

Name of Student : Bharat Suresh Patel

Roll Number : B-35

LAB Practical Number : 01

Title of LAB Practical : To setup AWS account from start: Signup using free tier, billing alarm & Creating Iam user.

DOP : 29-01-2024

DOS : 30-01-2024

CO Mapped :

C01

PO Mapped :

P01,P02,P03,PS01,
PS02


Signature :

Steps for creating AWS Free Tier Account:

Enter your email and account name:

Explore Free Tier products with a new AWS account.

To learn more, visit aws.amazon.com/free.



Sign up for AWS

Root user email address
Used for account recovery and some administrative functions

AWS account name
Choose a name for your account. You can change this name in your account settings after you sign up.

Verify email address


OR

[Sign in to an existing AWS account](#)

Verify your email id:

Explore Free Tier products with a new AWS account.

To learn more, visit aws.amazon.com/free.



Sign up for AWS

Confirm you are you

Making sure you are secure -- it's what we do.

We sent an email with a verification code to **2023.Bharat.Patel@ves.ac.in**. ([not you?](#))

Enter it below to confirm your email.

Verification code

Verify

[Resend code](#)


Didn't get the code?

- Codes can take up to 5 minutes to arrive.
- Check your spam folder.

Create a password and continue:

Explore Free Tier products with a new AWS account.

To learn more, visit aws.amazon.com/free.



Sign up for AWS

Create your password

✔

It's you! Your email address has been successfully verified.

✕

Your password provides you with sign in access to AWS, so it's important we get it right.

Root user password

Confirm root user password

Continue (step 1 of 5)


OR


Sign in to an existing AWS account


Enter your contact information and proceed:

Free Tier offers

All AWS accounts can explore 3 different types of free offers, depending on the product used.

**Always free**
Never expires

**12 months free**
Start from initial sign-up date

**Trials**
Start from service activation date

Sign up for AWS

Contact Information

How do you plan to use AWS?

☒ Business - for your work, school, or organization


☐ Personal - for your own projects

Who should we contact about this account?

Full Name

Organization name

Phone Number


 +91


Country or Region

Address

Enter billing information and Pan Card number then verify and continue:

Secure verification





 We will not charge you for usage below AWS Free Tier limits. We may temporarily hold up to \$1 USD (or an equivalent amount in local currency) as a pending transaction for 3-5 days to verify your identity.



Sign up for AWS

Billing Information

Credit or Debit card number



AWS accepts all major credit and debit cards. To learn more about payment options, review our [FAQ](#)


Expiration date

Month

▼

Year

▼

Security code 

CVV/CVC

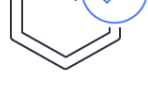
Cardholder's name

☐ Save card information for faster future payments

Securely save card information payments as per RBI guidelines. [Learn more.](#)

Billing address

☒ Use my contact address



Cardholder's name

☐ Save card information for faster future payments

Securely save card information payments as per RBI guidelines. [Learn more.](#)

Billing address

☒ Use my contact address

A-002/Ec-52, Magal Geet Chs
VASAI-VIRAR Maharashtra 401208
IN

☐ Use a new address

Do you have a PAN?

Permanent Account Number (PAN) is a ten-digit alphanumeric number issued by the Indian Income Tax Department. This 10-digit number is printed on the front of your PAN card.

☒ Yes

☐ No

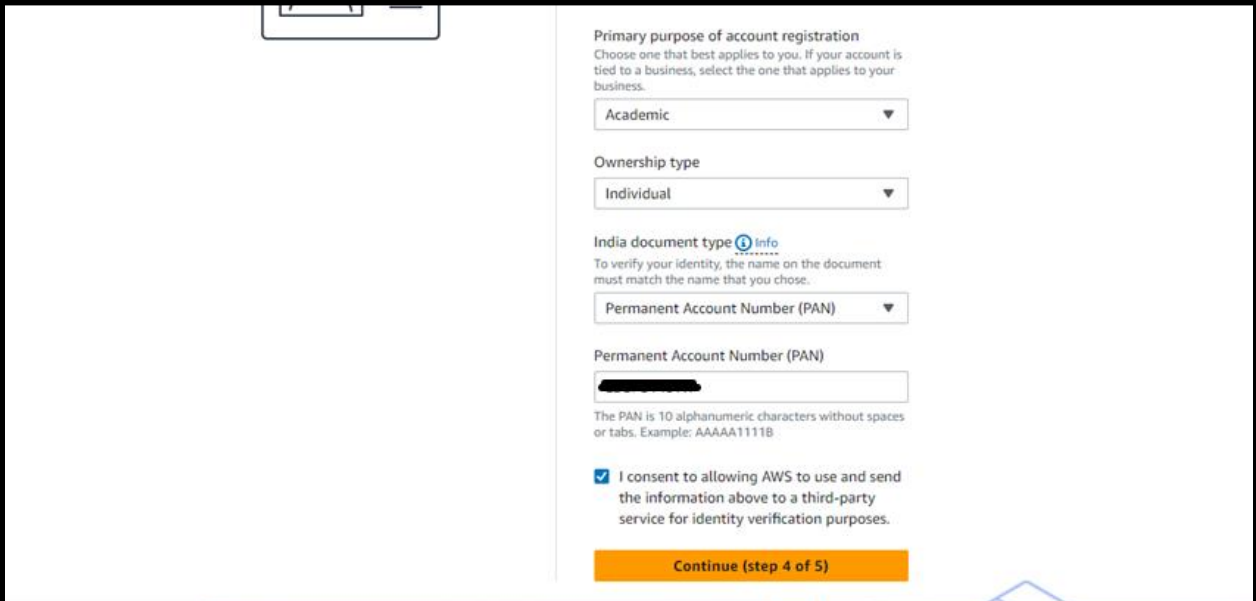
You can go on the Tax Settings Page on Billing and Cost Management Console to update your PAN information.

Enter PAN now or provide it later

Verify and Continue (step 3 of 5)

You might be redirected to your bank's website to authorize the verification charge.

Enter purpose of account registration and PAN no (If you haven't added in previous step)



Primary purpose of account registration
Choose one that best applies to you. If your account is tied to a business, select the one that applies to your business.

Academic ▼

Ownership type
Individual ▼

India document type [Info](#)
To verify your identity, the name on the document must match the name that you chose.

Permanent Account Number (PAN) ▼

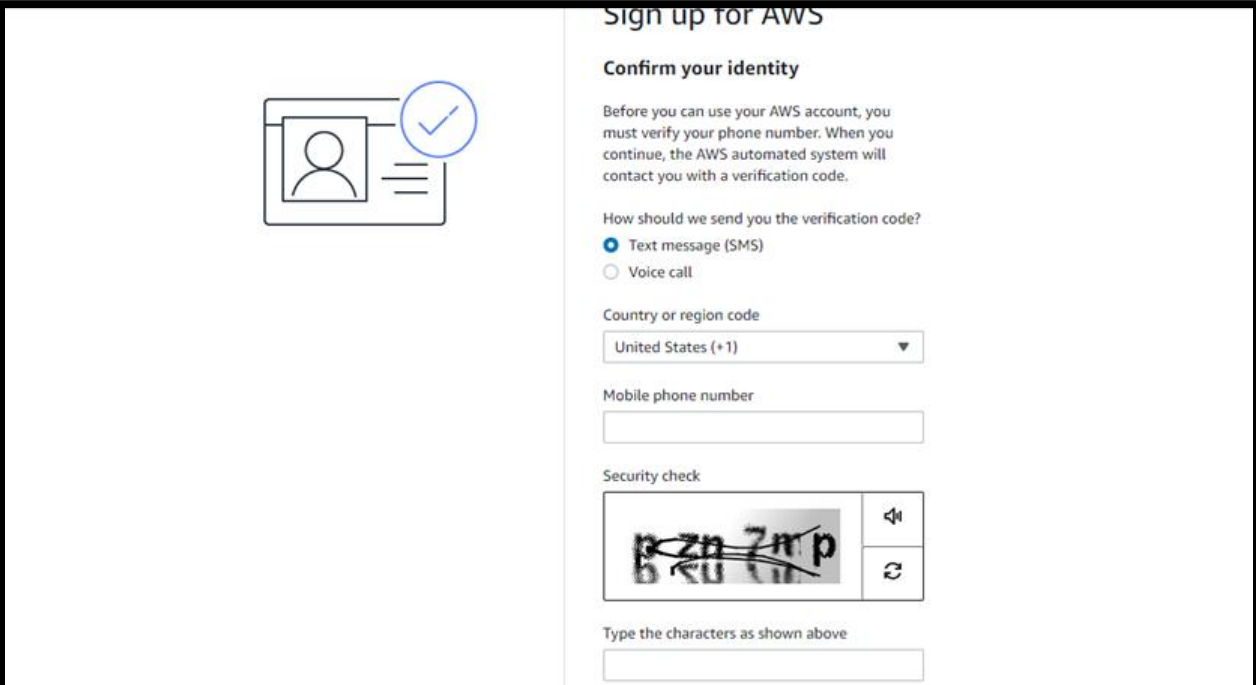
Permanent Account Number (PAN)
[Redacted]

The PAN is 10 alphanumeric characters without spaces or tabs. Example: AAAAAA1111B

☒ I consent to allowing AWS to use and send the information above to a third-party service for identity verification purposes.

Continue (step 4 of 5)

Verify your mobile no. and fill the captcha:



Sign up for AWS

Confirm your identity


Before you can use your AWS account, you must verify your phone number. When you continue, the AWS automated system will contact you with a verification code.

How should we send you the verification code?

☒ Text message (SMS)
☐ Voice call

Country or region code
United States (+1) ▼

Mobile phone number
[Input field]

Security check


Type the characters as shown above
[Input field]

Choose free plan:


Sign up for AWS

Select a support plan

Choose a support plan for your business or personal account. [Compare plans and pricing examples](#)
[You can change your plan anytime in the AWS Management Console.](#)


☒ **Basic support - Free**

- Recommended for new users just getting started with AWS
- 24x7 self-service access to AWS resources
- For account and billing issues only
- Access to Personal Health Dashboard & Trusted Advisor




☐ **Developer support - From \$29/month**


- Recommended for developers experimenting with AWS
- Email access to AWS Support during business hours
- 12 (business)-hour response times



☐ **Business support - From \$100/month**



- Recommended for running production workloads on AWS
- 24x7 tech support via email, phone, and chat
- 1-hour response times
- Full set of Trusted Advisor best-practice recommendations





Need Enterprise level support?
From \$15,000 a month you will receive 15-minute response times and concierge-style experience with an assigned Technical Account Manager. [Learn more](#)

Your account has been created:



Congratulations

Thank you for signing up for AWS.

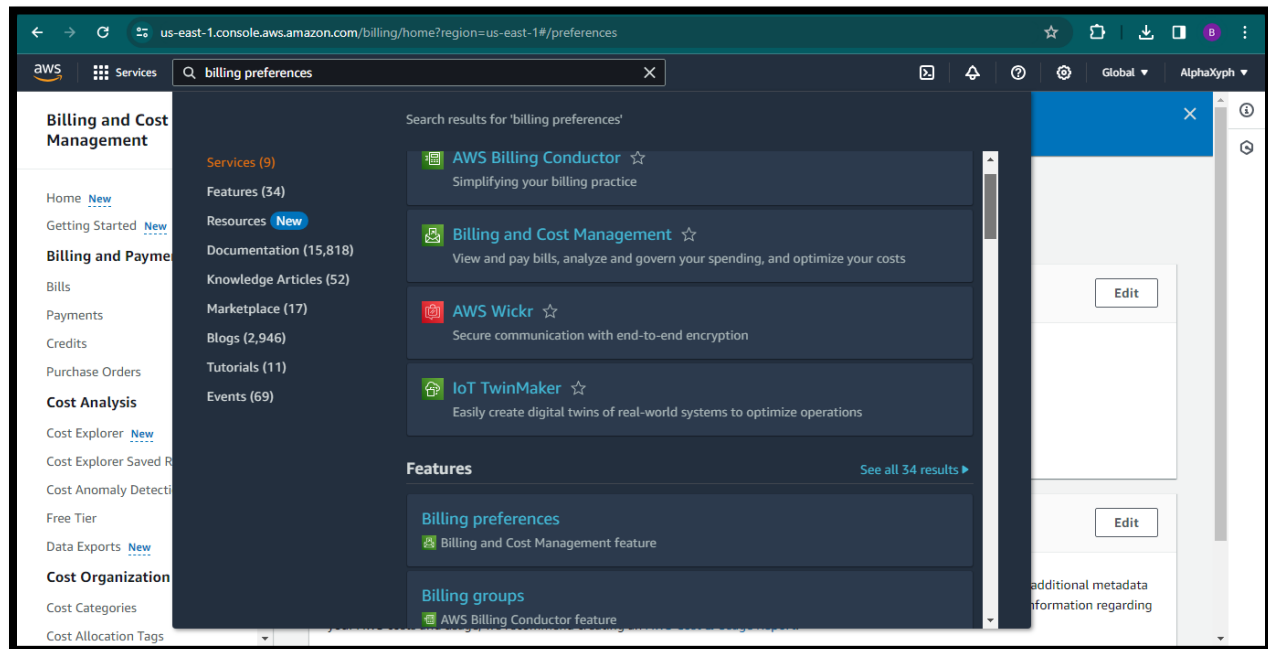
We are activating your account, which should only take a few minutes. You will receive an email when this is complete.

[Go to the AWS Management Console](#)

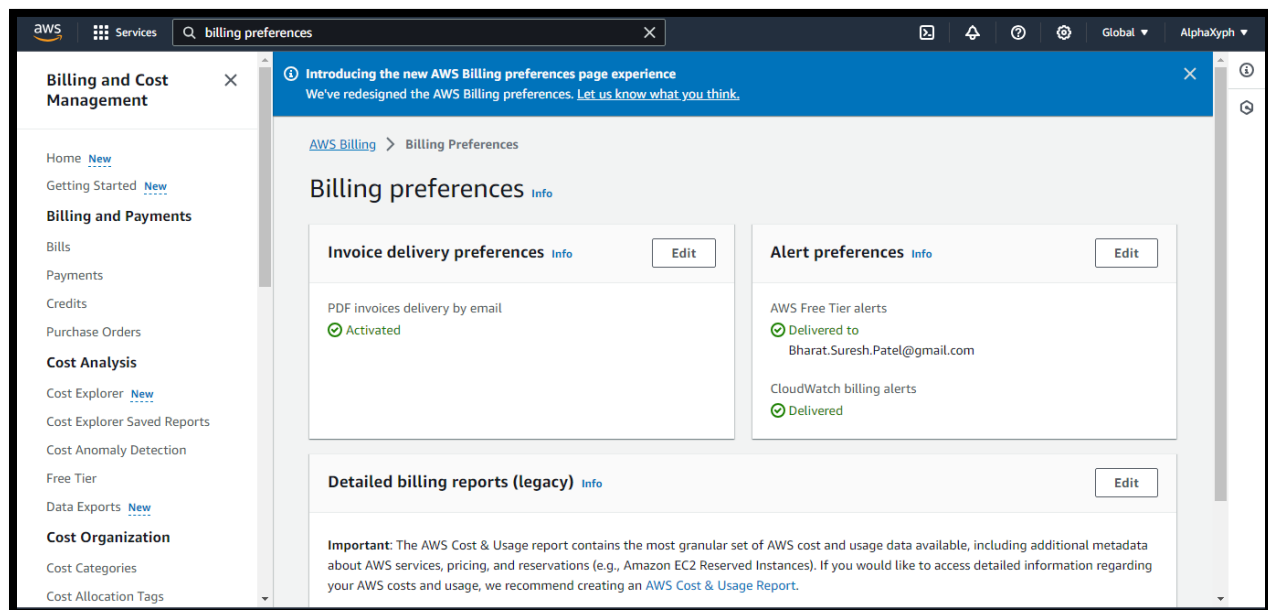
[Sign up for another account](#) or [contact sales](#).

Steps for setting up billing preferences:

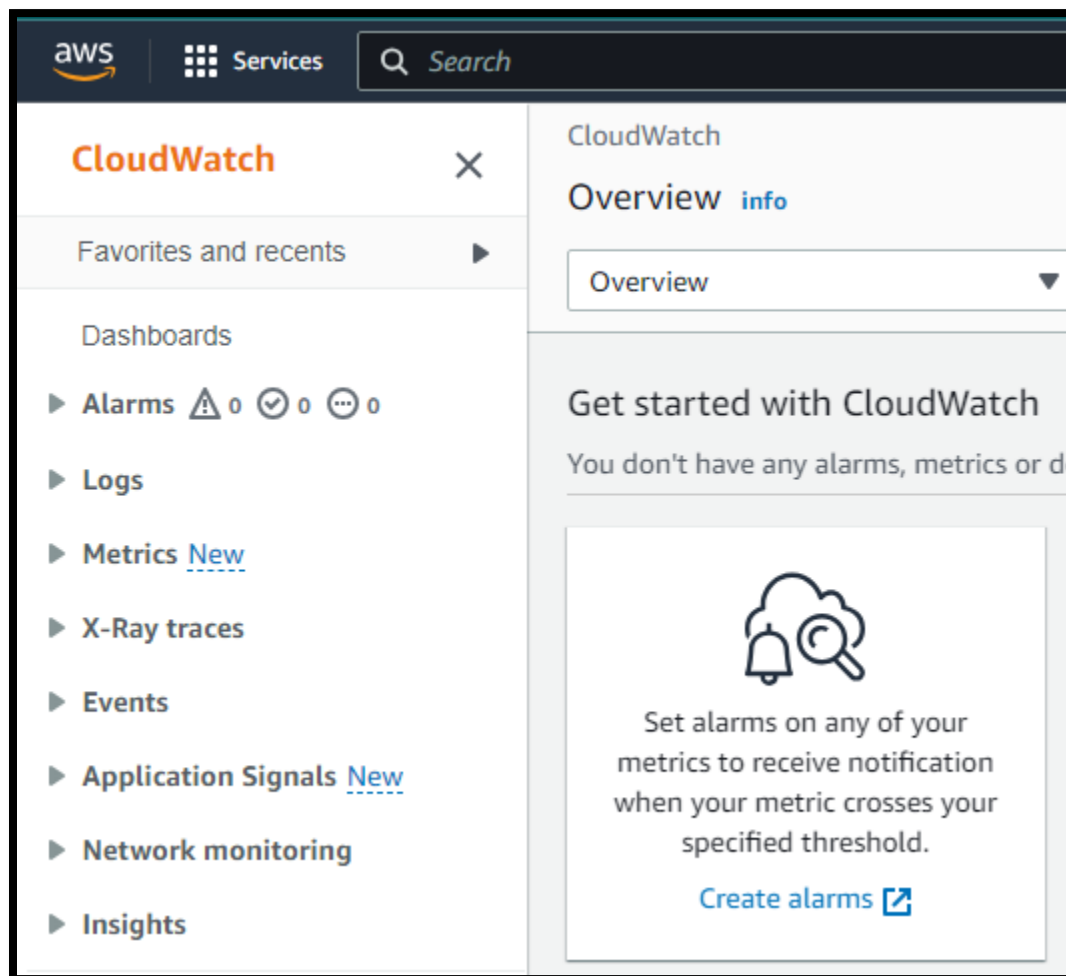
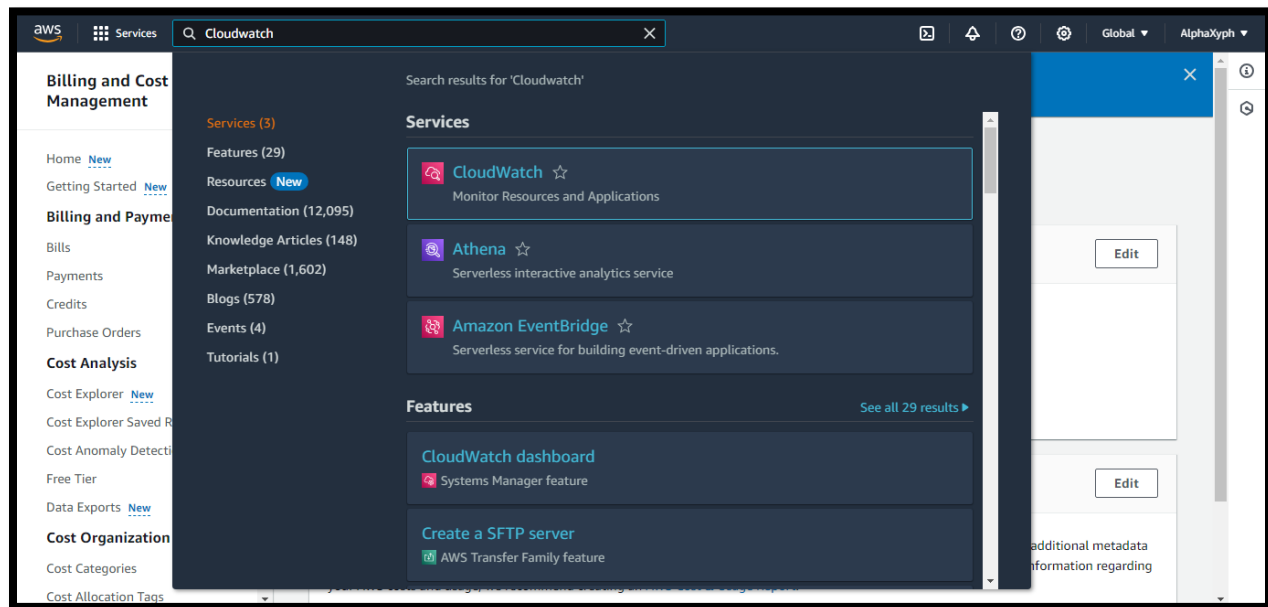
Search for billing preferences and click over it:



Edit and activate PDF invoices delivery, Free Tier alerts and CloudWatch:



Search for CloudWatch and click over it then go to “create alarms”:



Follow the steps in this video: <https://www.youtube.com/watch?v=oLUDNzb8yGo>

The screenshot shows the AWS CloudWatch console interface. On the left, a sidebar lists the steps: Step 1 (Specify metric and conditions), Step 2 (Configure actions), Step 3 (Add name and description), and Step 4 (Preview and create). The main area is titled 'Add name and description'. It contains a form with the following fields:

- Alarm name:** A text input field containing 'Billing exceed'.
- Alarm description - optional:** A text area with a 'View formatting guidelines' link. It contains the text 'Your Bill is over \$1'.
- Character count:** A label indicating 'Up to 1024 characters (20/1024)'.
- Buttons:** 'Edit', 'Preview', 'Cancel', 'Previous', and 'Next'.

A note at the bottom states: 'Markdown formatting is only applied when viewing your alarm in the console. The description will remain in plain text in the alarm notifications.'

The screenshot shows the AWS CloudWatch console with the 'Alarms' section selected. A green banner at the top reads 'Successfully created alarm Billing exceed.' with a 'View alarm' button. Below this, a blue banner states 'Some subscriptions are pending confirmation' with a 'View SNS Subscriptions' button. The main area displays a table of alarms:

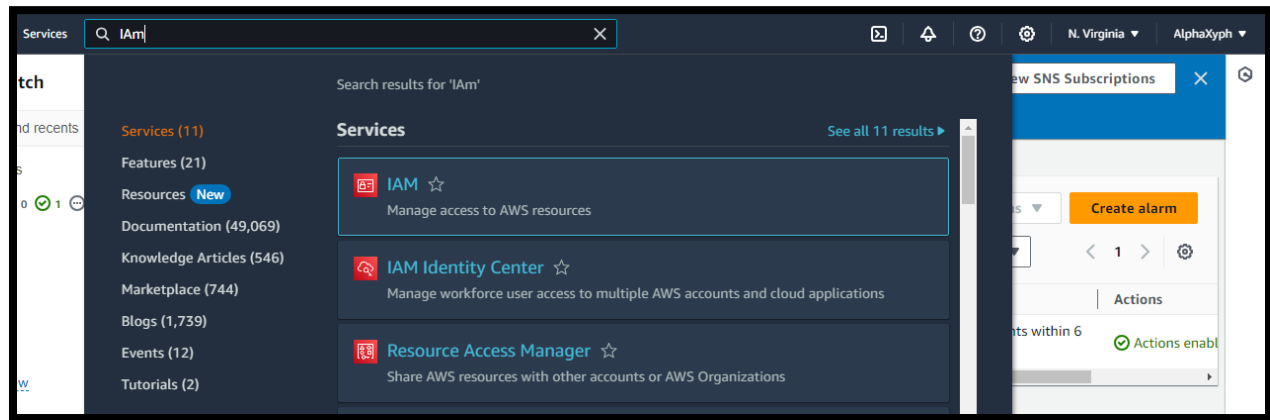
Name	State	Last state update	Conditions	Actions
Billing exceed	Insufficient data	2024-01-30 14:52:18	EstimatedCharges >= 1 for 1 datapoints within 6 hours	Actions enabled

The screenshot shows the AWS SNS 'Subscription confirmed' page. It features the AWS logo and the text 'Simple Notification Service'. A green box contains the following information:

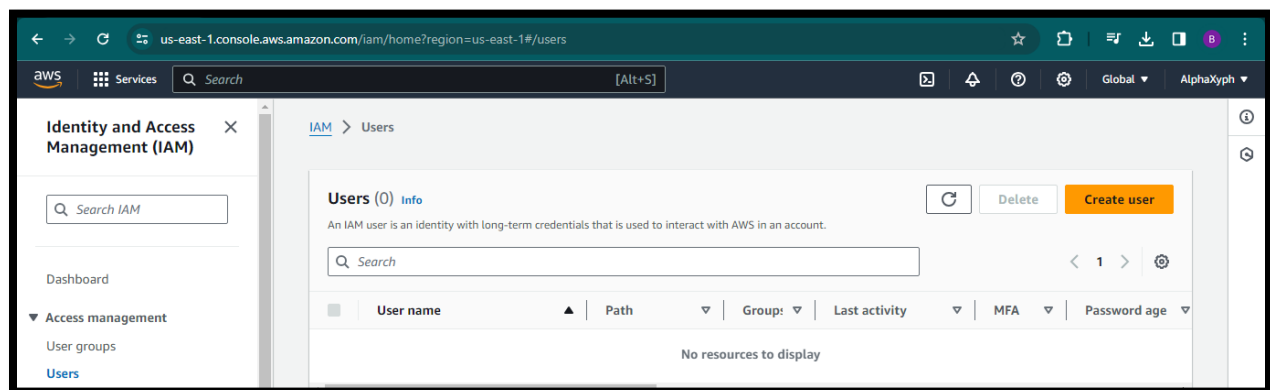
- Subscription confirmed!**
- You have successfully subscribed.
- Your subscription's id is:
`arn:aws:sns:us-east-1:339712964237:Default_CloudWatch_Alarms_Topic:06c54150-1e98-481f-8d9c-eb7f981671f4`
- If it was not your intention to subscribe, [click here to unsubscribe](#).

Steps for creating IAM user:

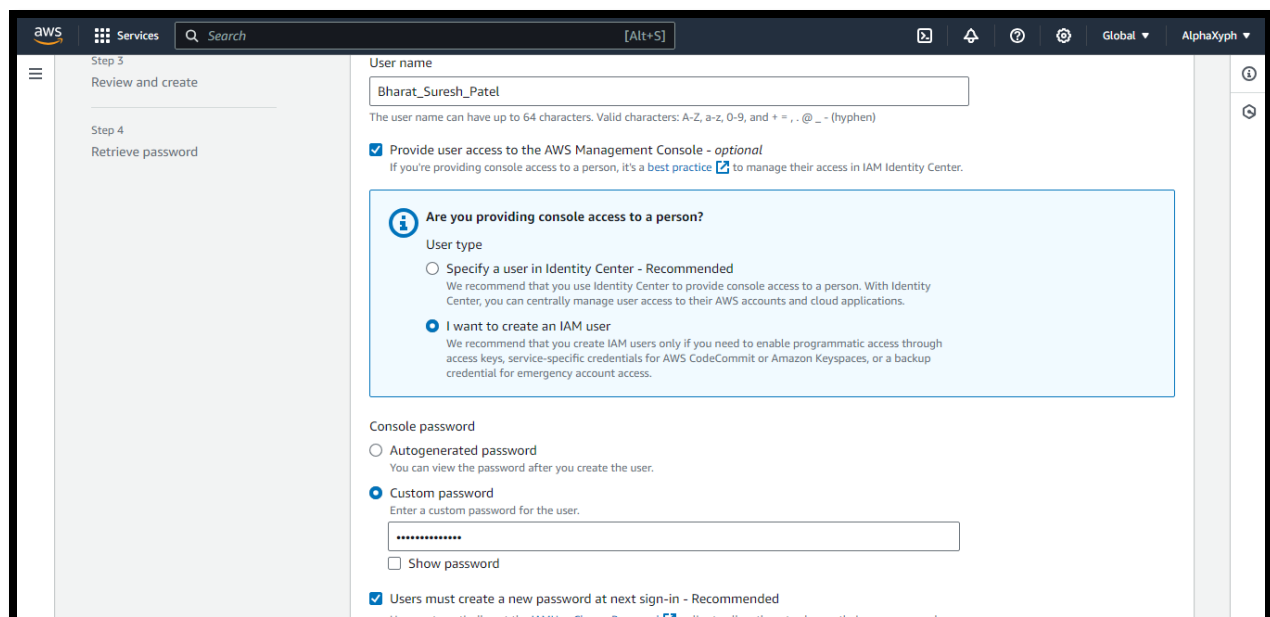
Search for IAM and click over it:



Click on “users” in left panel, then select “create user”:



Enter user details, manage access and passwords:



Manage permissions (In whatever way you prefer) and Click Next:

The screenshot shows the 'Set permissions' step in the AWS IAM console. The left sidebar indicates the current step is 'Set permissions'. The main content area has a title 'Set permissions' and a subtitle 'Add user to an existing group or create a new one. Using groups is a best-practice way to manage user's permissions by job functions. [Learn more](#)'. Below this, there are three 'Permissions options' cards: 'Add user to group' (selected), 'Copy permissions', and 'Attach policies directly'. A 'Get started with groups' section provides instructions and a 'Create group' button. At the bottom, there is a 'Set permissions boundary - optional' section and 'Cancel', 'Previous', and 'Next' buttons.

Set permissions

Add user to an existing group or create a new one. Using groups is a best-practice way to manage user's permissions by job functions. [Learn more](#)

Permissions options

- ☒ **Add user to group**
Add user to an existing group, or create a new group. We recommend using groups to manage user permissions by job function.
- ☐ **Copy permissions**
Copy all group memberships, attached managed policies, and inline policies from an existing user.
- ☐ **Attach policies directly**
Attach a managed policy directly to a user. As a best practice, we recommend attaching policies to a group instead. Then, add the user to the appropriate group.

Get started with groups
Create a group and select policies to attach to the group. We recommend using groups to manage user permissions by job function, AWS service access, or custom permissions. [Learn more](#)

[Create group](#)

Set permissions boundary - optional

[Cancel](#) [Previous](#) [Next](#)

Check the details, summary, create tag (optional) and then Click “Create User”:

The screenshot shows the 'Review and create' step in the AWS IAM console. The left sidebar indicates the current step is 'Review and create'. The main content area has a title 'User details' and a subtitle 'User details'. Below this, there is a 'Permissions summary' table. The 'User details' section shows the user name 'Bharat_Suresh_Patel', console password type 'Custom password', and 'Require password reset' set to 'Yes'. The 'Permissions summary' table lists various AWS managed policies.

User details

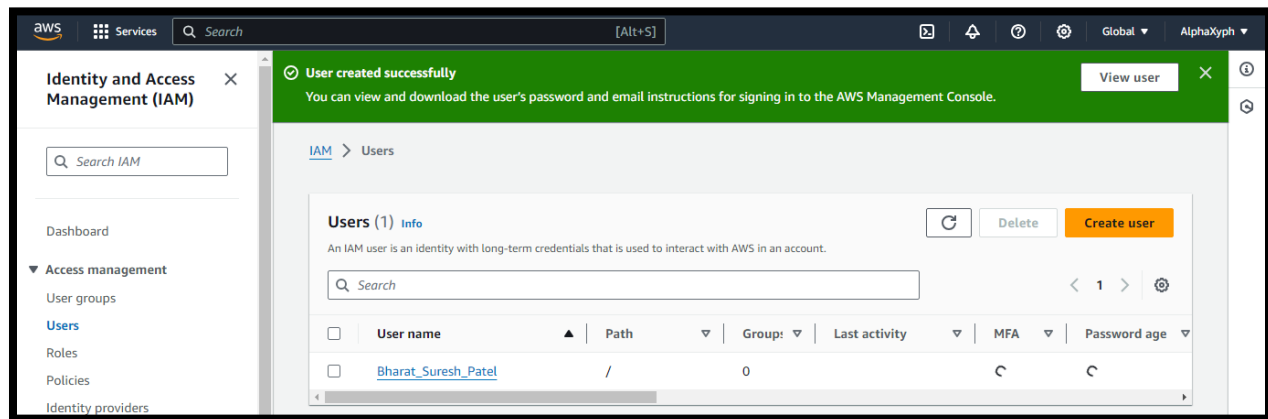
User name: Bharat_Suresh_Patel
Console password type: Custom password
Require password reset: Yes

Permissions summary

Name	Type	Used as
AccessAnalyzerServiceRolePolicy	AWS managed	Permissions policy
AdministratorAccess	AWS managed - job function	Permissions policy
AdministratorAccess-Amplify	AWS managed	Permissions policy
AdministratorAccess-AWSElasticBeanstalk	AWS managed	Permissions policy
AlexaForBusinessDeviceSetup	AWS managed	Permissions policy
AlexaForBusinessFullAccess	AWS managed	Permissions policy
AlexaForBusinessGatewayExecution	AWS managed	Permissions policy
AlexaForBusinessLifesizeDelegatedAccessPolicy	AWS managed	Permissions policy

[Cancel](#) [Previous](#) [Next](#)

User has been created:



Conclusion:

AWS IAM plays a pivotal role in enhancing the security of your AWS environment by enabling precise control over user access and permissions. Adhering to the principle of least privilege, IAM ensures that users only have the necessary permissions, thereby minimizing security risks and facilitating centralized user management. This robust identity and access management framework is essential for maintaining the integrity and confidentiality of your AWS resources. Additionally, incorporating billing alarms adds a proactive financial monitoring layer, helping organizations stay informed and in control of their AWS expenditure. Together, IAM and billing alarms contribute to a comprehensive and secure AWS infrastructure.