

Practical 1

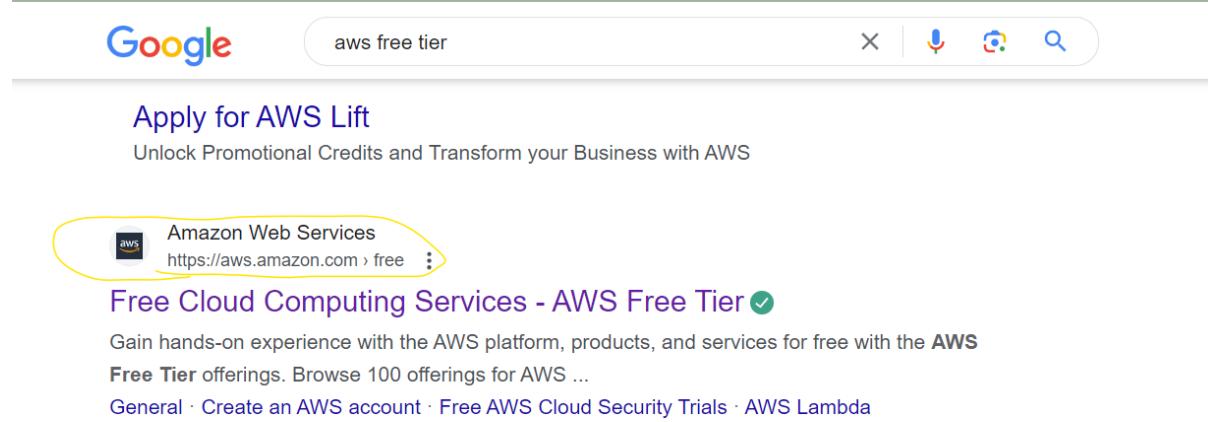
Introduction to cloud security Lab (CCP306)

Aim:

1. Create AWS free tier account.
2. Launch Amazon EC2 Windows instances.
3. Connect to Amazon EC2 Windows instances.

Steps to get connected with AWS free tier environment.

Step 1:



Google aws free tier

Apply for AWS Lift
Unlock Promotional Credits and Transform your Business with AWS

Amazon Web Services
<https://aws.amazon.com/free>

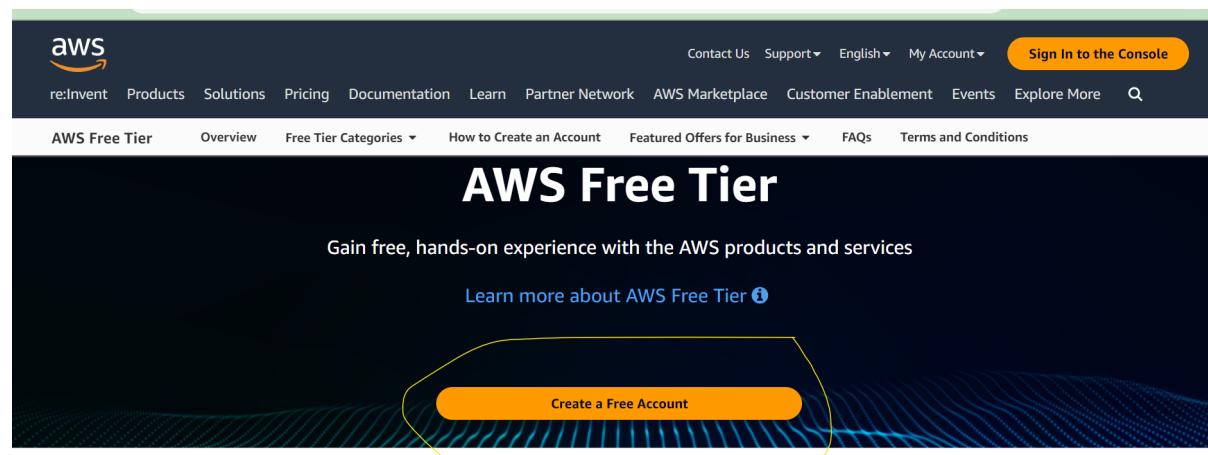
Free Cloud Computing Services - AWS Free Tier ✓

Gain hands-on experience with the AWS platform, products, and services for free with the AWS Free Tier offerings. Browse 100 offerings for AWS ...

General · Create an AWS account · Free AWS Cloud Security Trials · AWS Lambda

Step 2:

Select create free account



aws

Contact Us Support English My Account Sign In to the Console

re:Invent Products Solutions Pricing Documentation Learn Partner Network AWS Marketplace Customer Enablement Events Explore More

AWS Free Tier Overview Free Tier Categories How to Create an Account Featured Offers for Business FAQs Terms and Conditions

AWS Free Tier

Gain free, hands-on experience with the AWS products and services

Learn more about AWS Free Tier ⓘ

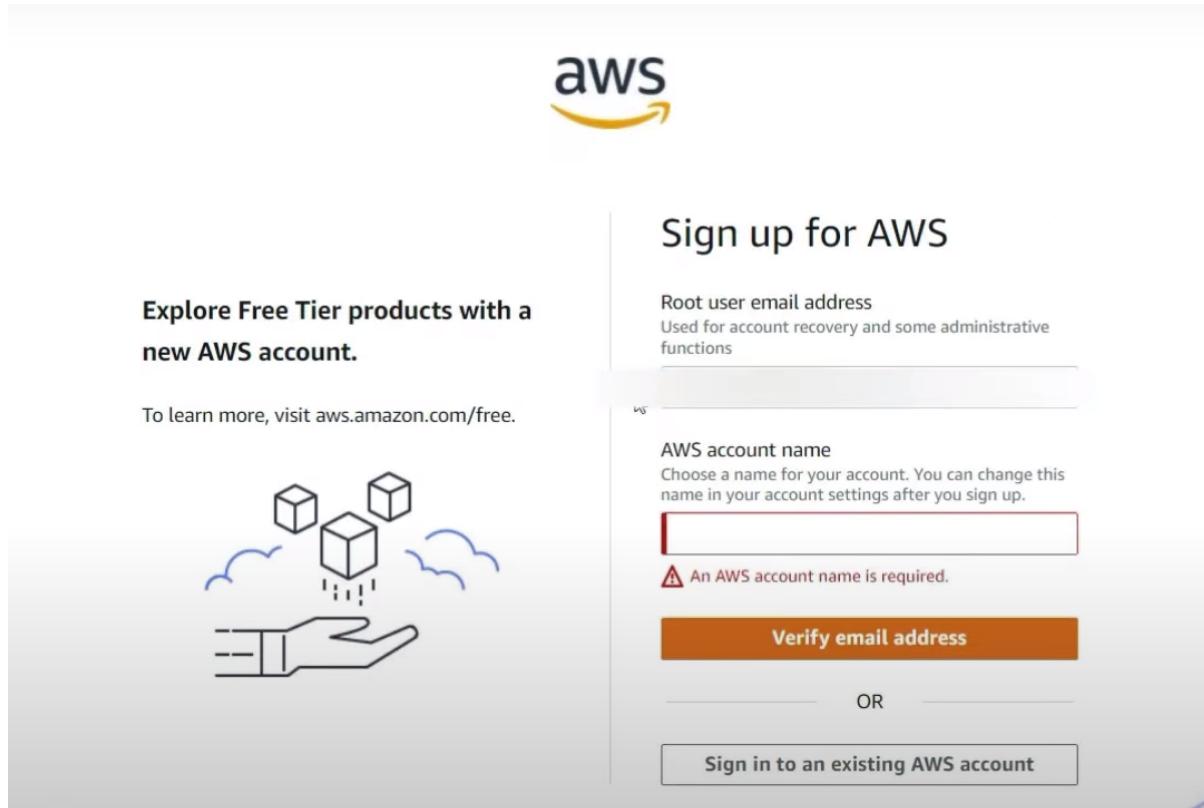
Create a Free Account

Step 3:

Put root user email address as your RKNEC email address.

In AWS account name put the name that you wanted to be displayed.

Select verify email address.



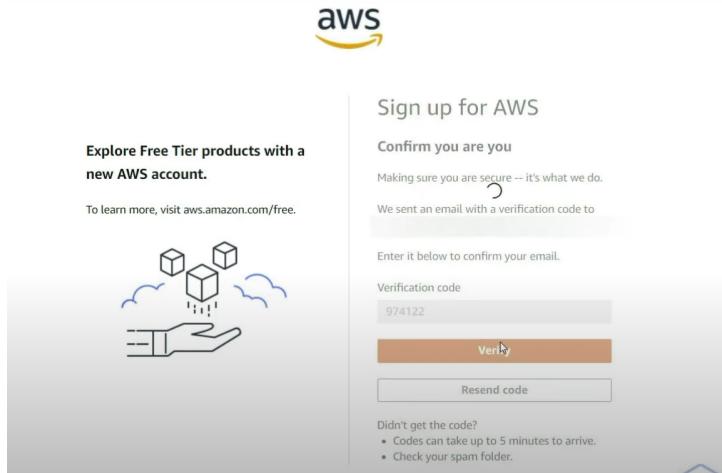
Step: 4

Copy the verification code that you have received on email.



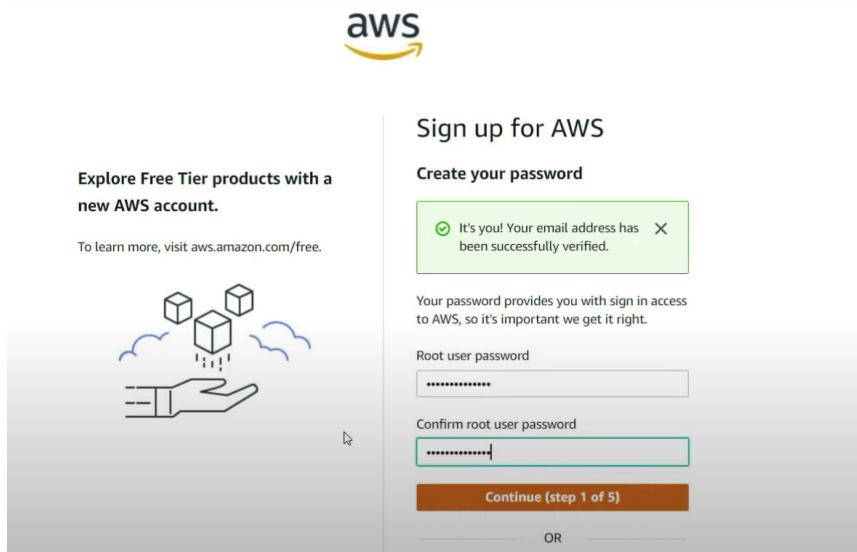
Step 5:

Put the code in verification code field and select verify.



Step 6:

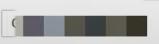
Set the password. And select continue.



Step 7:

Select contact information as “Personal”

Put all the remaining details correct.

Free Tier offers	Contact Information
All AWS accounts can explore 3 different types of free offers, depending on the product used.	<p>How do you plan to use AWS?</p> <p><input type="radio"/> Business - for your work, school, or organization</p> <p><input type="radio"/> Personal - for your own projects</p> <p>⚠ The account type is required.</p>
 Always free Never expires	Who should we contact about this account?
 12 months free Start from initial sign-up date	Full Name <input type="text" value="Gaurav Sharma"/>
 Trials Start from service activation date	Phone Number <input type="text" value="+91"/>
	Country or Region <input type="text" value="India"/>
	Address <input type="text"/>
	 <input type="text"/>
	City <input type="text" value="Dausa"/>
	State, Province, or Region <input type="text" value="Rajasthan"/>

Step 8:

Put your billing information.



Sign up for AWS

Billing Information

Credit or Debit card number

⚠ The credit card information is not valid or is an unsupported type.

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

Expiration date

Cardholder's name

CVV



Secure verification

i 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.

Step 9:

Put the OTP and submit.

The screenshot shows a payment confirmation page from ICICI Bank. At the top left is the Verified by VISA logo and the date 29 Sep 2022 10:14:20. At the top right is the ICICI Bank logo. The page displays the following information:
Card Number: XXXX XXXX XXXX 1219
Merchant: AMAZON
Amount: Rs 2.00
Mobile: X7XXXX0XX6 (with a copy icon)
In the center, there is a large input field labeled "Enter OTP" containing ".....". Below it are two buttons: "Resend OTP" and "Suggest strong password...". A note says "OTPs are SECRET." There is also a link to "Use passwords saved in your Google Account". A small note at the bottom states "This page will automatically timeout after 180 seconds."

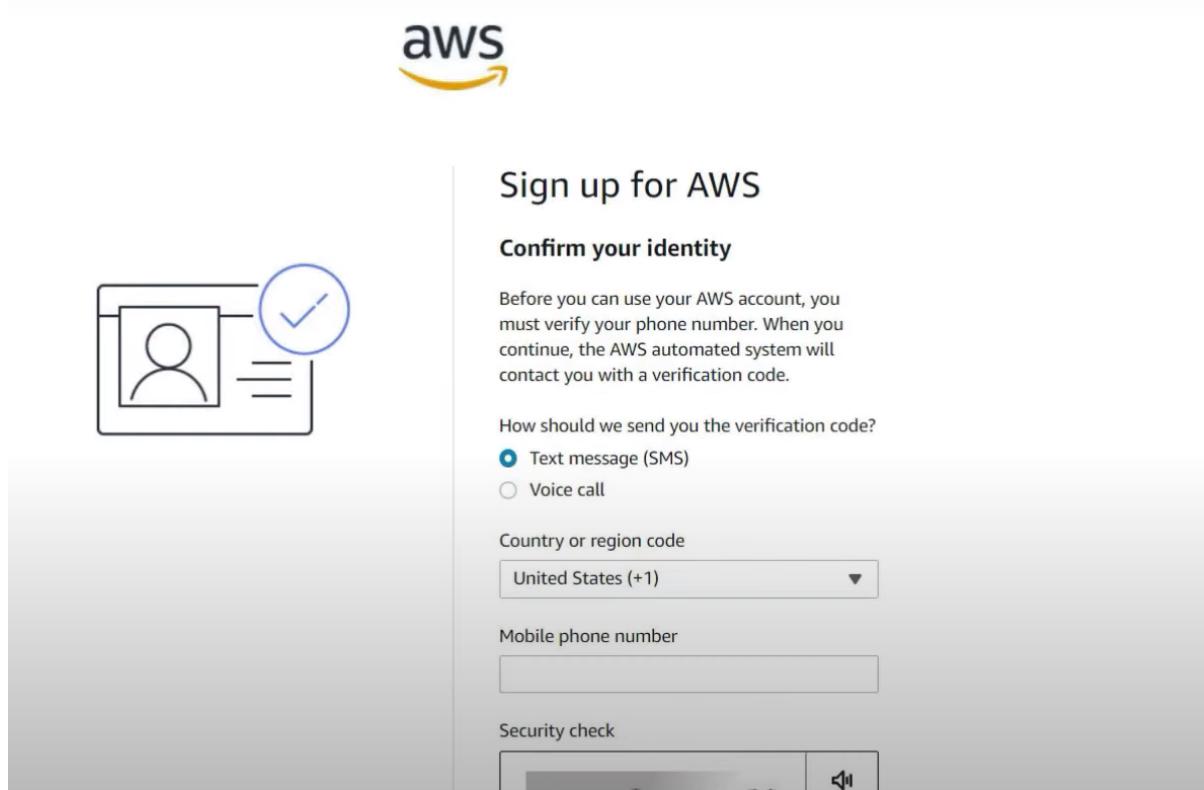
Step 10:

Enter OTP and select confirm and pay

The screenshot shows a payment page from IndusInd Bank. At the top left is the VISA logo and at the top right is the IndusInd Bank logo. The page displays the following information:
AMAZON ₹ 2.00
Visa xxxx 0779 29 September 2022
Enter OTP sent on 9196xxxxxx50
Input field: Enter OTP | Resend OTP in 48s
Large red button: Confirm & Pay
A pink banner at the bottom says "Page will expire in 09:48 mins".
At the bottom, there are links for "Terms & Conditions | Help" and "Cancel Payment".

Step 11:

Once the amount gets deducted it shows your identity has confirmed.

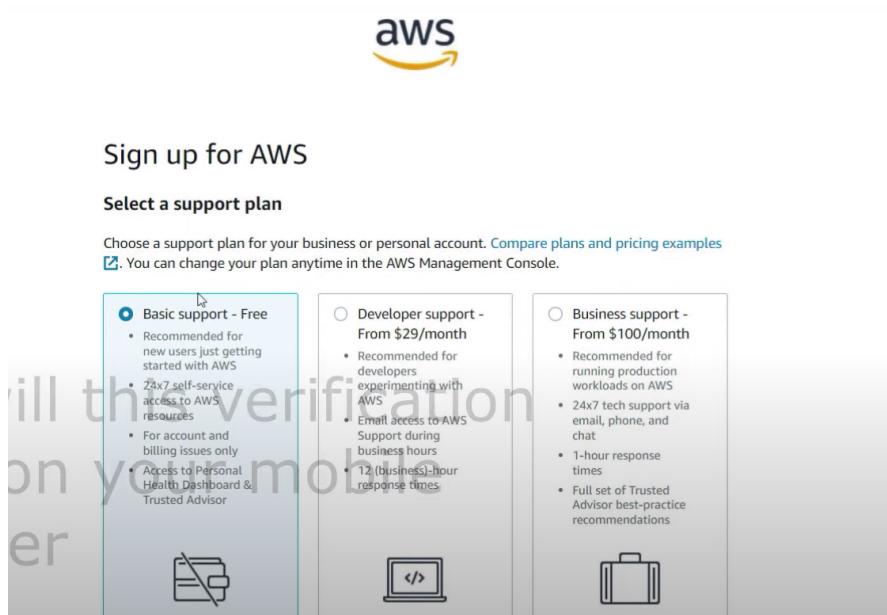


The screenshot shows the 'Sign up for AWS' process. At the top right, the AWS logo is displayed. Below it, the heading 'Sign up for AWS' is followed by 'Confirm your identity'. A sub-section titled 'Before you can use your AWS account, you must verify your phone number. When you continue, the AWS automated system will contact you with a verification code.' is present. To the left, there is an icon showing a user profile and a checkmark inside a circle. Below this, a question 'How should we send you the verification code?' has two options: 'Text message (SMS)' (selected) and 'Voice call'. A dropdown menu for 'Country or region code' is set to 'United States (+1)'. Below it is a field for 'Mobile phone number' with a placeholder '(123) 456-7890'. At the bottom, there is a 'Security check' section with a progress bar and a speaker icon.

Step 12:

Once the identity has confirmed select Basic Support free option.

Select complete sign up.



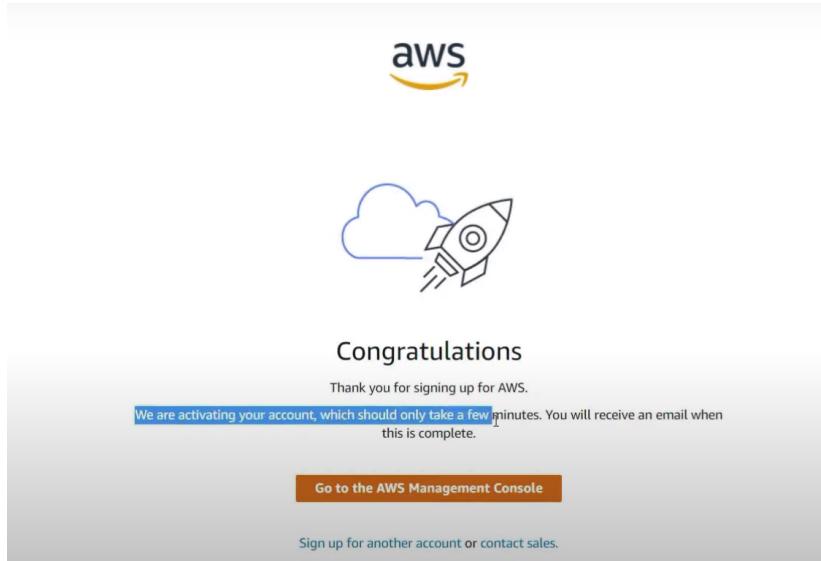
The screenshot shows the 'Select a support plan' step. The AWS logo is at the top. The heading 'Sign up for AWS' is followed by 'Select a support plan'. A note says 'Choose a support plan for your business or personal account. Compare plans and pricing examples' with a link to 'Compare plans and pricing examples'. It also says 'You can change your plan anytime in the AWS Management Console.' Three support plan options are listed in boxes:

- Basic support - Free** (selected):
 - 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

Below the plan descriptions are small icons: a clipboard with a slash, a laptop with code brackets, and a briefcase.

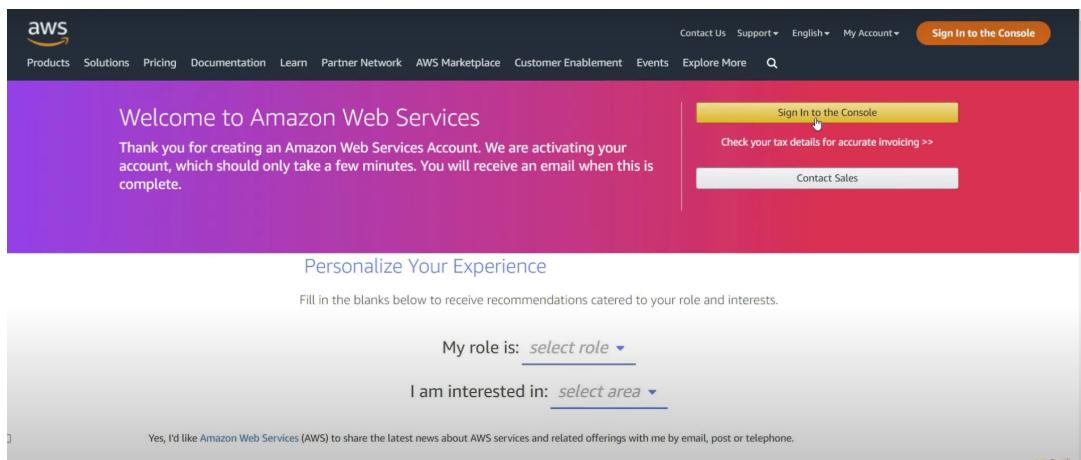
Step 13:

Select AWS Management console.



Step 14:

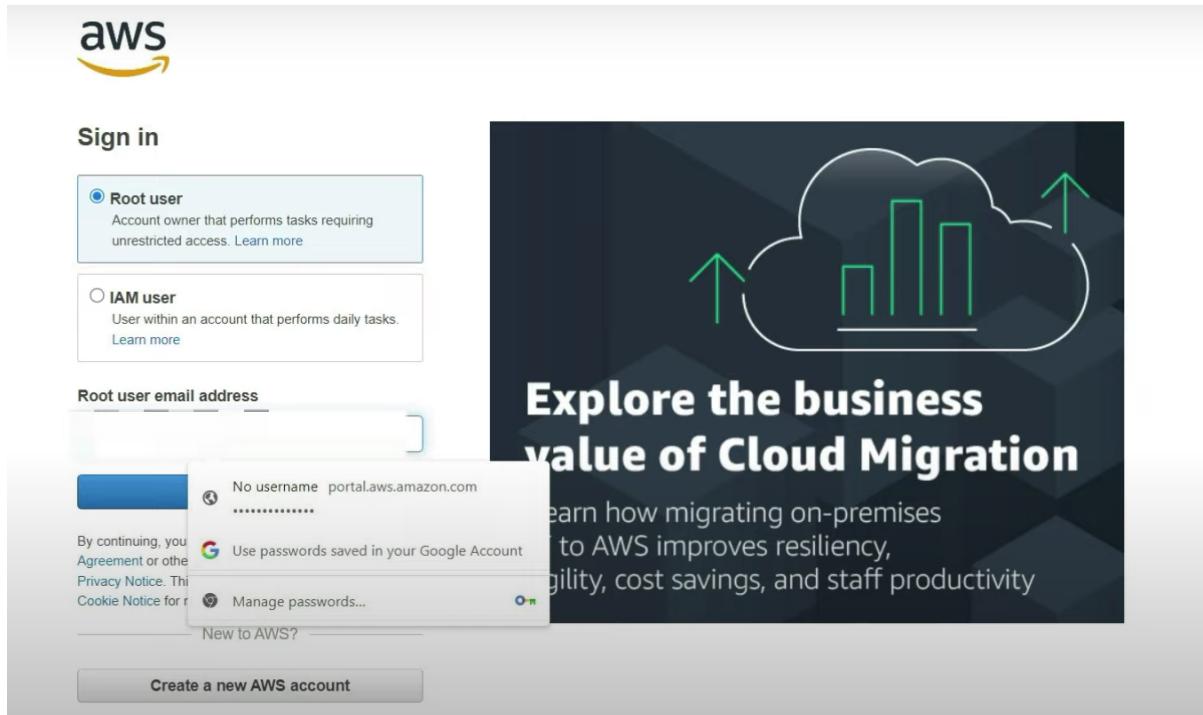
Select sign in to the Console.



Step 15:

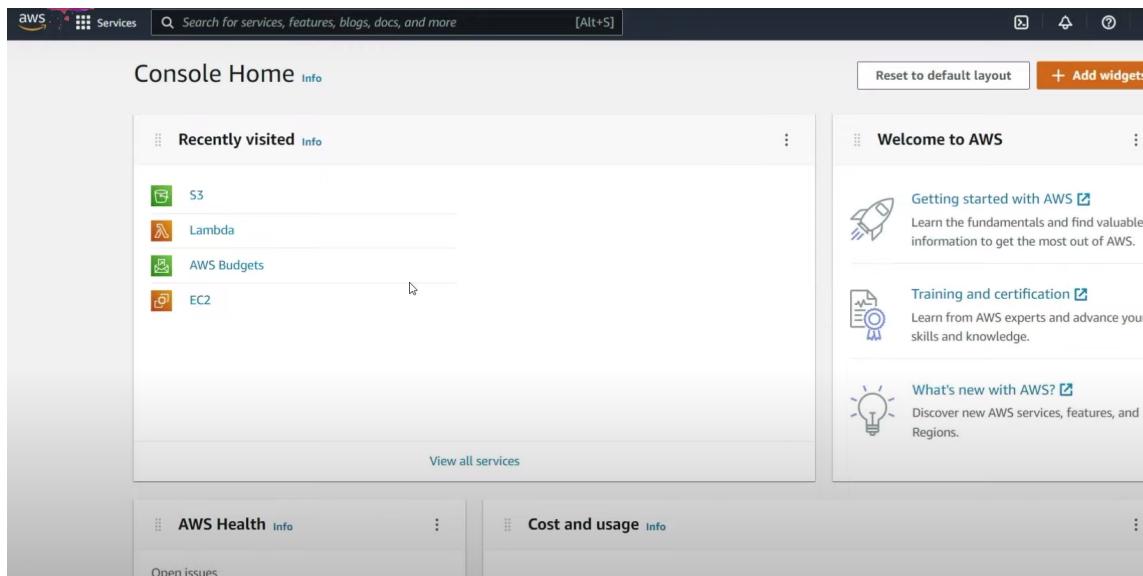
Put your root user email address. Click next

Put the password. And click sign in.



Step 16:

In this way you will be launched to the AWS console.



Virtualization:

What is Virtualization?

- Virtualization is technology that you can use to create virtual representations of servers, storage, networks, and other physical machines.
- Virtual software mimics the functions of physical hardware to run multiple virtual machines simultaneously on a single physical machine.
- Businesses use virtualization to use their hardware resources efficiently and get greater returns from their investment.
- It also powers cloud computing services that help organizations manage infrastructure more efficiently.

Why is virtualization important?

- By using virtualization, you can interact with any hardware resource with greater flexibility.
- Physical servers consume electricity, take up storage space, and need maintenance.
- You are often limited by physical proximity and network design if you want to access them.
- Virtualization removes all these limitations by abstracting physical hardware functionality into software.
- You can manage, maintain, and use your hardware infrastructure like an application on the web.

Use below Document Link to get started with Amazon EC2 windows instance:

https://docs.aws.amazon.com/AWSEC2/latest/WindowsGuide/EC2_GetStarted.html#ec2-launch-instance