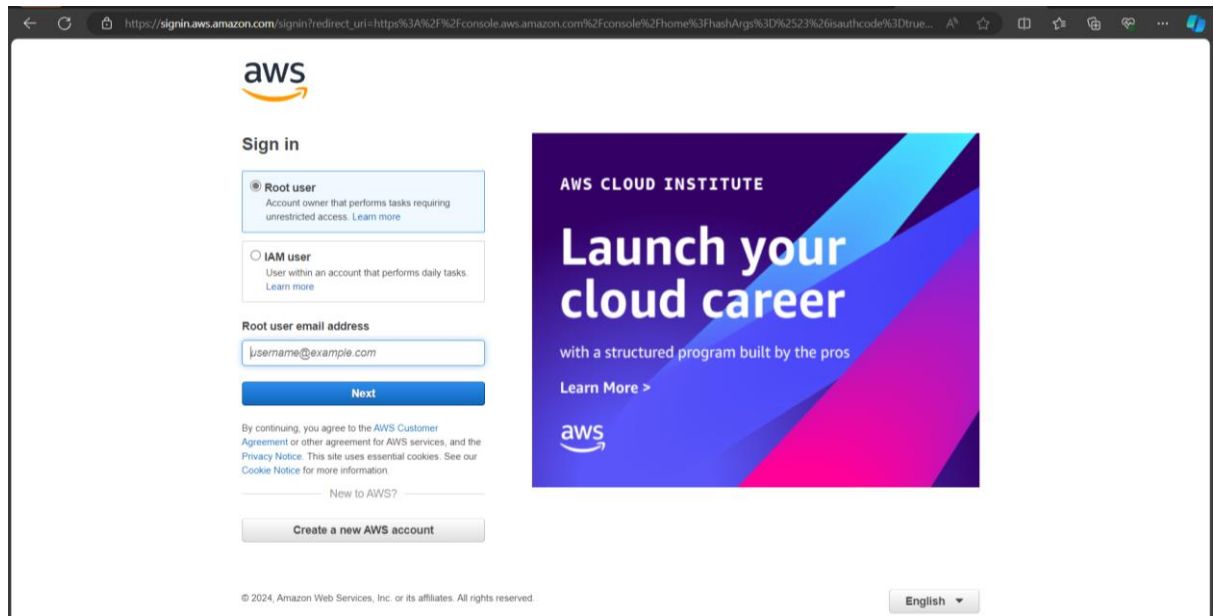


PROBLEM STATEMENT :

->Create an account in AWS and configure a budget.

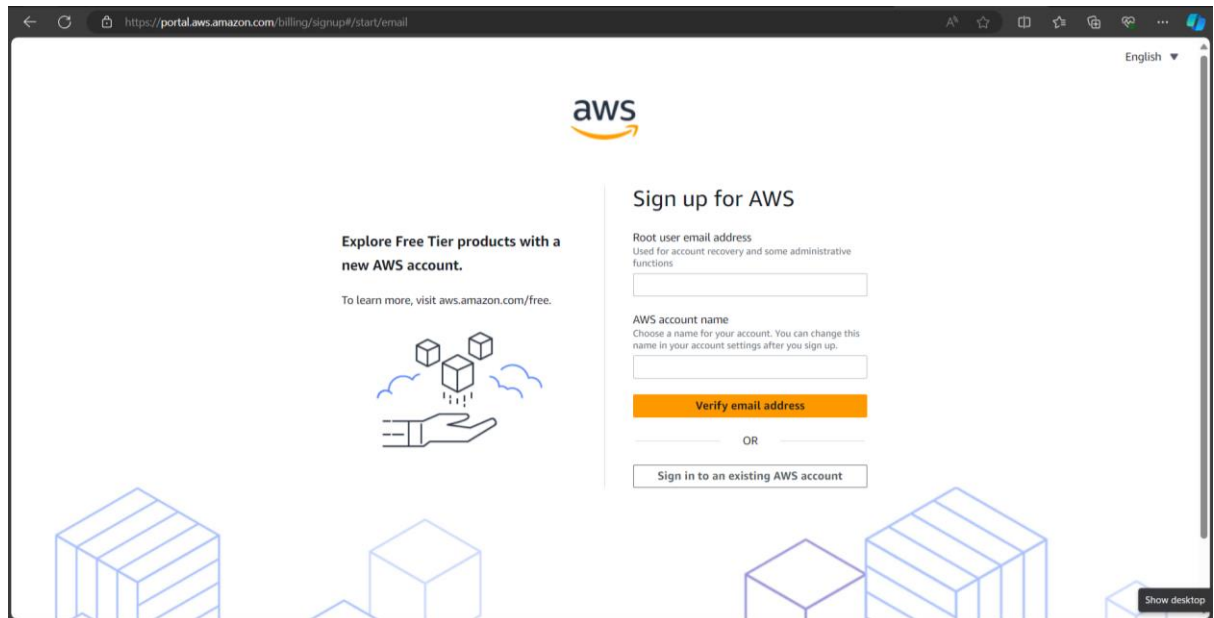
Account Creation

1. Sign up. Create a new AWS account.



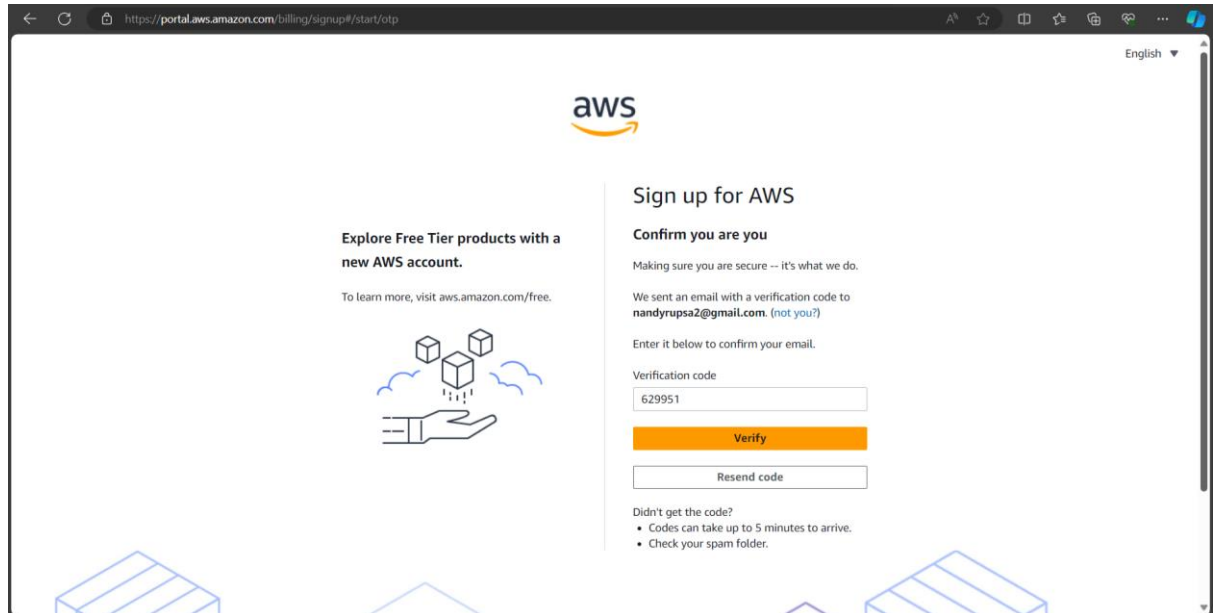
The screenshot shows the AWS Sign in page. On the left, there is a 'Sign in' section with two options: 'Root user' (selected) and 'IAM user'. Below these is a text input field for 'Root user email address' containing 'jusername@example.com' and a blue 'Next' button. A link for 'New to AWS?' leads to 'Create a new AWS account'. On the right, there is a large banner for 'AWS CLOUD INSTITUTE' with the text 'Launch your cloud career' and 'with a structured program built by the pros'. At the bottom right of the banner is a 'Learn More >' link. The footer contains copyright information and a language selector set to 'English'.

2. Enter root user email address and AWS account name.



The screenshot shows the 'Sign up for AWS' page. On the left, there is a section titled 'Explore Free Tier products with a new AWS account.' with a link to 'aws.amazon.com/free.' and an illustration of a hand holding blocks. On the right, there is a 'Sign up for AWS' form with two input fields: 'Root user email address' and 'AWS account name'. Below the first field is a 'Verify email address' button. Below the second field is an 'OR' separator and a 'Sign in to an existing AWS account' button. The footer has a 'Show desktop' button.

3. Verify your email address.



The screenshot shows the AWS sign-up page at the URL `https://portal.aws.amazon.com/billing/signup#/start/otp`. The page features the AWS logo at the top center. On the left, there is a section titled "Explore Free Tier products with a new AWS account." with a link to `aws.amazon.com/free` and an illustration of a hand holding three server icons. On the right, the "Sign up for AWS" section is active, showing the "Confirm you are you" step. It states that a verification code was sent to the email `nandyrupsa2@gmail.com`. A text input field contains the verification code "629951", followed by a yellow "Verify" button and a "Resend code" button. A note at the bottom indicates that codes take up to 5 minutes to arrive and to check the spam folder.

https://portal.aws.amazon.com/billing/signup#/start/otp

English

aws

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 **nandyrupsa2@gmail.com**. (not you?)

Enter it below to confirm your email.

Verification code

629951

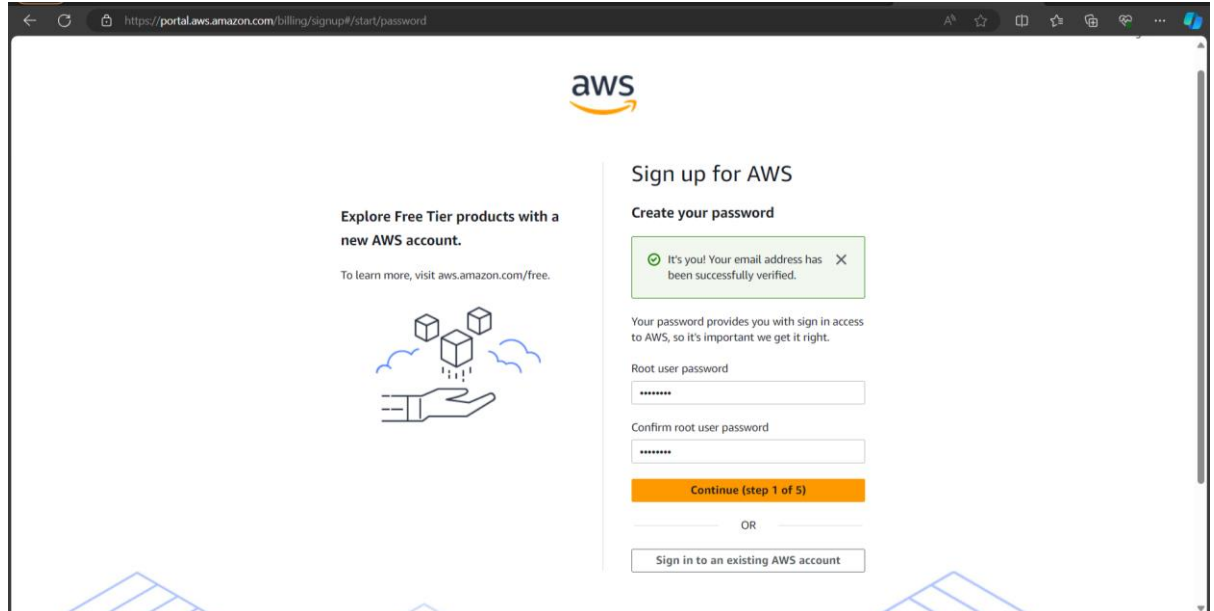
Verify

Resend code

Didn't get the code?

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

4. Set your password, then click on continue(step 1 of 5).



The screenshot shows the AWS sign-up page at the URL `https://portal.aws.amazon.com/billing/signup#/start/password`. The layout is similar to the previous step, but the "Sign up for AWS" section is now at the "Create your password" step. A green success message states: "It's you! Your email address has been successfully verified." Below this, it explains that the password provides sign-in access to AWS. There are two password input fields: "Root user password" and "Confirm root user password", both masked with dots. A yellow "Continue (step 1 of 5)" button is prominent. Below the button is an "OR" separator and a button to "Sign in to an existing AWS account".

https://portal.aws.amazon.com/billing/signup#/start/password

aws

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

5. Fill the required details, tick off the check box and then click on continue(step 2 of 5).


The screenshot shows the AWS Sign up for AWS page (Step 2 of 5). The page is titled "Sign up for AWS" and has a sub-header "Contact Information". On the left, there are "Free Tier offers" listed: "Always free" (Never expires), "12 months free" (Start from initial sign-up date), and "Trials" (Start from service activation date). The main form fields include: "How do you plan to use AWS?" (Personal - for your own projects), "Who should we contact about this account?" (Full Name: Rupra Nandy, Phone Number: +91 9007413395, Country or Region: India), "Address" (Kona Tetulata Peyara Bagan Howrah-71111, Apartment, suite, unit, building, floor, etc.), "City" (Howrah), "State, Province, or Region" (West Bengal), and "Postal Code" (711114). There is a checkbox for "I have read and agree to the terms of the AWS Customer Agreement" which is checked. A "Continue (step 2 of 5)" button is at the bottom right.

6. Complete payment for successful registration.

The screenshot shows the AWS Sign up for AWS page (Step 3 of 5). The page is titled "Sign up for AWS" and has a sub-header "Billing Information". On the left, there is a "Secure verification" section with a shield icon and a message: "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) in a pending transaction for 3-5 days to verify your identity." The main form fields include: "Credit or Debit card number" (with a field for the card number), "Expiration date" (Month and Year), "Security code" (CVV/CVC), and "Cardholder's name". There is a checkbox for "Save card information for faster future payments" which is unchecked. The "Billing address" section shows "Use my contact address" (Kona Tetulata Peyara Bagan Howrah-711114, Howrah West Bengal 711114, IN) and "Use a new address" (unchecked). There is a checkbox for "Do you have a PAN?" (Permanent Account Number) which is checked. A "Verify and Continue (step 3 of 5)" button is at the bottom right.

7. Verify phone number.

← ↻ 🔒 https://portal.aws.amazon.com/billing/signup#/paymentinformation



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

(+91)

Mobile phone number

Security check

b5 c8x6
n3 r0x0


Type the characters as shown above

15c8d6

Send SMS (step 4 of 5)

8. Select a Support plan.

← ↻ 🔒 https://portal.aws.amazon.com/billing/signup#/paymentinformation



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
- Free 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

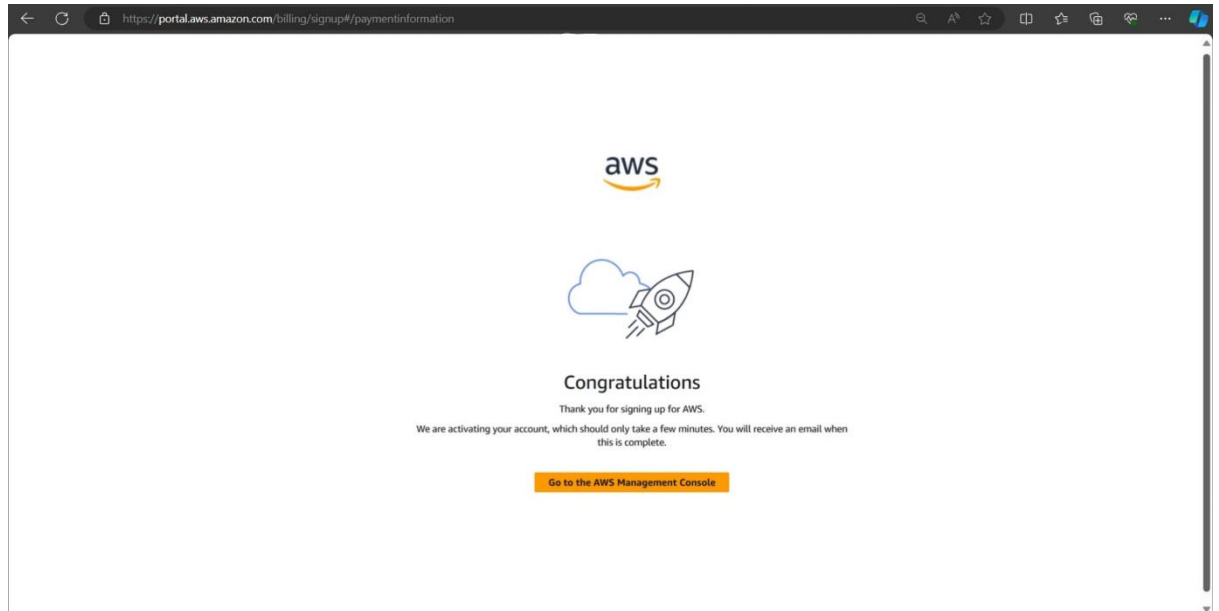


Need Enterprise level support?

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

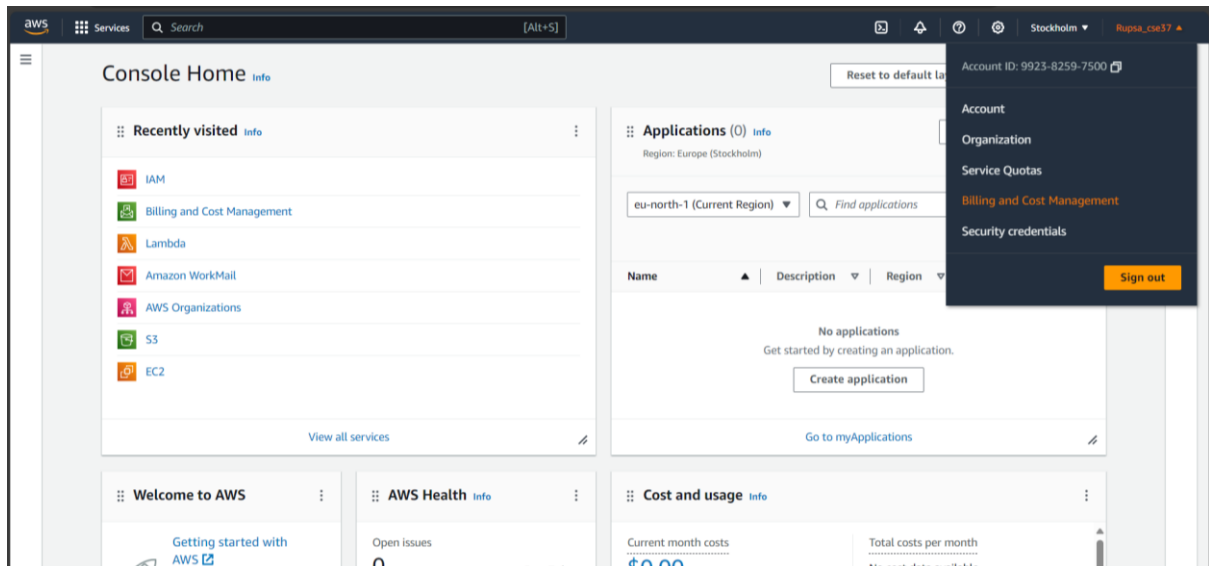
Complete sign up

9. Successful account creation.

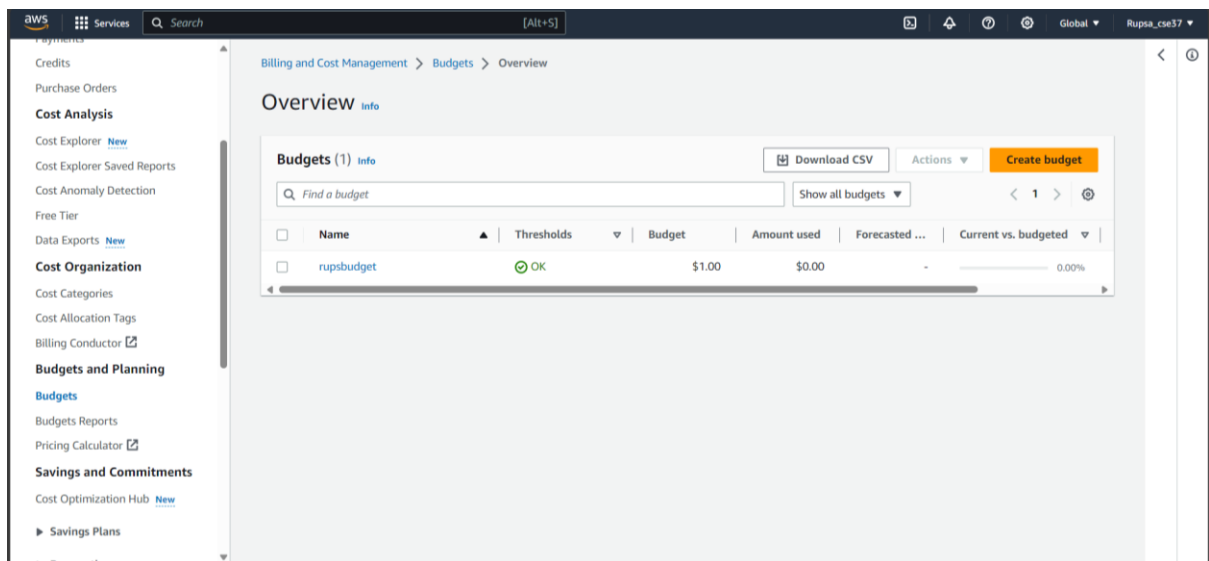


Budget Configuration

1. Log in to AWS console ,go to your username and there click on 'Billing and Cost Management'.



2. Under 'Budgets and Planning', click on 'Budgets' and create budget.

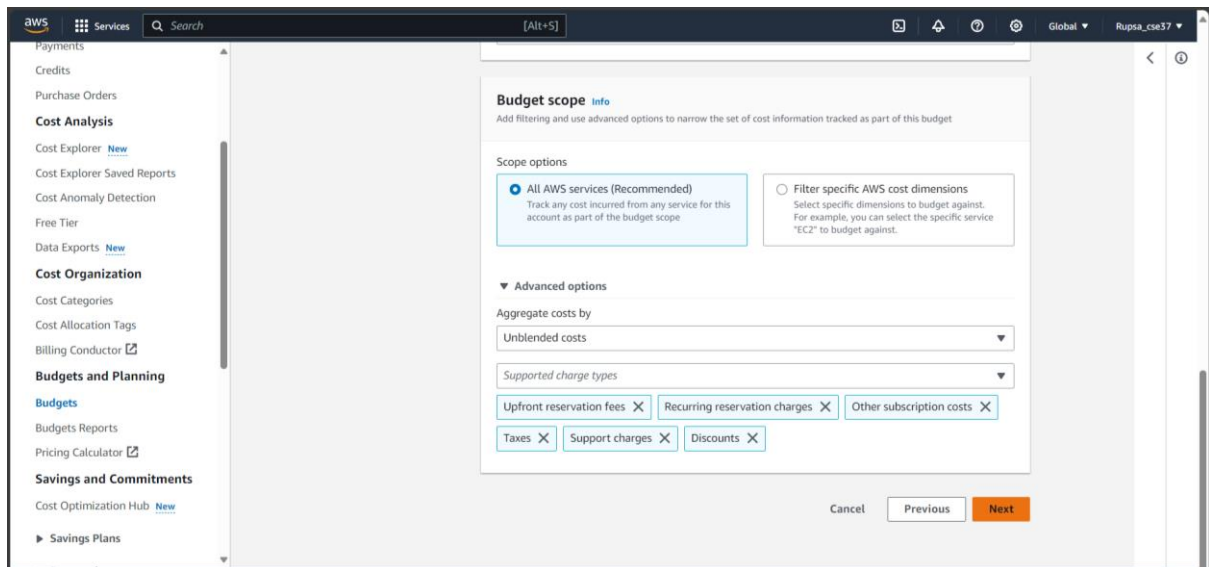


3. Configure budget setup->click on Customize(advanced) then click on next.

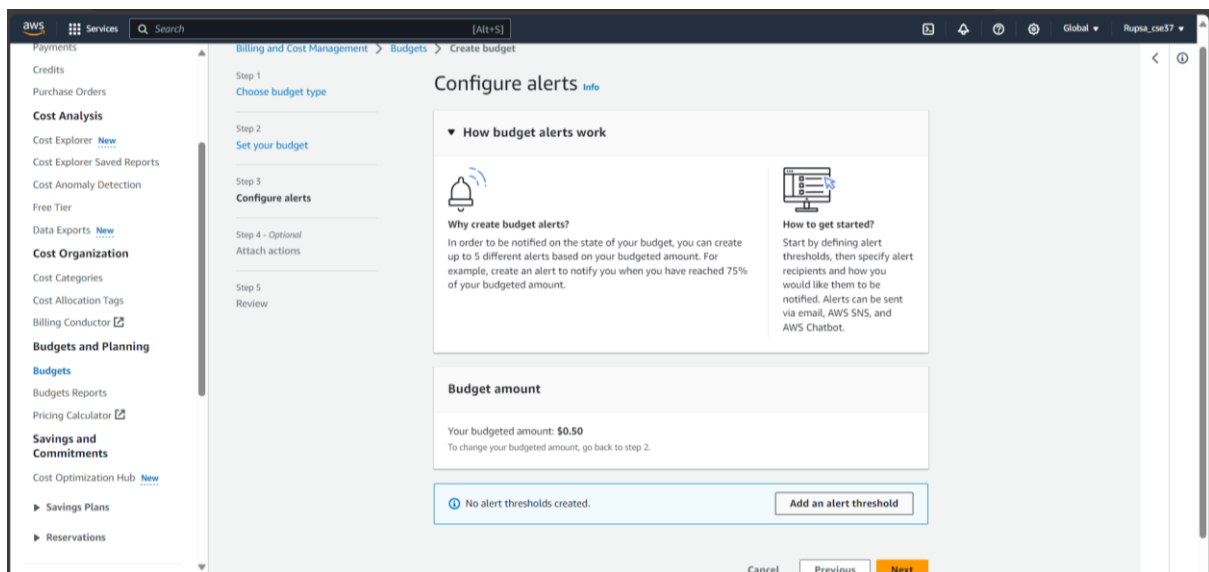
The screenshot shows the AWS Budgets console interface. On the left is a navigation menu with categories like Payments, Cost Analysis, Cost Organization, Budgets and Planning, and Savings and Commitments. The main content area is titled 'Budget setup' and includes a progress bar with steps: Step 2 (Set your budget), Step 3 (Configure alerts), Step 4 (Optional: Attach actions), and Step 5 (Review). Under 'Budget setup', there are two radio buttons: 'Use a template (simplified)' and 'Customize (advanced)', with the latter selected. Below this, the 'Budget types' section lists four options: 'Cost budget - Recommended' (selected), 'Usage budget', 'Savings Plans budget', and 'Reservation budget'. Each option has a brief description. At the bottom right, there are 'Cancel' and 'Next' buttons, with 'Next' being highlighted in orange.

3. Add budget details.

The screenshot shows the 'Details' page of the AWS Budgets console. The 'Budget name' field is filled with 'rupsibudget2'. Below it, the 'Set budget amount' section contains several fields: 'Period' is set to 'Monthly', 'Budget renewal type' is set to 'Recurring budget', 'Start month' is set to 'Feb 2024', and 'Budgeting method' is set to 'Fixed'. At the bottom, the 'Enter your budgeted amount (\$)' field is filled with '0.50'. The 'Next' button from the previous screen is visible at the bottom right.



4. Configure alerts->click on 'Add an alert threshold'.



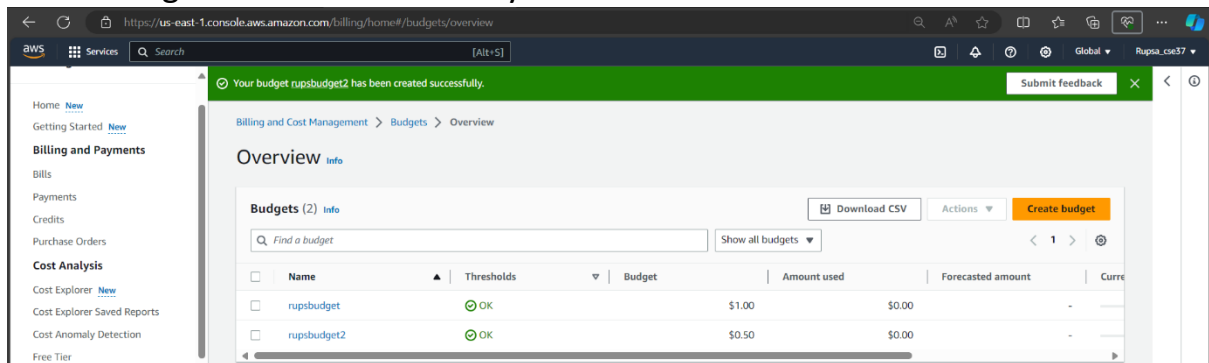
5. Set alert threshold(Alert #1). If we want to create more than one alert threshold then click on 'Add an alert threshold' otherwise click on next(2 times).

The screenshot shows the 'Alert #1' configuration page in the AWS Budgets console. The left sidebar contains navigation links for Payments, Credits, Purchase Orders, Cost Analysis, Cost Explorer, Cost Anomaly Detection, Free Tier, Data Exports, Cost Organization, Cost Categories, Cost Allocation Tags, Billing Conductor, Budgets and Planning, Budgets, Budgets Reports, Pricing Calculator, Savings and Commitments, Cost Optimization Hub, Savings Plans, and Reservations. The main content area is titled 'Alert #1' and includes a 'Remove' button. Below the title is the 'Set alert threshold' section, which has two dropdown menus: 'Threshold' (set to 50) and 'Trigger' (set to '% of budgeted amount'). A summary text states: 'Summary: When your actual cost is greater than 50.00% (\$0.25) of your budgeted amount (\$0.50), the alert threshold will be exceeded.' Below this is the 'Notification preferences' section, which includes a text input field for 'Email recipients' (containing 'rupsanandy2@gmail.com') and a note that the maximum number of email recipients is 10. There are also links for 'Amazon SNS Alerts - Optional info' and 'AWS Chatbot Alerts'. At the bottom, there is a '+ Add alert threshold' button and 'Cancel', 'Previous', and 'Next' buttons.

6. We 'Review' our budget and for creating it click on 'Create budget'.

The screenshot shows the 'Review' page in the AWS Budgets console. The left sidebar is the same as in the previous screenshot. The main content area is titled 'Review' and includes a 'Review' button. Below the title is a progress bar with five steps: Step 1: Choose budget type, Step 2: Set your budget, Step 3: Configure alerts, Step 4 - Optional: Attach actions, and Step 5: Review. The 'Review' step is currently selected. The main content area is divided into four sections: 'Budget type' (Cost budget), 'Budget details' (Name: rupsbudget2, Start date: Feb 2024, Budget amount: \$0.50, Period: Monthly), 'Alerts' (Alert #1, Threshold: 50% of budgeted amount, Threshold measured against: Actual costs), and 'Actions' (You have no budgets actions). At the bottom, there are 'Cancel', 'Previous', and 'Create budget' buttons.

7. Budget created successfully.



The screenshot shows the AWS Billing console interface. A green notification bar at the top states: "Your budget rupsbudget2 has been created successfully." Below this, the breadcrumb navigation is "Billing and Cost Management > Budgets > Overview". The main heading is "Overview".

Below the heading, there is a section titled "Budgets (2)" with a "Download CSV" button and an "Actions" dropdown menu. A search bar contains the text "Find a budget" and a "Show all budgets" dropdown menu. A table lists the budgets:

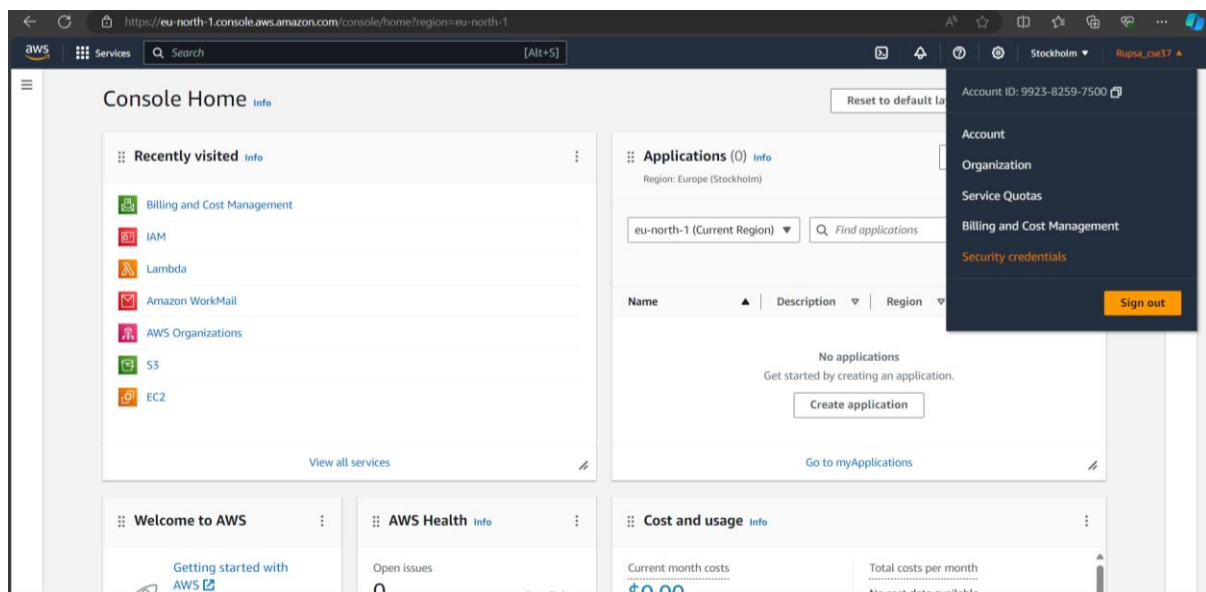
<input type="checkbox"/>	Name	Thresholds	Budget	Amount used	Forecasted amount	Current
<input type="checkbox"/>	rupsbudget	OK		\$1.00	\$0.00	-
<input type="checkbox"/>	rupsbudget2	OK		\$0.50	\$0.00	-

The left sidebar contains navigation links for Home, Getting Started, Billing and Payments, and Cost Analysis. The top navigation bar includes the AWS logo, Services, Search, and user information.

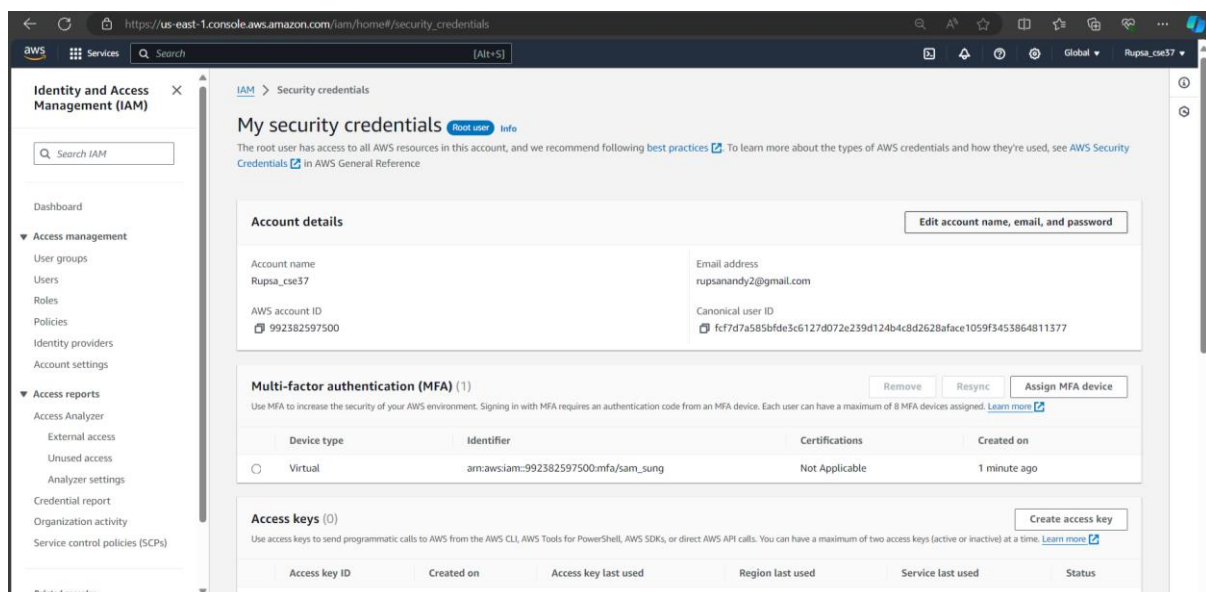
PROBLEM STATEMENT :

->Create MFA for authentication.

1. Log into AWS account and go to security credentials.



2. Add MFA device by clicking on 'Assign MFA device'.



3. Enter device name and click on 'Next'.

The screenshot shows the AWS IAM console interface. On the left, a sidebar indicates 'Step 2: Set up device'. The main content area is titled 'MFA device name'. It contains a text input field for the device name, with the value 'my_aws2' entered. Below the input field, a note states: 'Maximum 128 characters. Use alphanumeric and '+', '-', '@', '=', '_' characters.' Below this, there is a section titled 'MFA device' with the instruction: 'Select an MFA device to use, in addition to your username and password, whenever you need to authenticate.' Three options are listed: 'Authenticator app' (selected with a radio button), 'Security Key', and 'Hardware TOTP token'. Each option has a small icon and a brief description. At the bottom right of the main content area, there are 'Cancel' and 'Next' buttons.

4. Enter code using authenticator app and click on 'Add MFA' to complete the process.

The screenshot shows the AWS IAM console interface for the 'Set up device' step. The left sidebar shows 'Step 2: Set up device'. The main content area is titled 'Set up device' with an 'Info' link. Below the title, it says 'Authenticator app' and 'A virtual MFA device is an application running on your device that you can configure by scanning a QR code.' The page is divided into three numbered steps: 1. 'Install a compatible application such as Google Authenticator, Duo Mobile, or Authy app on your mobile device or computer. See a list of compatible applications.' 2. A QR code is displayed, with the instruction: 'Open your authenticator app, choose Show QR code on this page, then use the app to scan the code. Alternatively, you can type a secret key. Show secret key.' 3. 'Fill in two consecutive codes from your MFA device.' Below this, there are two input fields: 'MFA code 1' with the value '902620' and 'MFA code 2' with the value '288988'. At the bottom right, there are 'Cancel', 'Previous', and 'Add MFA' buttons.

5. MFA device assigned successfully.

The screenshot shows the AWS IAM console for the user 'Rupsa_cse37'. A green notification banner at the top states 'MFA device assigned' and provides instructions on registering MFA devices. The 'Account details' section shows the account name 'Rupsa_cse37', email 'rupsanandy2@gmail.com', and AWS account ID '992382597500'. The 'Multi-factor authentication (MFA)' section shows two virtual MFA devices assigned: 'my_aws2' and 'sam_sung'. The 'Access keys' section shows no keys are currently assigned.

Device type	Identifier	Certifications	Created on
Virtual	am:awsiam:992382597500:mfa/my_aws2	Not Applicable	3 minutes ago
Virtual	am:awsiam:992382597500:mfa/sam_sung	Not Applicable	16 minutes ago

6. Sign out from the console and login again using MFA code.

The screenshot shows the AWS Multi-factor authentication (MFA) login page. The user's email address is 'rupsanandy2@gmail.com'. The MFA code '216113' has been entered into the input field. The 'Submit' button is highlighted in blue. To the right, there is a promotional banner for 'AI Use Case Explorer'. At the bottom, the copyright notice '© 2024, Amazon Web Services, Inc. or its affiliates. All rights reserved.' and a language selector set to 'English' are visible.

7. Successfully signed in. Now open the security credentials to view the added MFA device.

aws

Services

Search

[Alt+S]

23

🔔

🔄

⚙️

Global

Rupsa_cse37

Identity and Access Management (IAM)

Dashboard

Access management

Users

Roles

Policies

Identity providers

Account settings

Access reports

Access Analyzer

External access

Unused access

Analyzer settings

Credential report

Organization activity

IAM > Security credentials

My security credentials Root user info

The root user has access to all AWS resources in this account, and we recommend following [best practices](#). To learn more about the types of AWS credentials and how they're used, see [AWS Security Credentials](#) in [AWS General Reference](#).

Account details

Edit account name, email, and password

Account name

Rupsa_cse37

Email address

rupsanandy2@gmail.com

AWS account ID

992382597500

Canonical user ID

fcf7d7a585bfde3c6127d072e239d124b4c8d2628aface1059f3453864811377

Multi-factor authentication (MFA) (2)

Remove Resync Assign MFA device

Use MFA to increase the security of your AWS environment. Signing in with MFA requires an authentication code from an MFA device. Each user can have a maximum of 8 MFA devices assigned. [Learn more](#)

	Device type	Identifier	Certifications	Created on
<input type="radio"/>	Virtual	arn:aws:iam:992382597500:mfa/my_aws2	Not Applicable	12 minutes ago
<input type="radio"/>	Virtual	arn:aws:iam:992382597500:mfa/sam_sung	Not Applicable	25 minutes ago