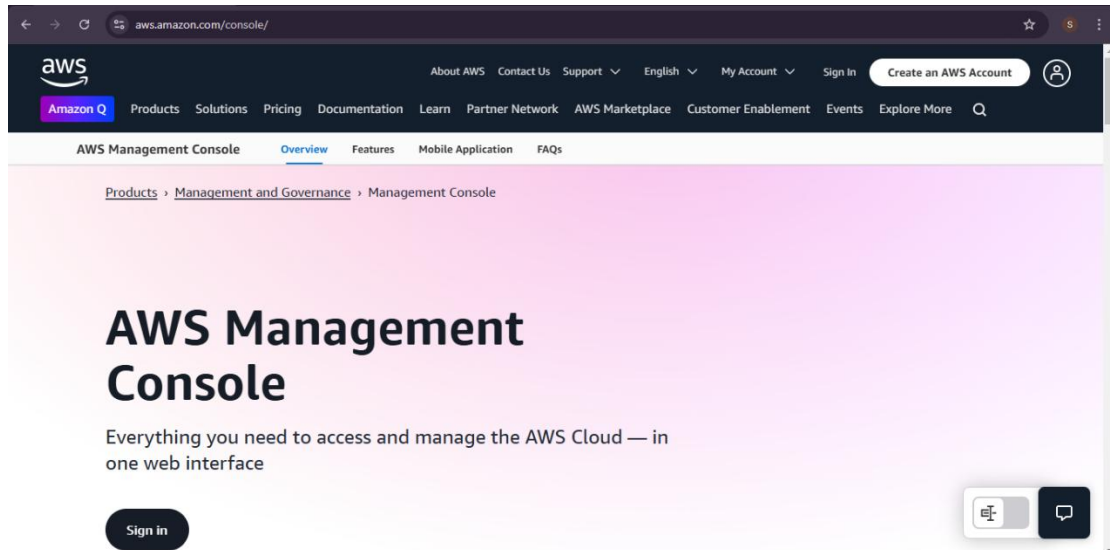


## Assignment No. – 1

**Problem Statement:** Create an account in AWS and configure a budget.

**Procedure:** Creating an account in AWS:

1. Go to the [AWS home page](https://aws.amazon.com/console/).

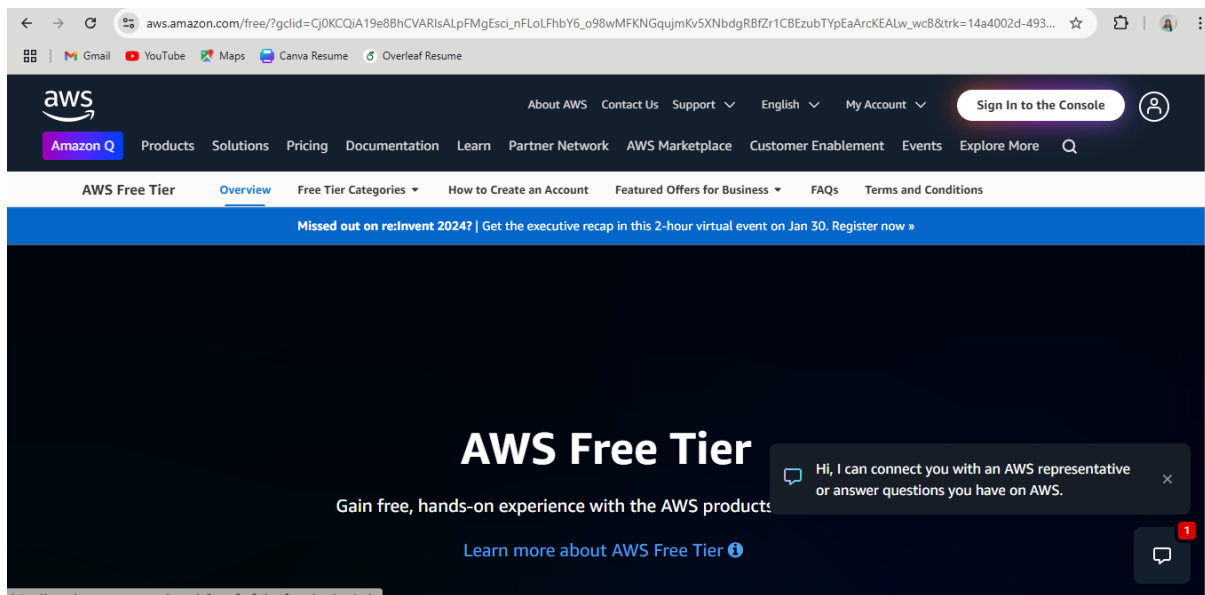


2. Select **Create an AWS account**. Make sure to create the account as a root user to unlock full functionality of the newly created AWS account.
3. Enter your account information, and then choose Continue.
4. Choose **personal** account.
5. Enter your personal information.
6. Read and accept the **AWS Customer Agreement**.
7. Choose Create Account and Continue.
8. On the Payment Information page, enter the information about your payment method, and then choose **Verify** and **Add**.
9. Next, you must verify your **phone number**. Choose your country code from the list, and enter a phone number.
10. Enter the code displayed in the **CAPTCHA**, and then submit.
11. Enter the **PIN** you receive and then choose Continue.
12. On the Select a **Support Plan** page, choose the **free tier**.
13. Finally, wait for your new account to be **activated**.

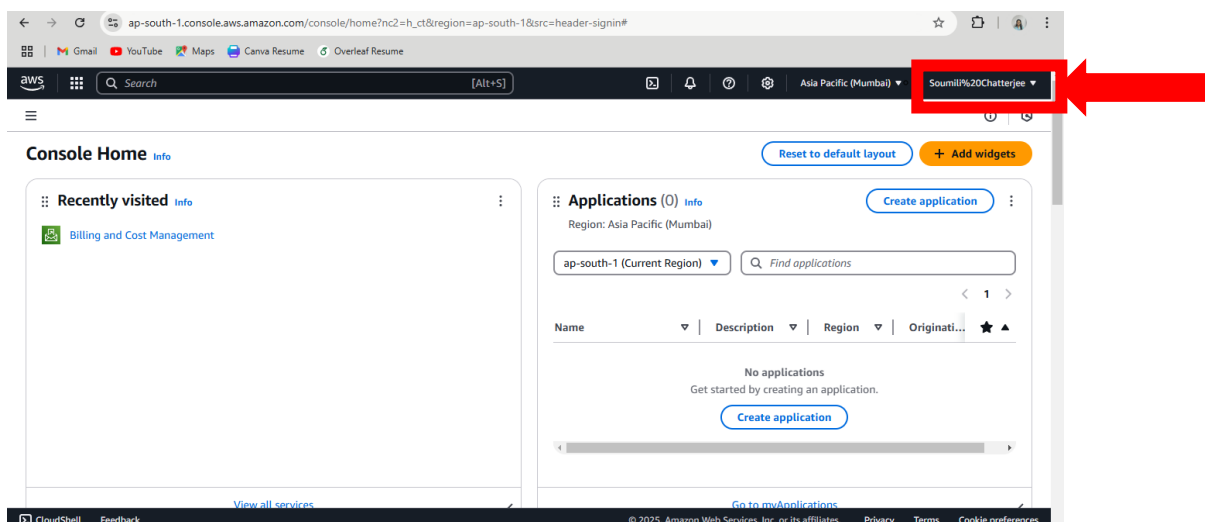
14. When your account is fully activated, you receive a **confirmation email message**. After you receive this email message, you have full access to all AWS services.

**Procedure:** Configuring a budget in AWS:

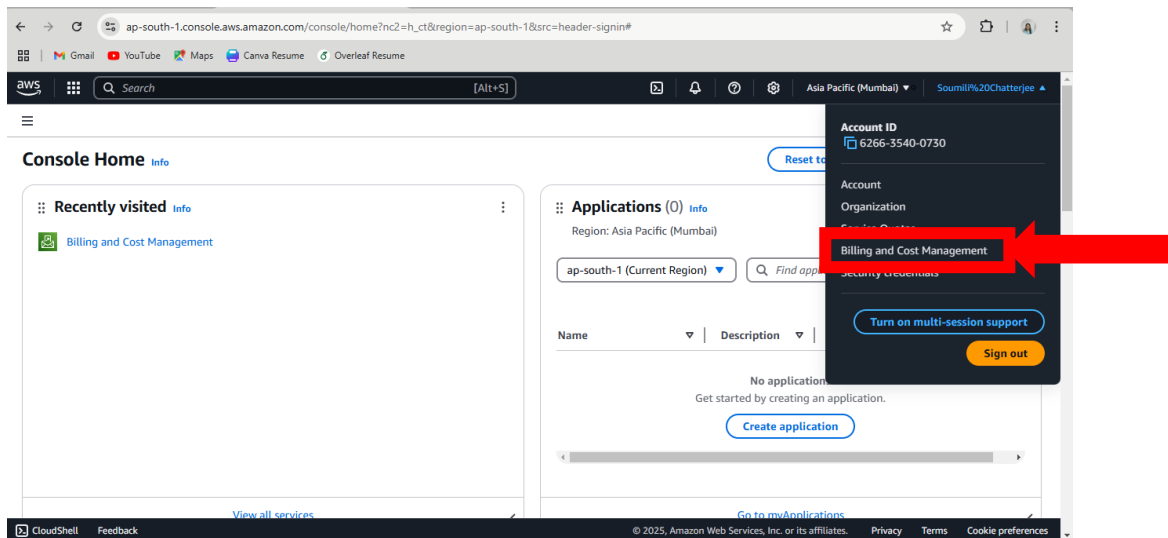
1. Sign in to the console using your credentials for your newly created account.



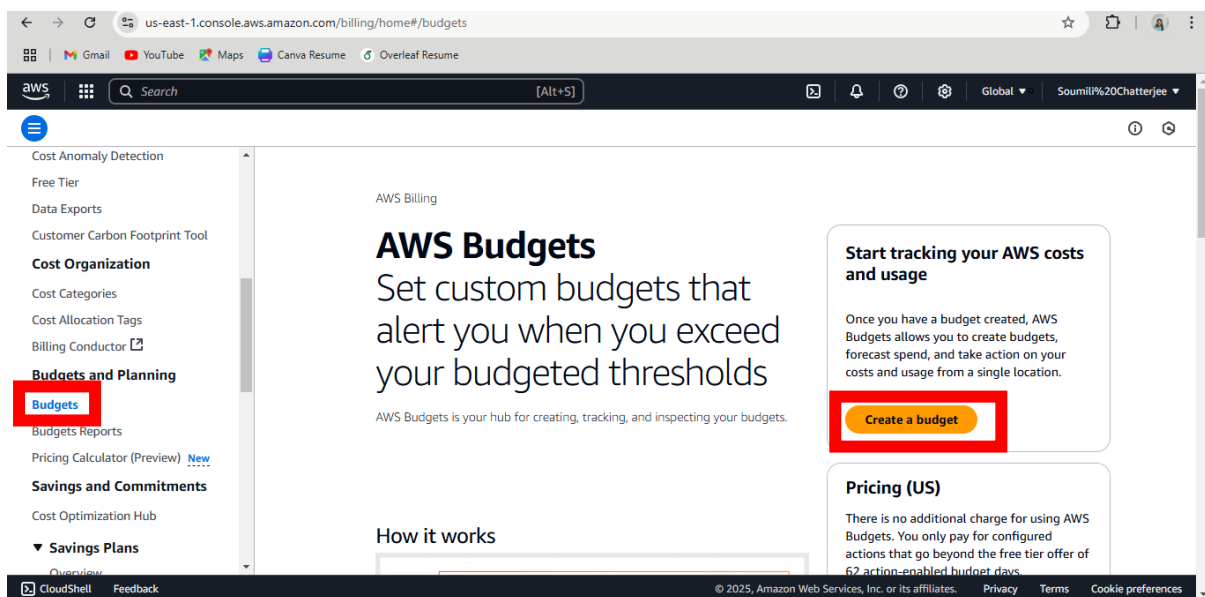
2. Now after successfully signing in we will arrive at the home page. Then click on down arrow beside your account name on the top right corner of the home page.



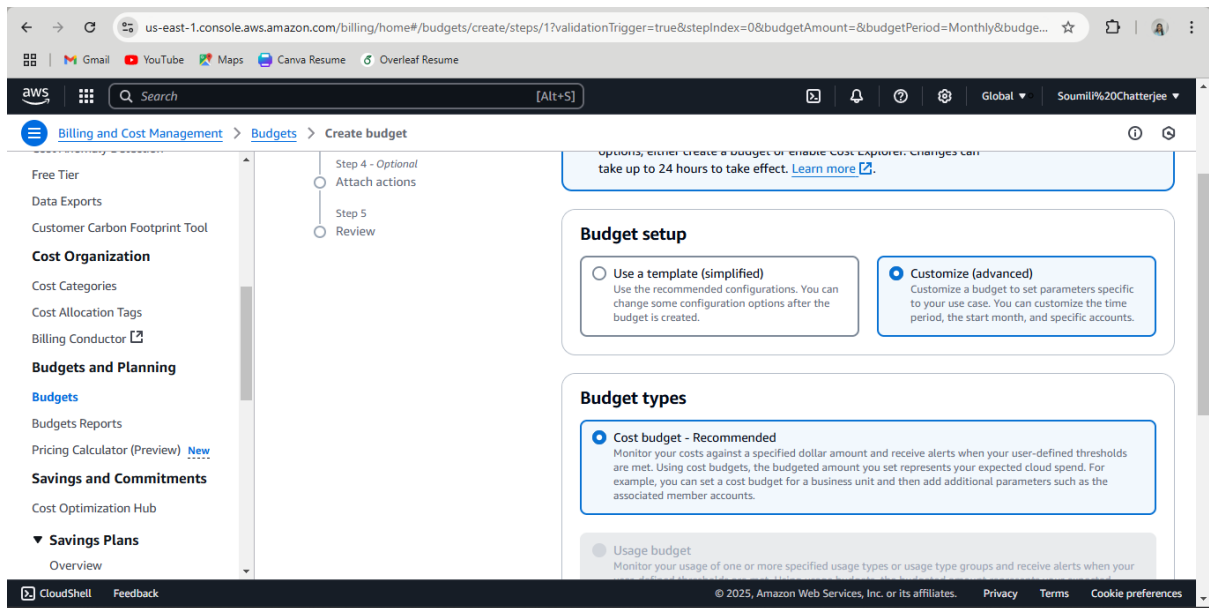
3. A drop down will appear, select **Billing and Cost Management** from the list.



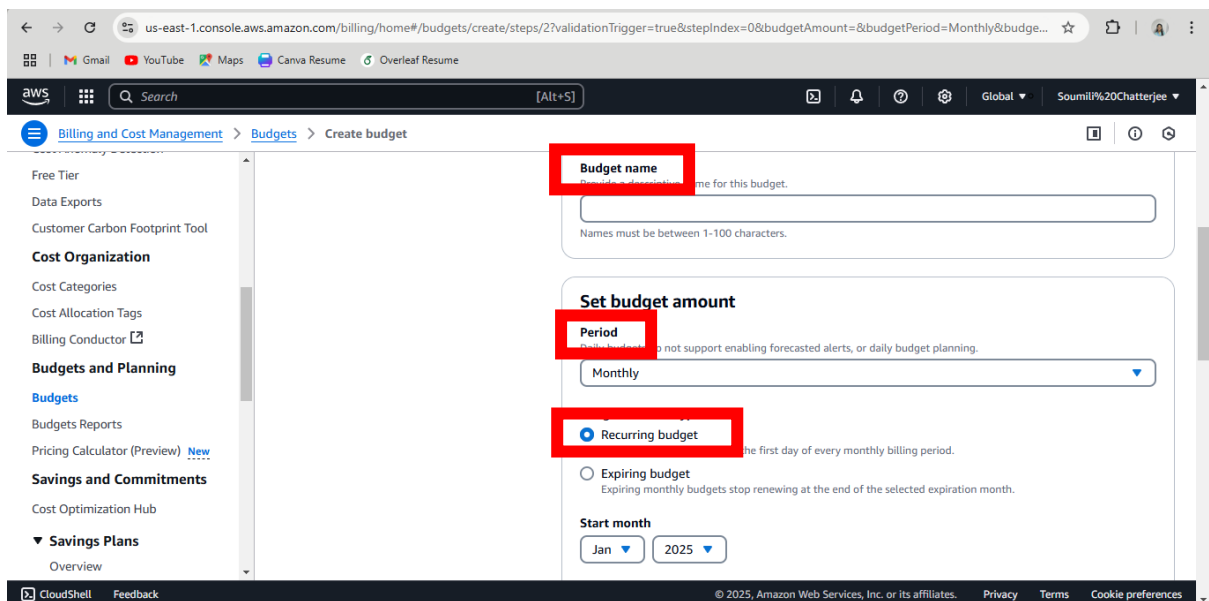
4. After arriving in **Billing and Cost Management**, go to the **Budgets** section on the left side panel under **Budgets and Planning**. Click on the **Create Budget** in the overview page to start creating a new budget for your AWS account.



5. Select **Customize** in Budget Setup section and **Cost Budget** in the Budget Types section. Then click on **Next**.



6. Enter **Budget Name**. Then set your **Budget Period**, preferably **Monthly** and set **Renewal Type** to **Recurring**.



7. Scroll down and Enter your **Budgeted amount**. For free usage enter 1 in the box. (All amounts are automatically considered in dollars "\$")

us-east-1.console.aws.amazon.com/billing/home#/budgets/create/steps/2?validationTrigger=true&stepIndex=0&budgetAmount=&budgetPeriod=Monthly&budge...

Search [Alt+S]

Billing and Cost Management > Budgets > Create budget

Free Tier  
Data Exports  
Customer Carbon Footprint Tool

**Cost Organization**  
Cost Categories  
Cost Allocation Tags  
Billing Conductor

**Budgets and Planning**  
**Budgets**  
Budgets Reports  
Pricing Calculator (Preview) [New](#)

**Savings and Commitments**  
Cost Optimization Hub

**Savings Plans**  
Overview

**Recurring budget**  
Recurring budgets renew on the first day of every monthly billing period.

☐ **Expiring budget**  
Expiring monthly budgets stop renewing at the end of the selected expiration month.

**Start month**  
Jan 2025

**Budgeting method** [Info](#)  
Fixed  
Create a budget that tracks against a single monthly budgeted amount.

**Enter your budgeted amount (\$)**  
Last month's cost:

**Budget scope** [Info](#)  
Add filtering and use advanced options to narrow the set of cost information tracked as part of this budget.

CloudShell Feedback

© 2025, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

8. No need to change any other options in the page. So, now we click on **Next**.

9. Next, we move on to **Configure Alerts**. Here, we select **Add an Alert Threshold** button.

us-east-1.console.aws.amazon.com/billing/home#/budgets/create/steps/3?validationTrigger=true&stepIndex=0&budgetAmount=1.00&budgetPeriod=Monthly&bu...

Search [Alt+S]

Billing and Cost Management > Budgets > Create budget

Free Tier  
Data Exports  
Customer Carbon Footprint Tool

**Cost Organization**  
Cost Categories  
Cost Allocation Tags  
Billing Conductor

**Budgets and Planning**  
**Budgets**  
Budgets Reports  
Pricing Calculator (Preview) [New](#)

**Savings and Commitments**  
Cost Optimization Hub

**Savings Plans**  
Overview

Step 5  
Review

In order to be notified on the state of your budget, you can create up to 5 different alerts based on your budgeted amount. For example, create an alert to notify you when you have reached 75% of your budgeted amount.

Start by defining alert thresholds, then specify alert recipients and how you would like them to be notified. Alerts can be sent via email, AWS SNS, and AWS Chatbot.

**Budget amount**  
Your budgeted amount: **\$1.00**  
To change your budgeted amount, go back to step 2.

No alert thresholds created.

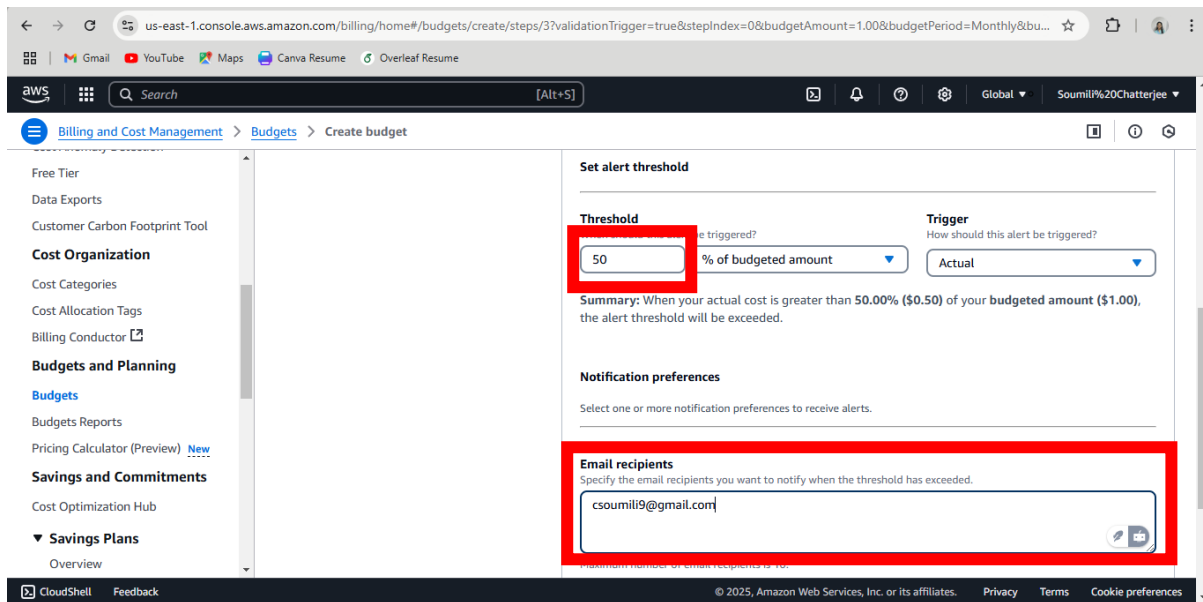
**Add an alert threshold**

Cancel Previous **Next**

CloudShell Feedback

© 2025, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences

10. Now set **Alert #1**. Give a suitable threshold value in percentage of the actual budgeted amount. Also, mention the email address where AWS should send you the alerts.

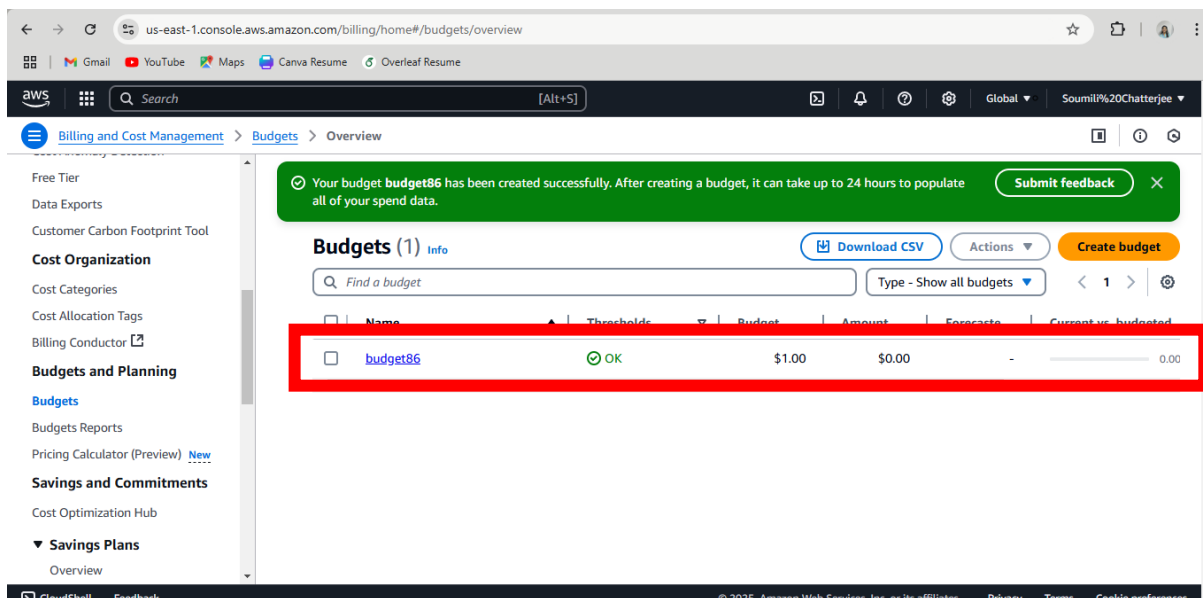


11. Click on **Next**.

12. Again, click on **Next** after reviewing your alert summary.

13. Click on **Create Budget** button to finally create your Budget.

14. After this step you will be redirected to the **overview** page where all your budgets will be shown. You can see your newly created budget in the table format with various information related to it. Our Budget creation is complete!

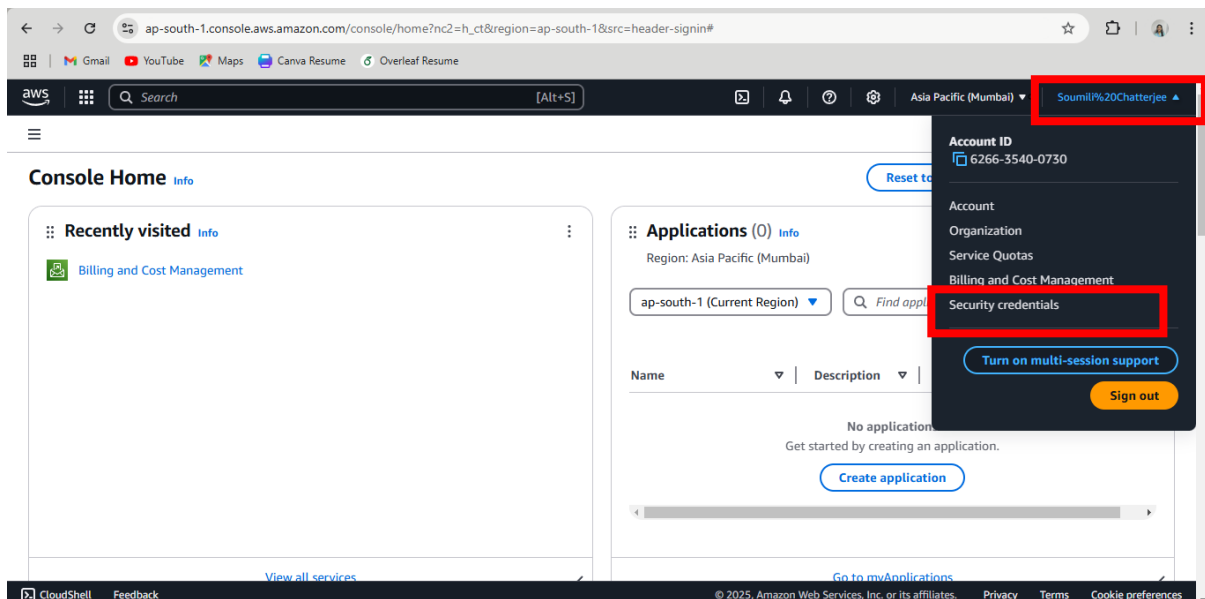


## Assignment No. – 2

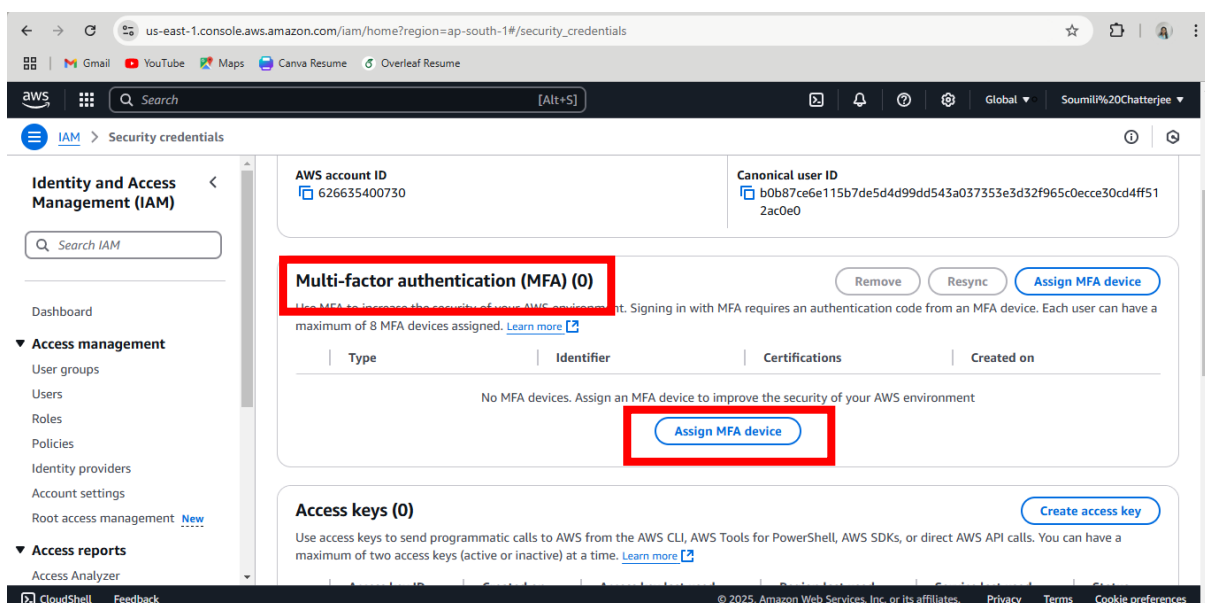
**Problem Statement:** Create MFA for authentication.

### **Procedure:**

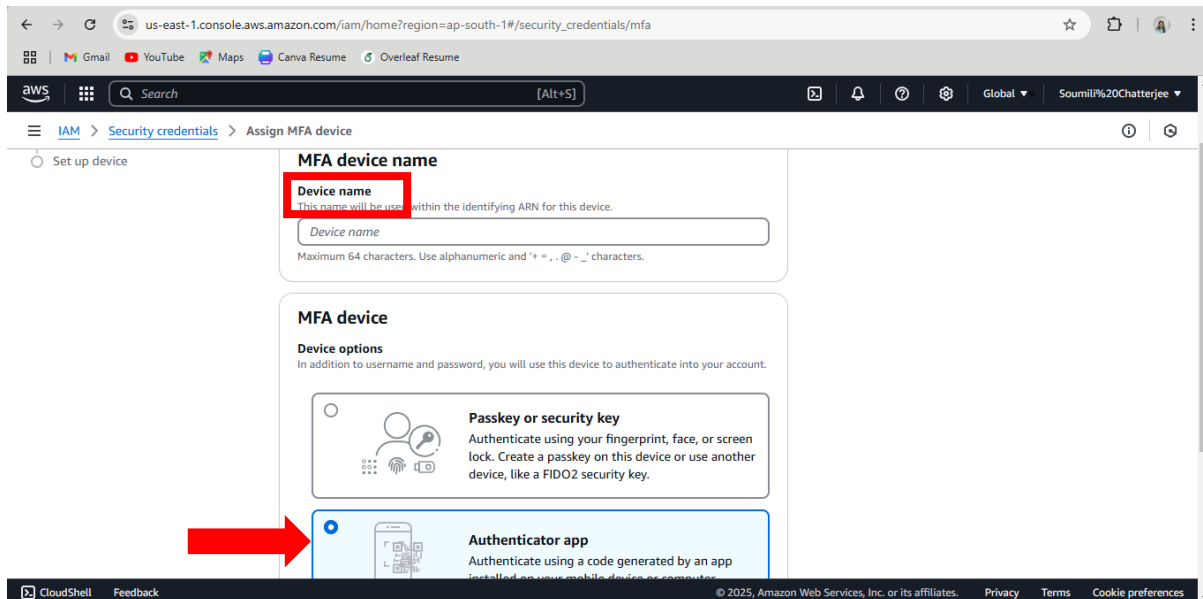
1. Sign-in to your AWS console. Then select the down arrow beside your account name in the top right side of the page.
2. Now select **Security Credentials** option in the drop-down menu.



3. Now after arriving in **My Security Credentials** page, scroll down to **Multi-Factor Authentication (MFA)** section. Click on the **Assign MFA device** button.

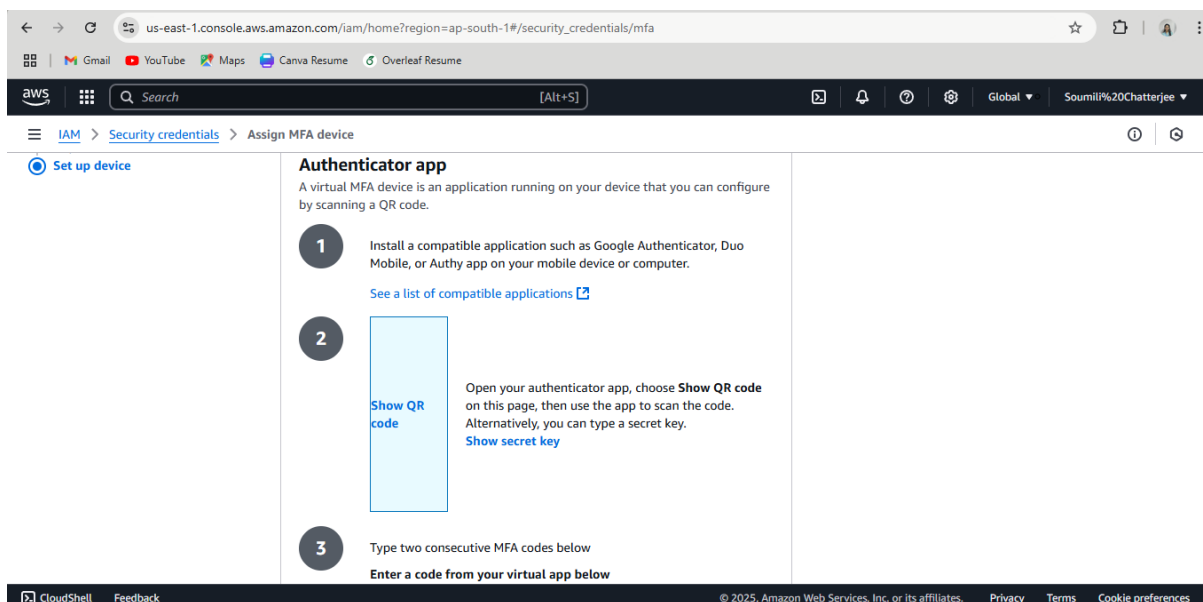


4. Next Assign a **unique device name**. Select **Authenticator app** in Select MFA device section.



5. Click on **Next**.

6. After that you have download an **authenticator app** from play store in your android device. **Google authenticator** is preferred. After installation, click on the **Show QR code** box here in the website. **Scan the QR code** with your authenticator app. Your device name given will show up in your authenticator main page.



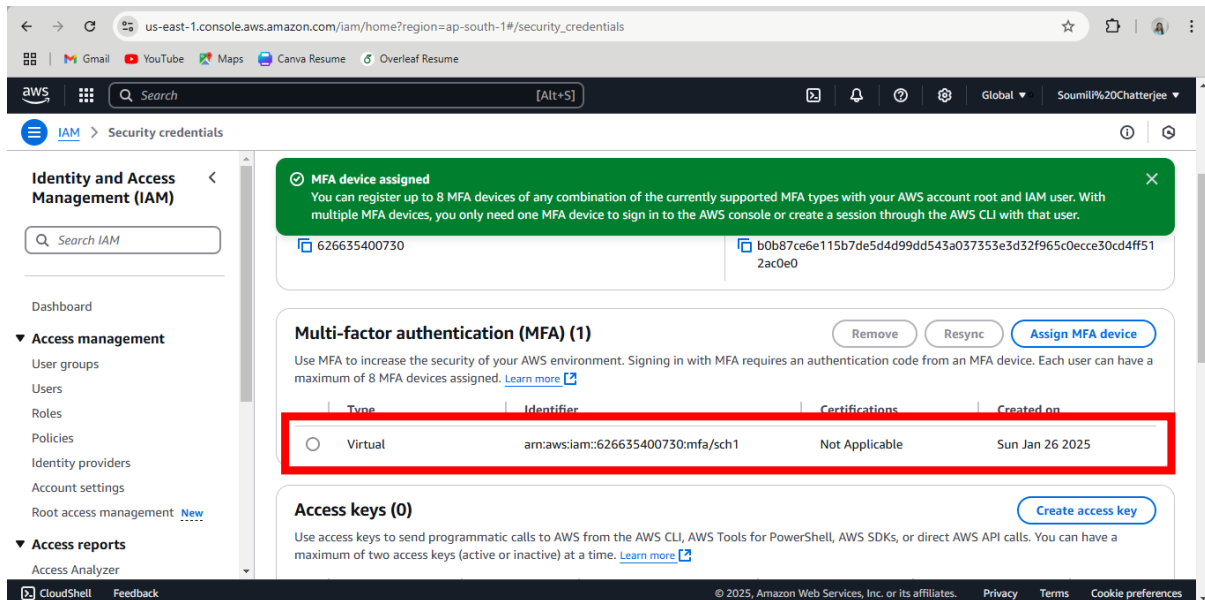
7. We will see a certain unique combination appearing against our given device name for our AWS account and stays only for 30 seconds. Enter 2



consecutive codes appearing in the given box in the website to authenticate your MFA.

8. After successfully verifying your MFA, click on the **Add MFA** button.

9. You will be redirected to the security credentials page and see your newly added MFA with your given device name for your account.



10. Hence, we have successfully added an **MFA device**.

11. Now sign-out and re-login to the console.

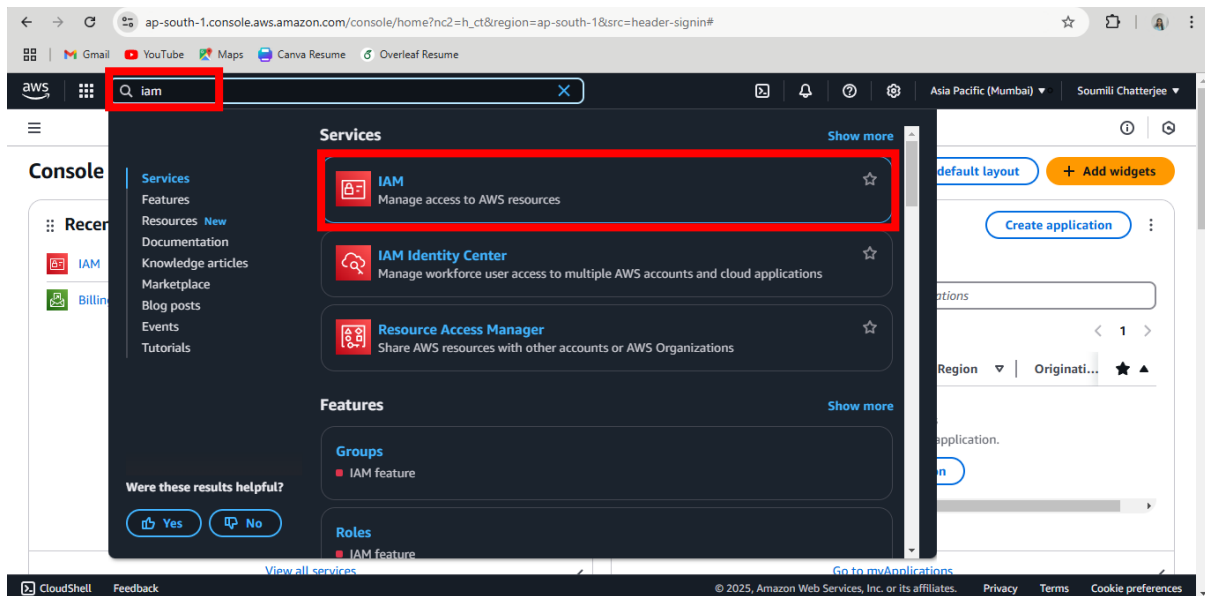
12. Now after providing user email and password, from now on you have to enter the **MFA code** which is given by the authenticator app in your phone.

## Assignment No. – 3

**Problem Statement:** Create IAM user and give full access to S3.

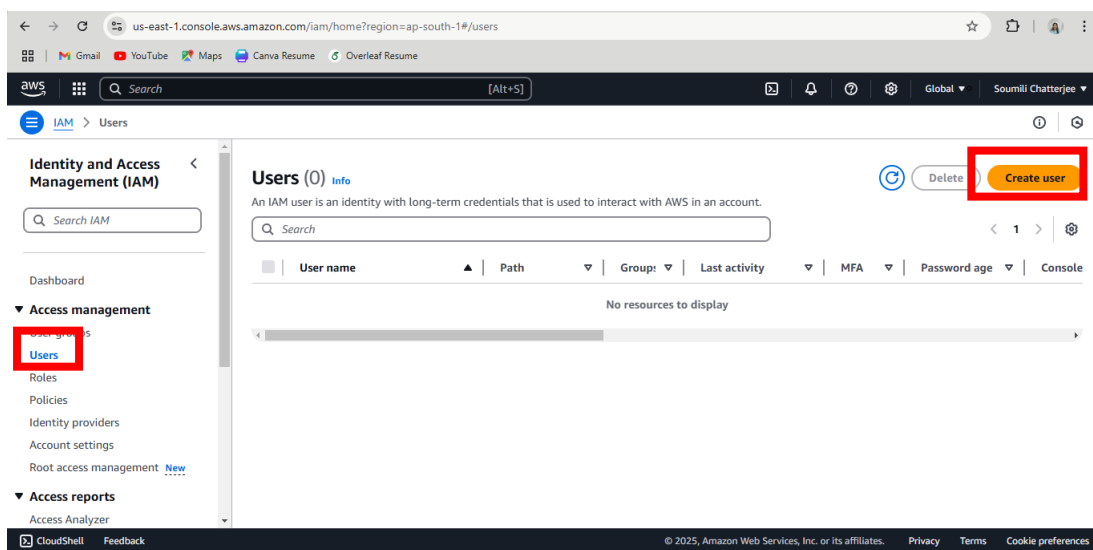
### **Procedure:**

1. Sign in to your console (as root user).
2. On the top side of the page go to the Search bar and type “IAM”.
3. Click on the first result showing “IAM”.



4. We are then redirected to the Identity and Access Management (IAM) dashboard. We then have to select the **users** option in the left side panel under **Access Management**.

5. Next click on **Create Users** button in the **Users** page.



6. After that you have to create a user and specify user details:
  - a. Specify the name of the user.
  - b. Check the “**Provide user access to the AWS Management Console**” box.
  - c. Select the option “**I want to create an IAM user**”.
  - d. Select **custom password** and enter it.
  - e. Uncheck the “**Users must create a new password at next sign-in**” box.
  - f. Then click on **next**.

Step 3  
Review and create

Step 4  
Retrieve password

Step 5  
Create user

User name

soumili@89

☒ Provide user access to the AWS Management Console - optional

Are you providing console access to a person?

User type

☐ Specify a user in Identity Center - Recommended

☒ I want to create an IAM user

Console password

☐ Autogenerated password

☒ Custom password

Enter a custom password for the user.

Must be at least 8 characters long

Must include at least three of the following mix of character types: uppercase letters (A-Z), lowercase letters (a-z), numbers (0-9), and symbols ! @ # \$ % ^ & \* ( ) \_ + - (hyphen) = [ ] { } | ' "

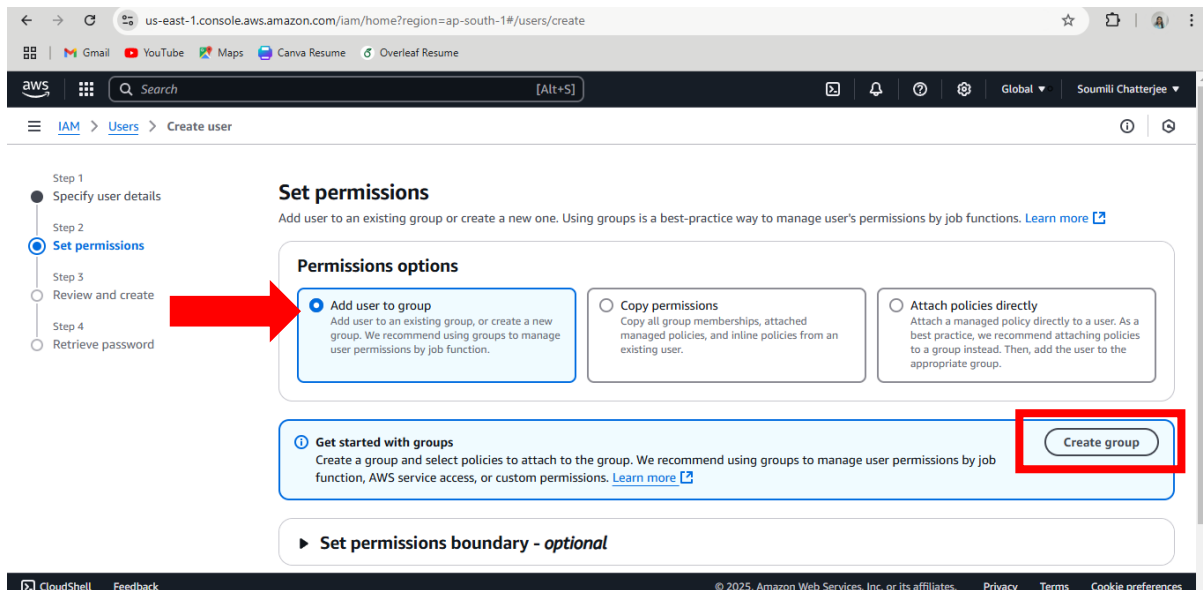
Show password

☐ Users must create a new password at next sign-in - Recommended

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](#)

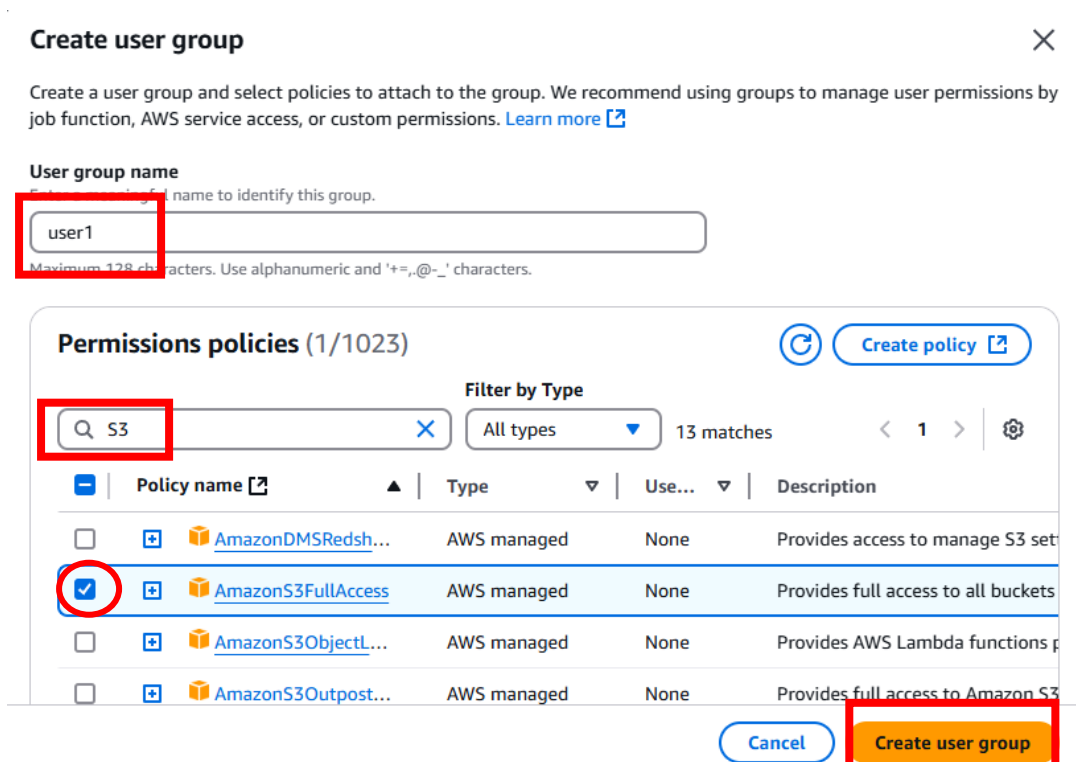
Cancel Next

7. Now under **Permissions** Options, select **Add user to Group** option.
8. Under **User Groups** click on **Create Group** button.



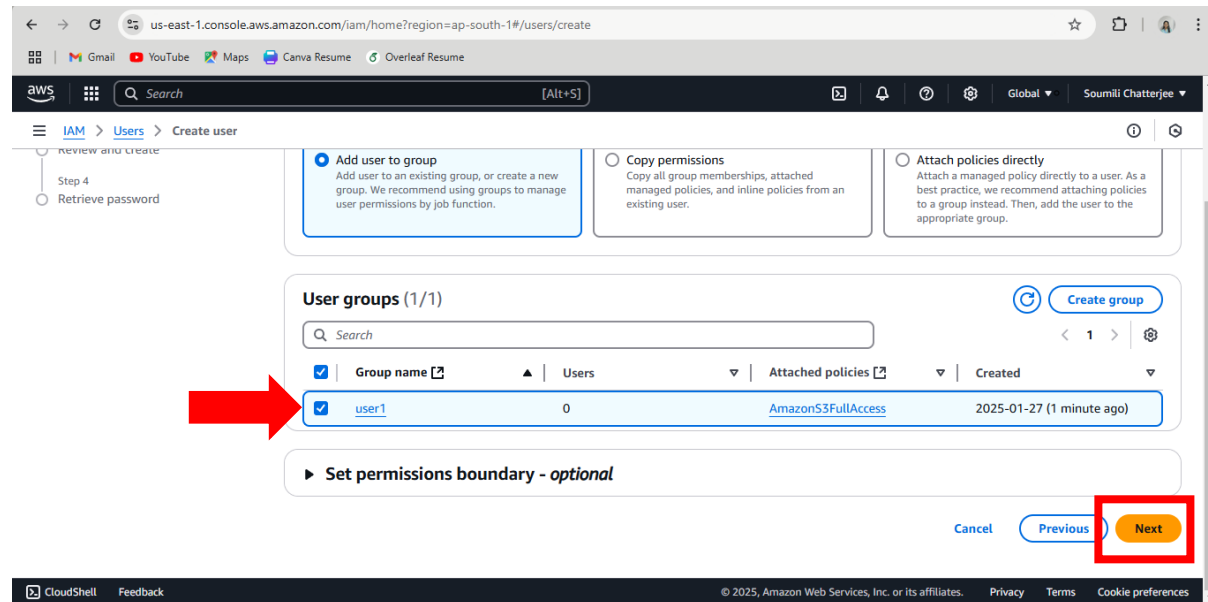
9. A pop-up will appear where you have to specify the new group name and edit the permissions policies associated with it:

- Enter the **User Group Name**.
- Next in the find policies search bar type **S3** as we have to give permission only for S3.
- Select the **second option**.
- Then click on **Create User Group**.

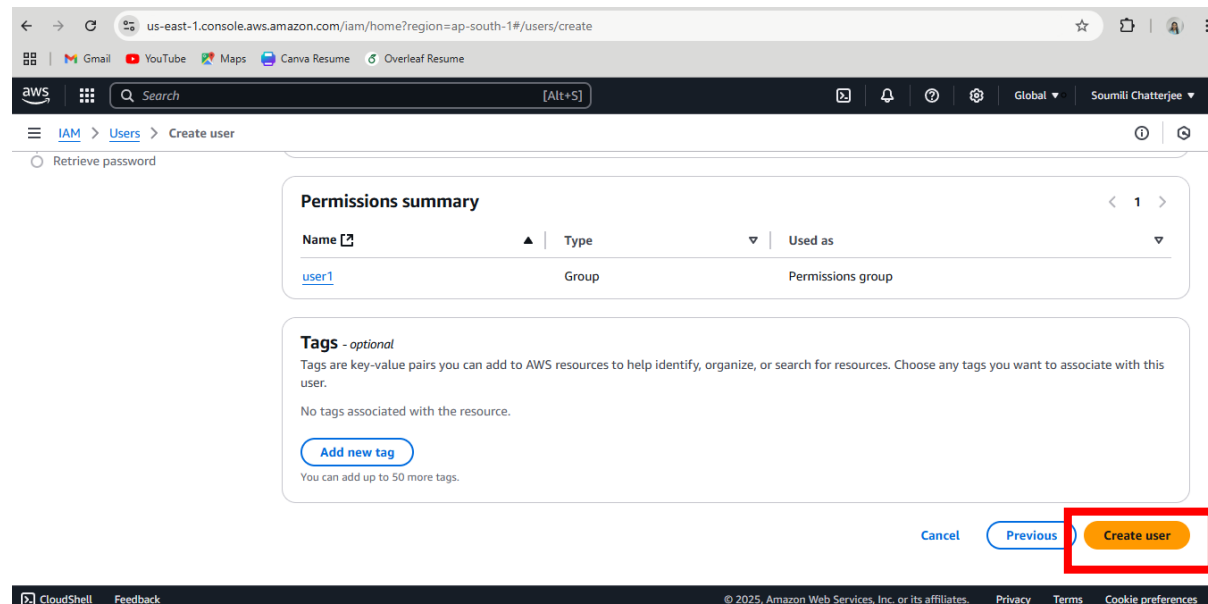


10. Now the pop-up closes and under the **User Groups** section our newly created group is visible in a table format. Select the group.

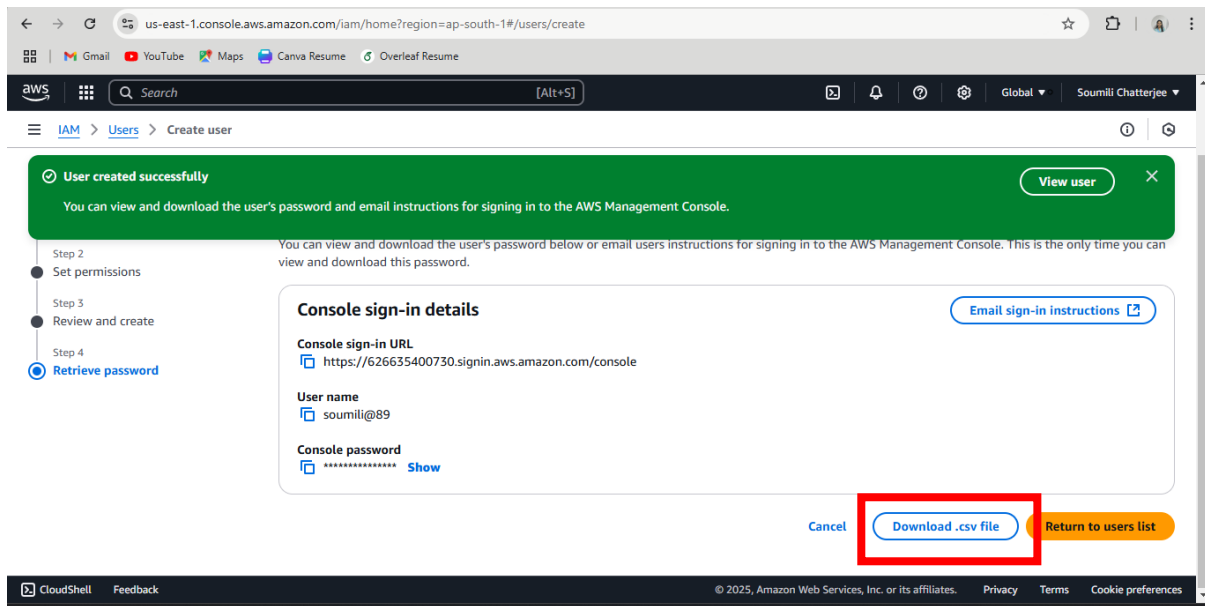
11. Then click on **Next**.



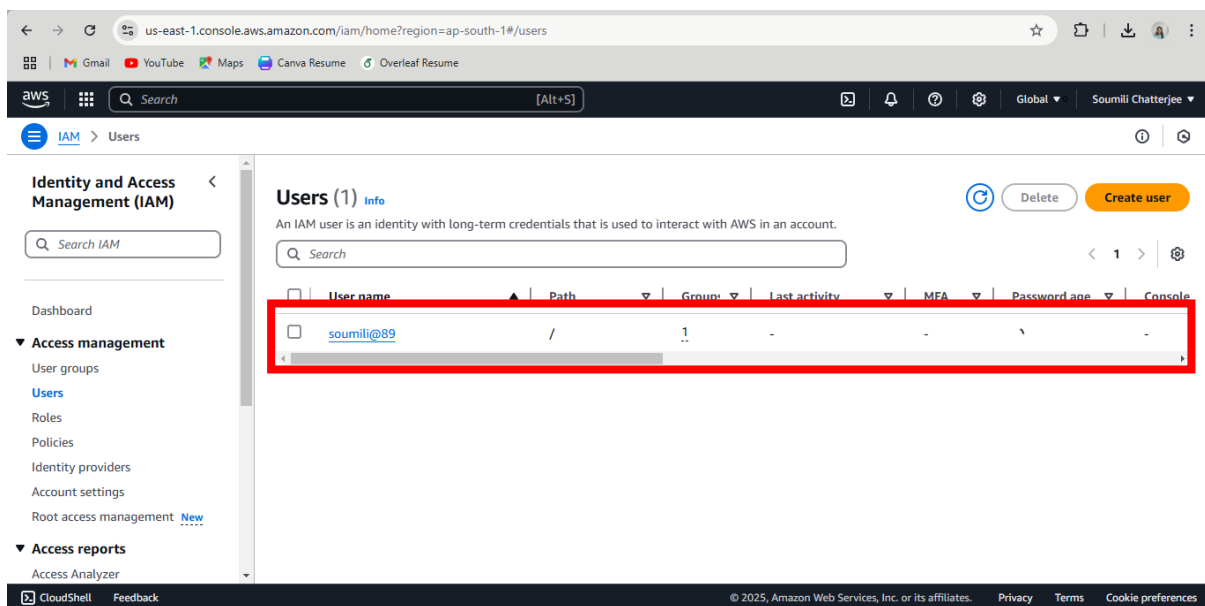
12. We arrive at the **Review and Create** page. After reviewing click on the **Create User** button.



13. Next, we arrive at the **Retrieve Password** page where we can download a **.csv** file or **email** the sign-in details of the newly created IAM user.



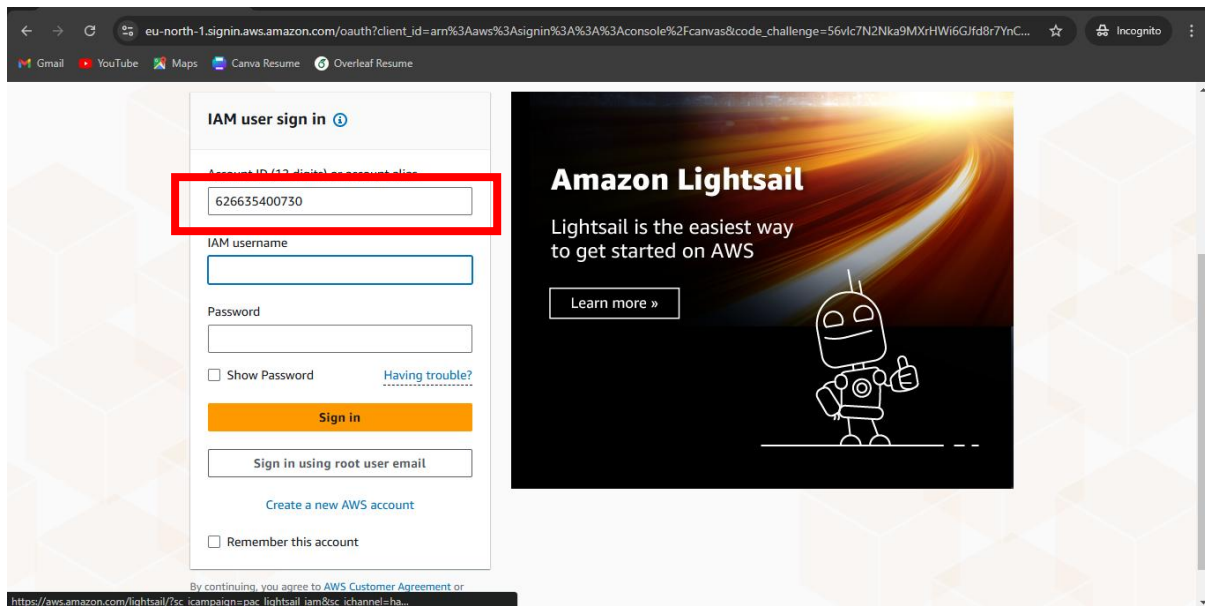
14. After that we can return to users list and see that our new user has been added to the users' table.



15. Now, we logout from our console.

16. Next, we again try to login to the console, but this time in **incognito mode**. And now, we select **IAM user login**.

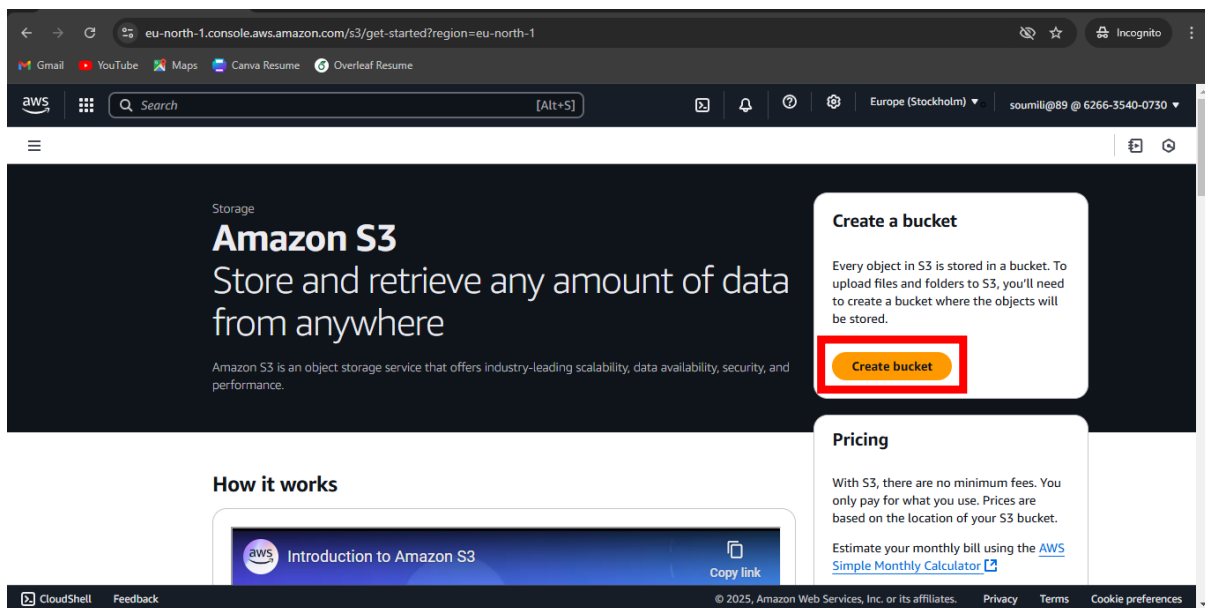
17. Here we will use the **link in our downloaded .csv file** which if used in our browser will redirect us to the login page with the Account ID already entered.



18. Enter the credentials and click sign-in.

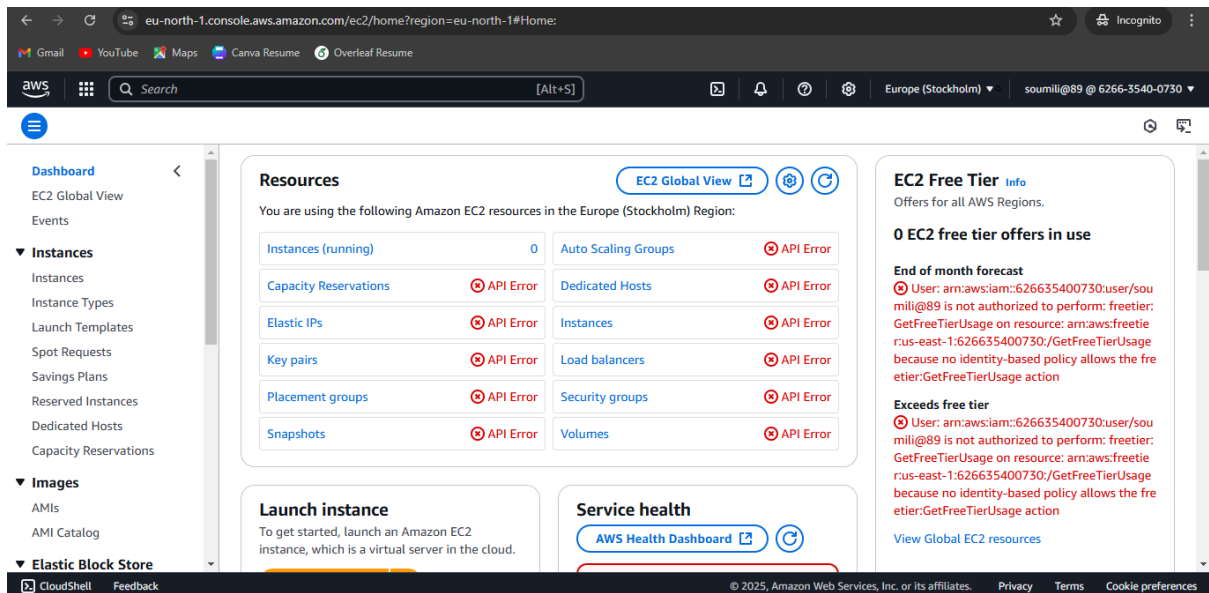
19. Next, you can type **S3** in the search box and select the first option.

20. Here we get to **Create Bucket**. Hence we have full access of **S3**.



21. Now to check our limits let us search **EC2** in search bar. Select the first choice.

22. Here, we encounter **API error**. This is proof that we do not have access to **EC2**. Hence, we have successfully restricted access to our **IAM user**.



23. Thus, we have successfully created an **IAM user** and given it only **S3** access.

24. Now, we can **logout**.