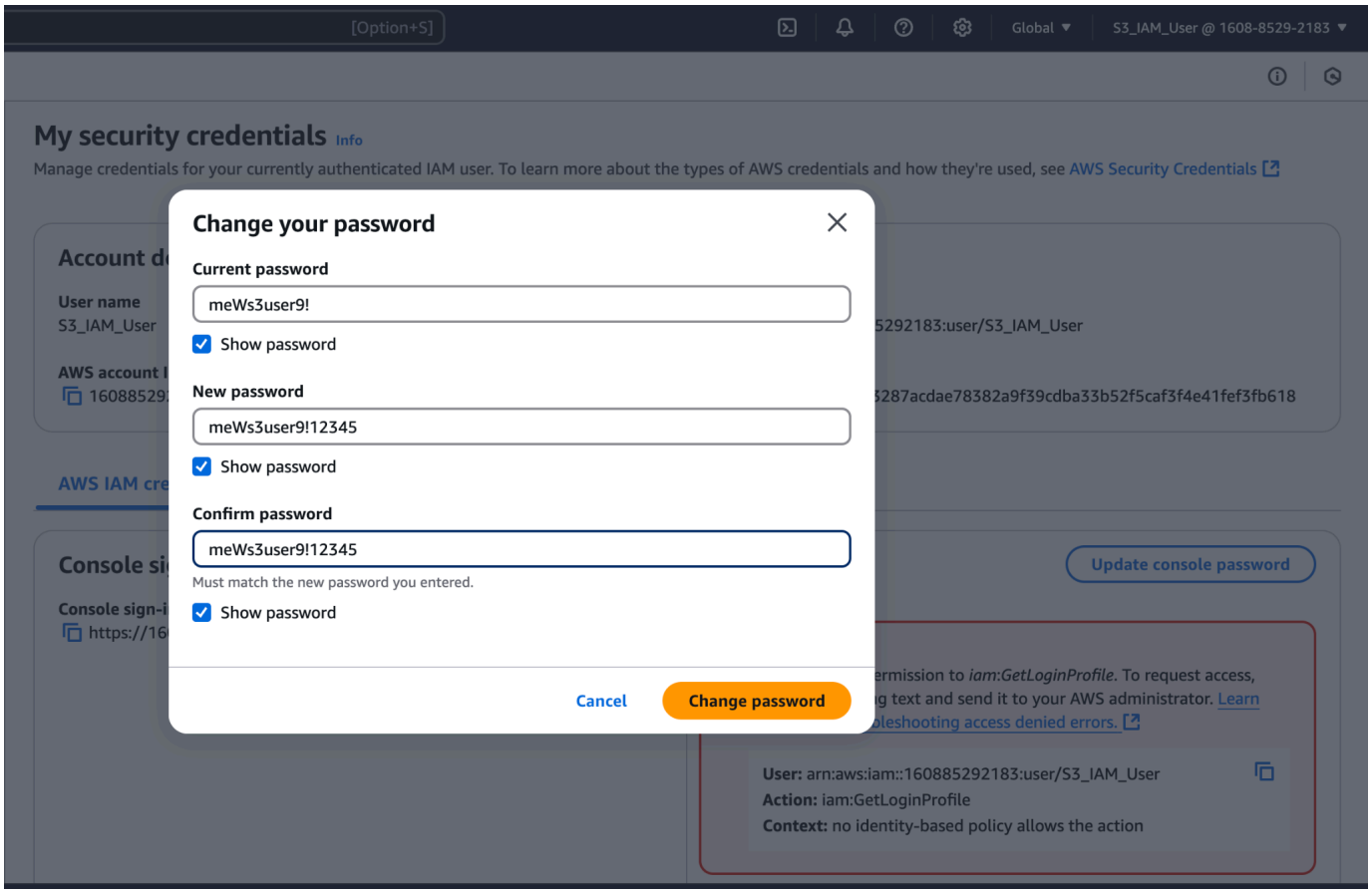


2. Create a new IAM group and attach at least one policy—perhaps IAMUserChangePassword.

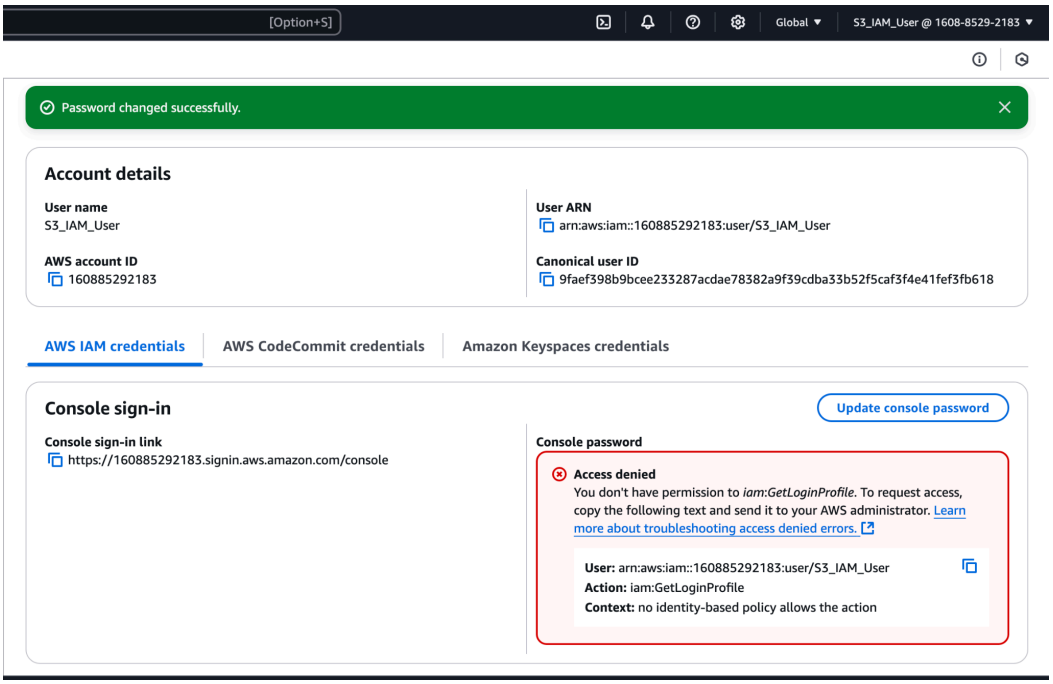


3. Add your two users to the group. - I have added the last two Users to the group.

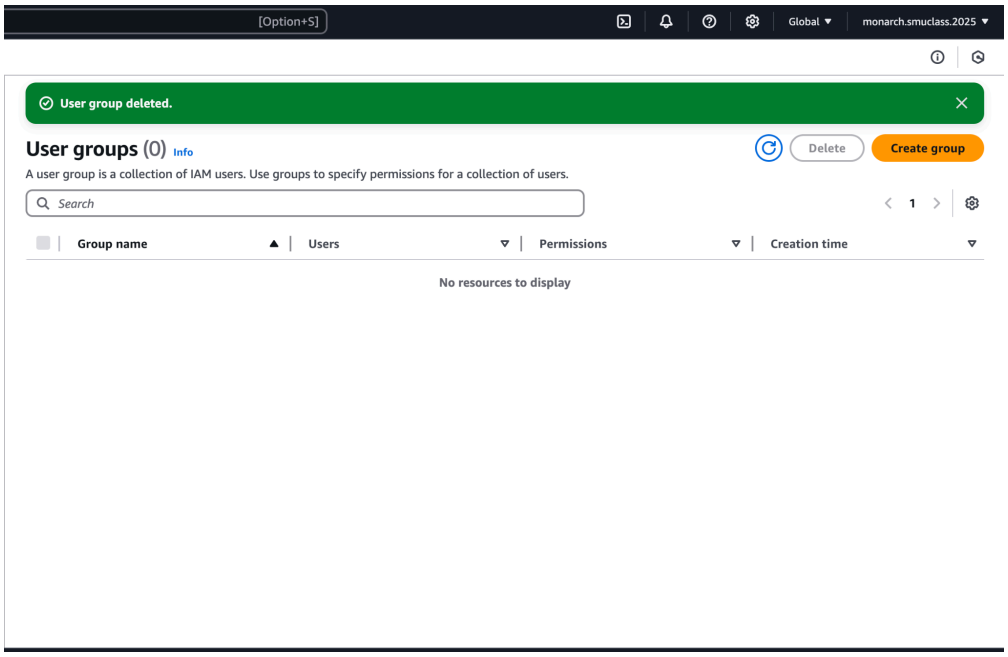
4. Confirm that your users can now change their own passwords- As you can see in the below screenshot I am able to change password as one of the user S3_IAM_User -



In the below screenshot we can see the password has been changed successfully



5. Delete the group or change its policies and then confirm that your users can no longer update their passwords- In the below screenshot i have deleted the USER GROUP



Now I am trying to change the password again in one of the user from the group and we can see that access denied is showing, because with the group, the permission is also deleted.