

**Shram Sadhana Bombay Trust Sanchlit
Arts, Commerce and Science College, Bambhori, Jalgaon
Bachelor of Computer Application (B.C.A.)**



Bachelor of Computer Applications

**LAB MANUAL ON
506 Cloud Computing Applications**

Name:

Class:

Sem:

Roll No:

Seat No:

Name of faculty: Mr.Aditya Nitin Patil

Academic Year: 20 - 20

**Shram Sadhana Bombay Trust Sanchlit
Arts, Commerce & Science, Bambhori, college, Jalgaon
Bachelor Of Computer Application (B.C.A)**

Practical: 01

DOP:

DOC:

Title: Working on Google Drive to Make Spreadsheets and Notes

Objective:

In this assignment, you will learn how to use Google Drive, a cloud storage service, to create and manage spreadsheets using Google Sheets and take and organize notes using Google Docs. These skills are essential for efficient project management and collaboration in a cloud-based environment.

Requirements :

A Google Account

An internet connection

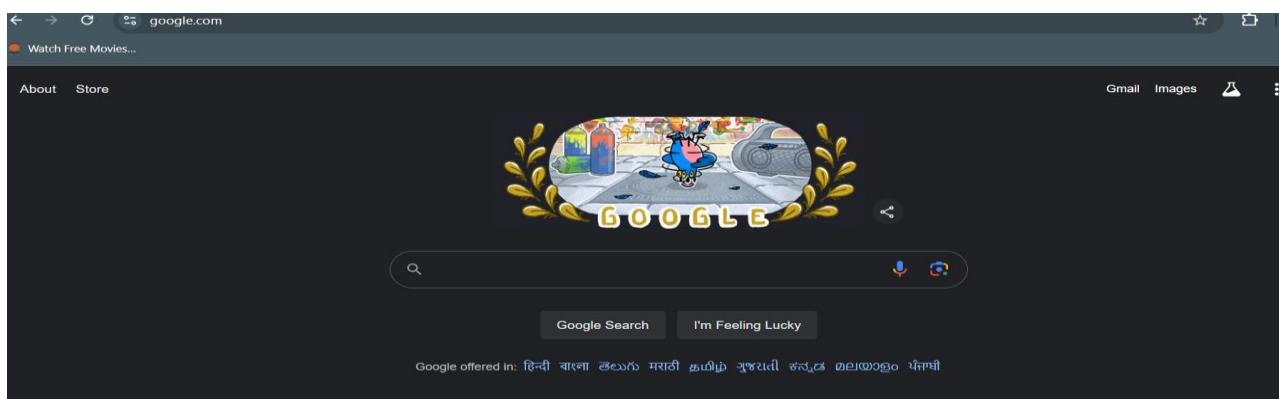
A web browser (e.g., Chrome, Firefox).

Step-by-Step Instructions:

1. Creating a Google Account:

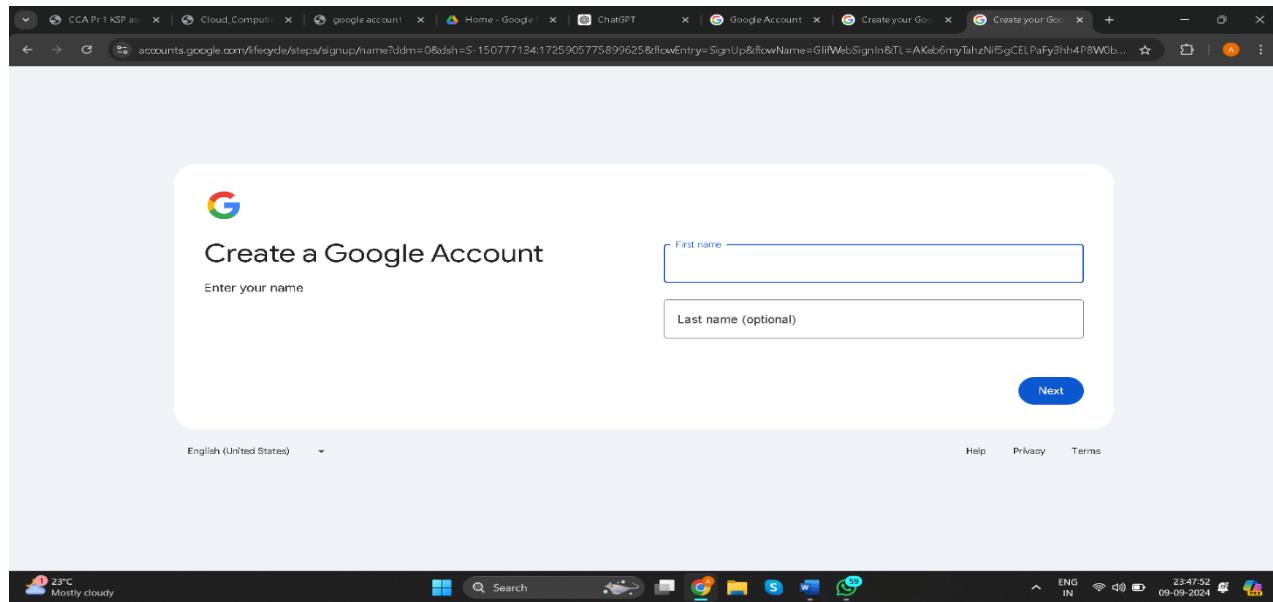
If you don't already have a Google account, follow these steps to create one:

Step 1: Open Google Chrome

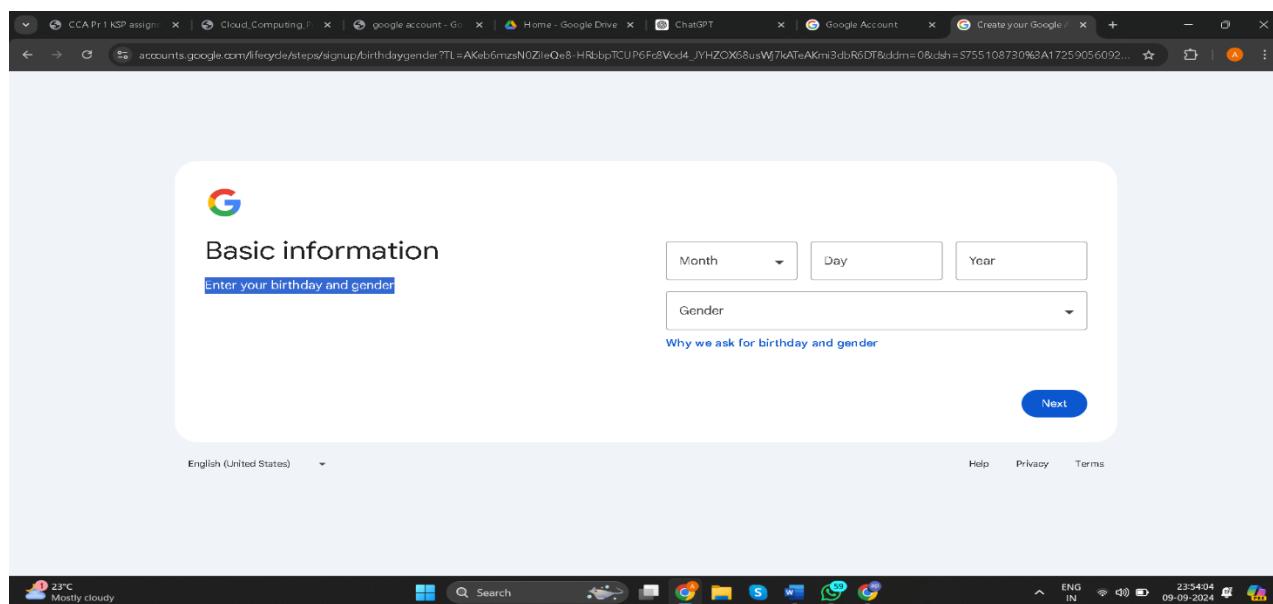


Step 2 : go to the [Google Account Creation Page](<https://accounts.google.com/signup>).

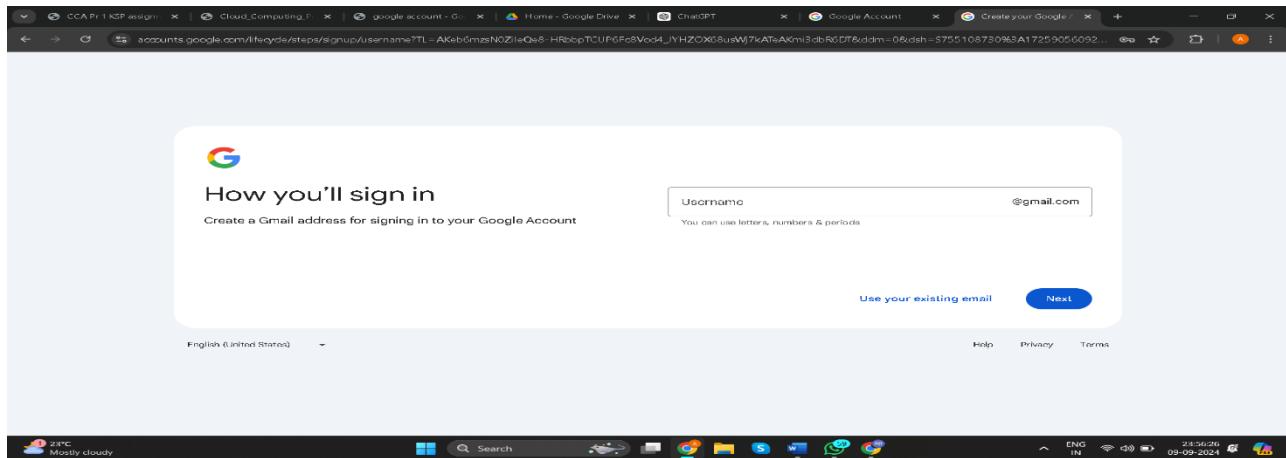
Step 3: Enter your name



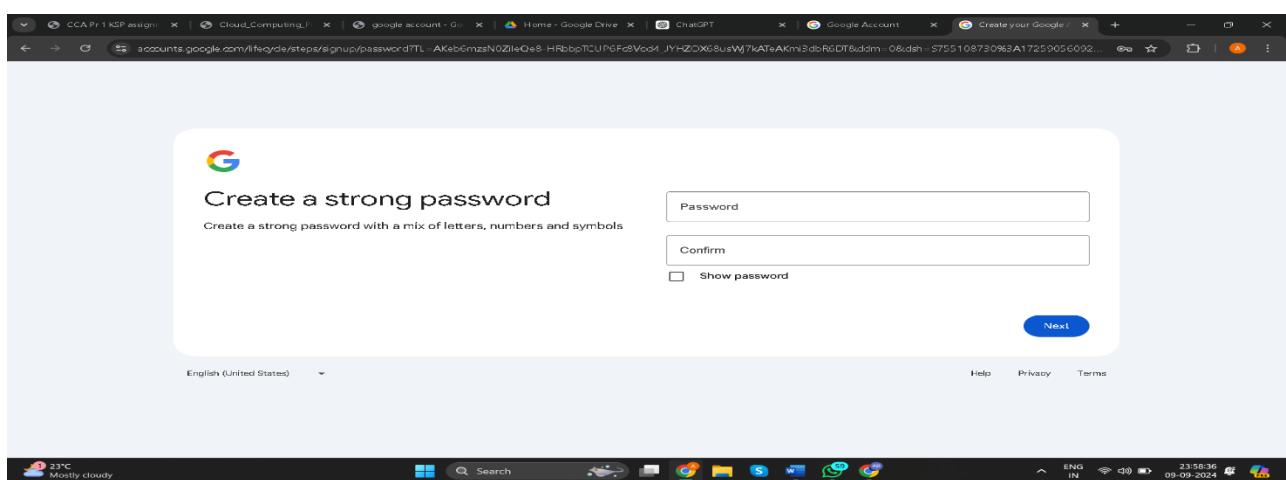
Step 4: Enter your birthday and gender



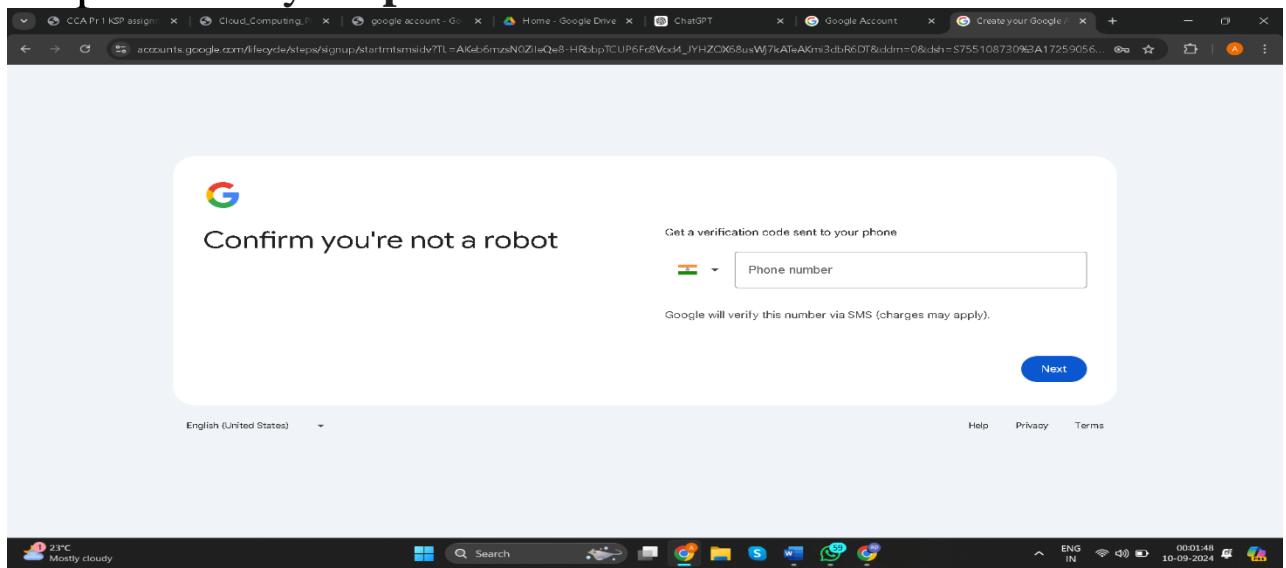
Step 5: Create a Gmail address for signing in to your Google Account



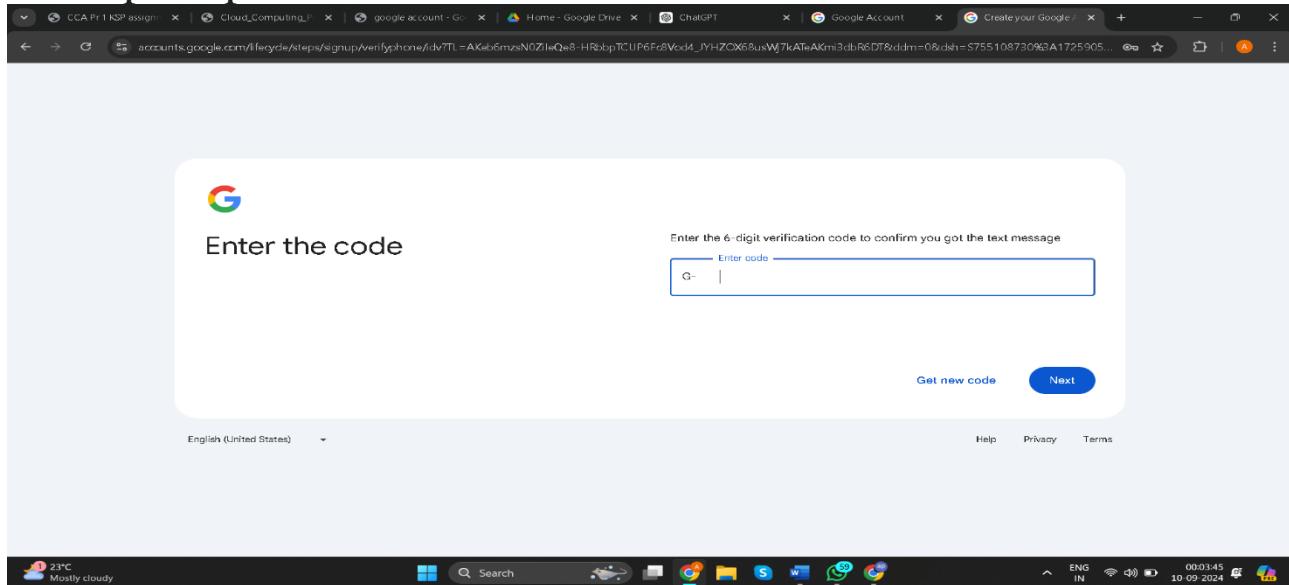
Step 6: Create a strong password



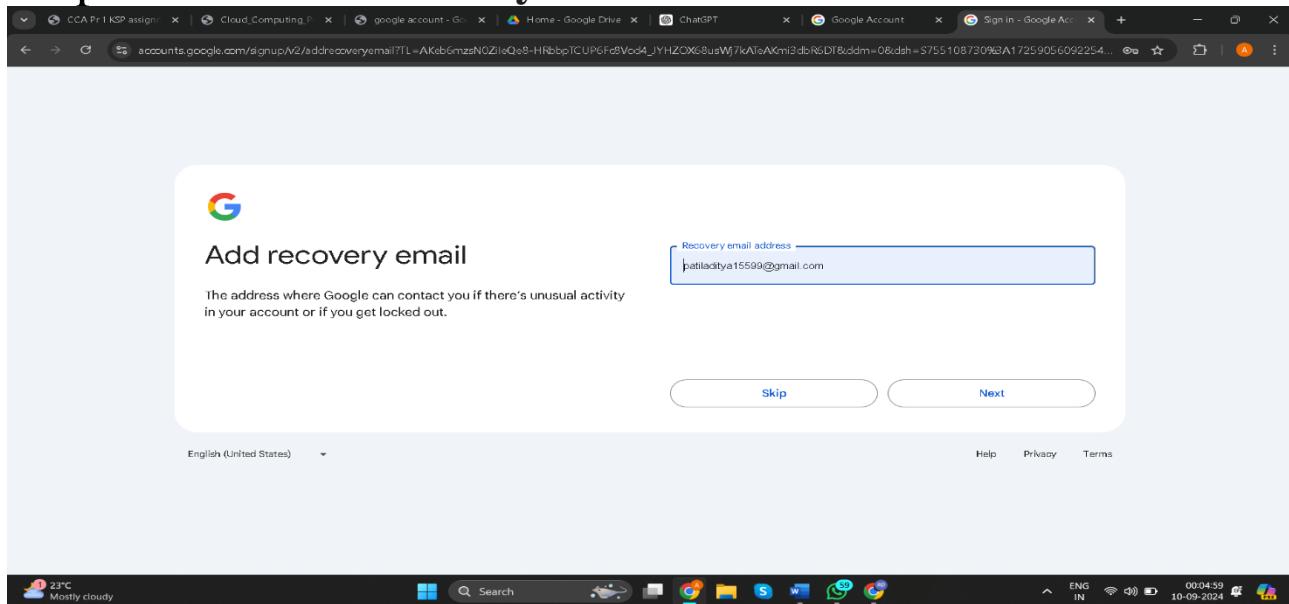
Step 7: Enter your phone number for verification.



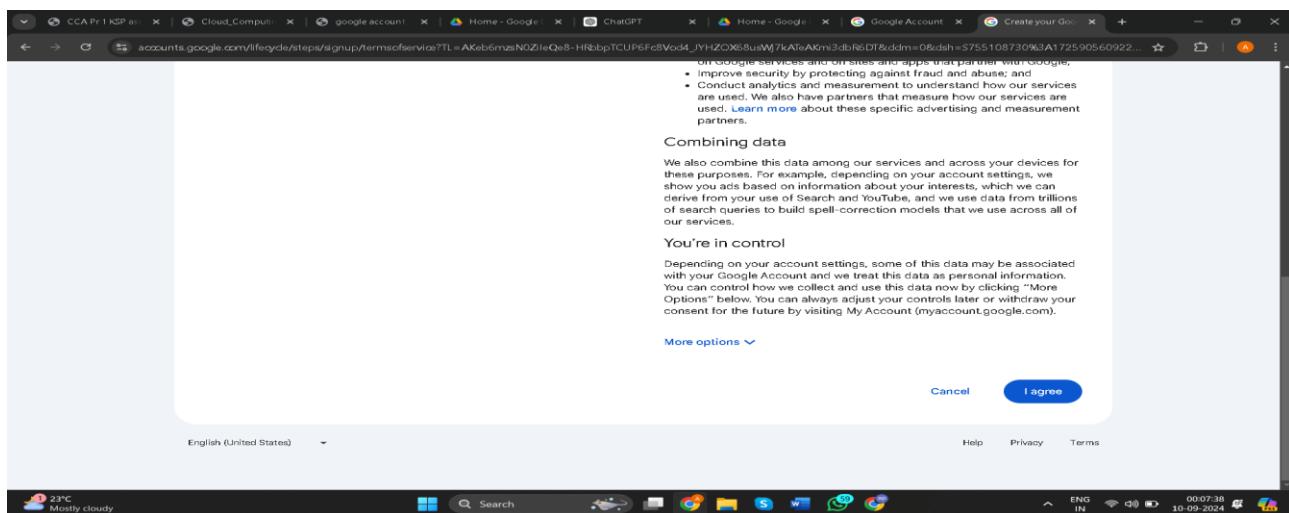
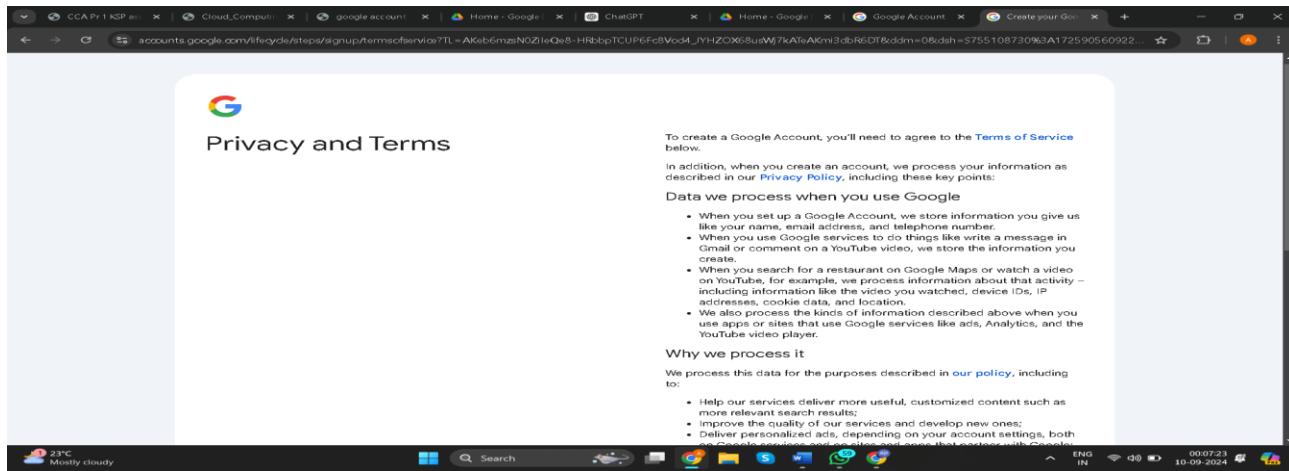
Step 8: Google will send a **verification code via SMS. Enter the code when prompted**



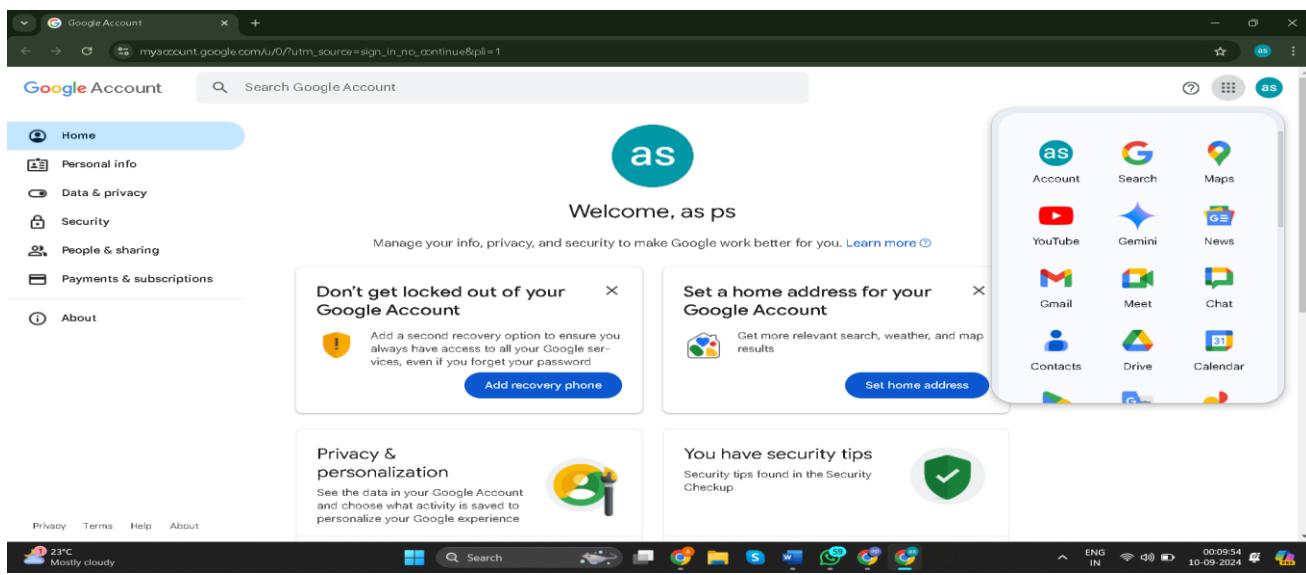
Step 9: Provide a **recovery email**



Step 10: Agree to the **terms and conditions.**

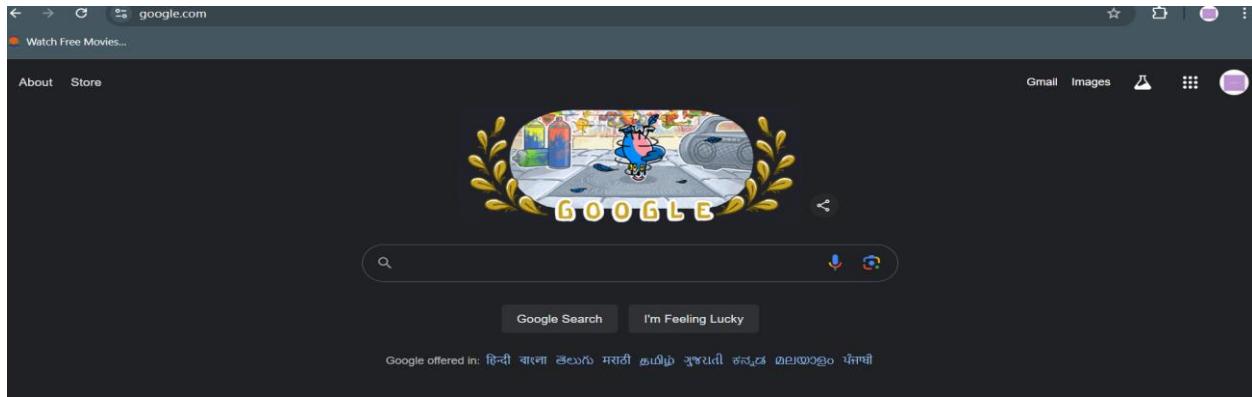


Step 11: Your Google account will be created, and you'll be redirected to your Google dashboard

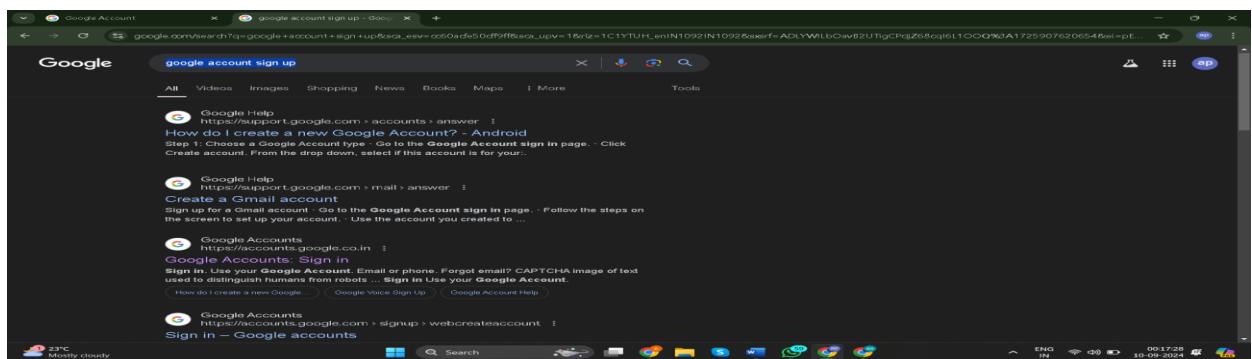


A)For Google Sheets:

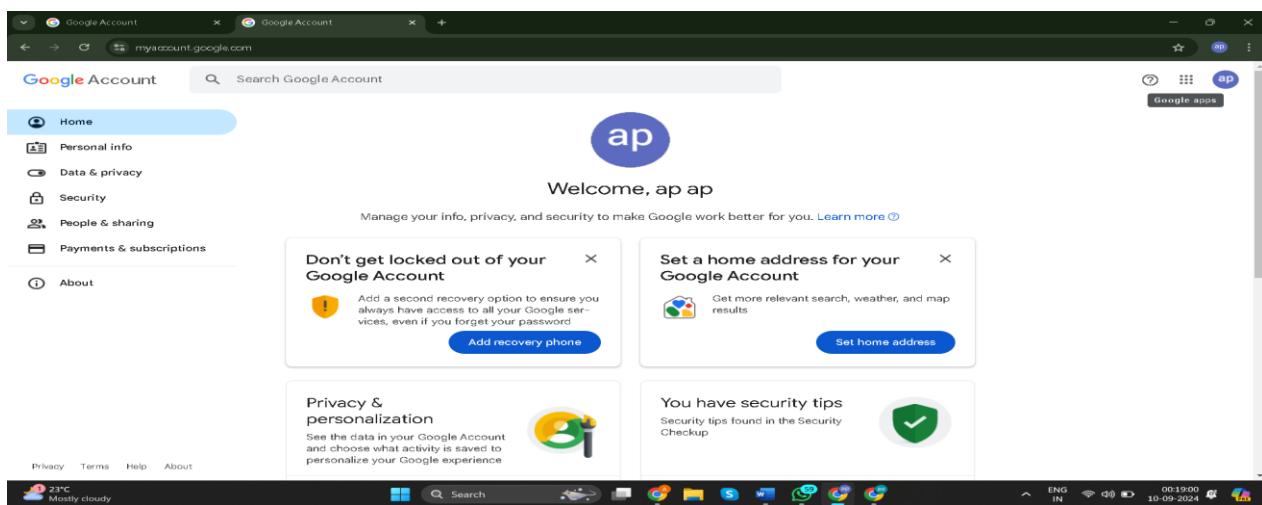
Step 1: Open Google Chrome



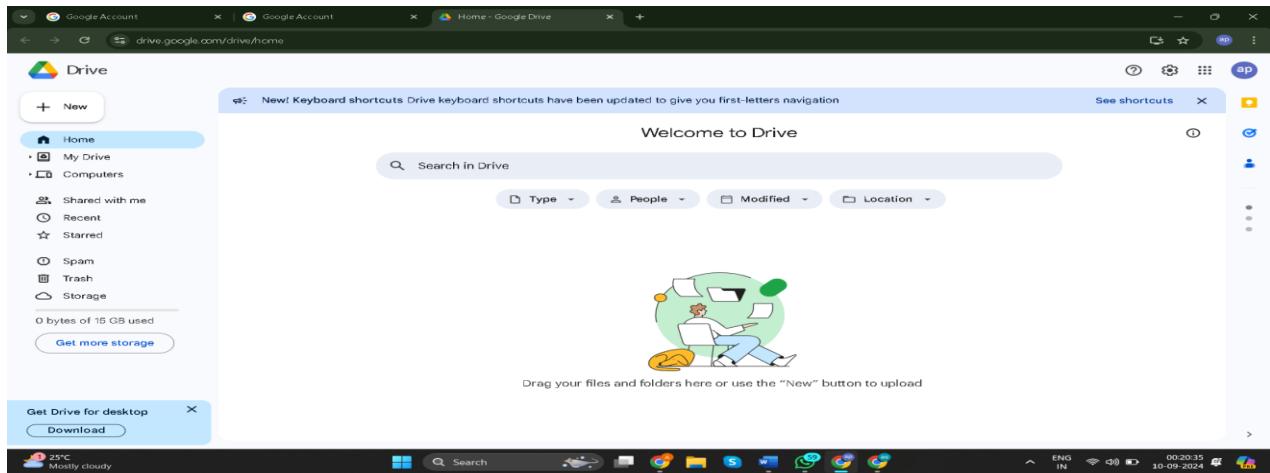
Step 2: search for google account sign in



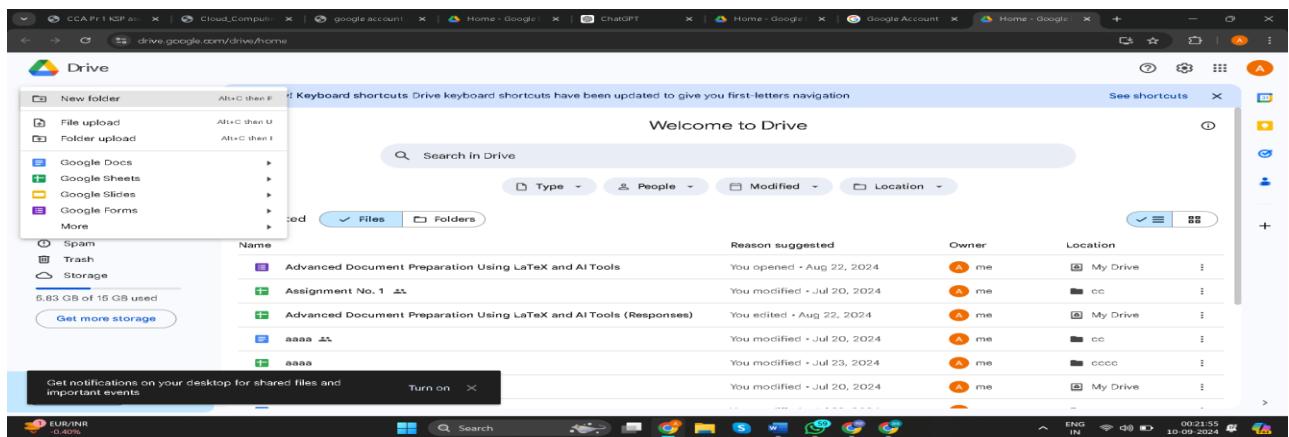
Step 3: click on the google apps



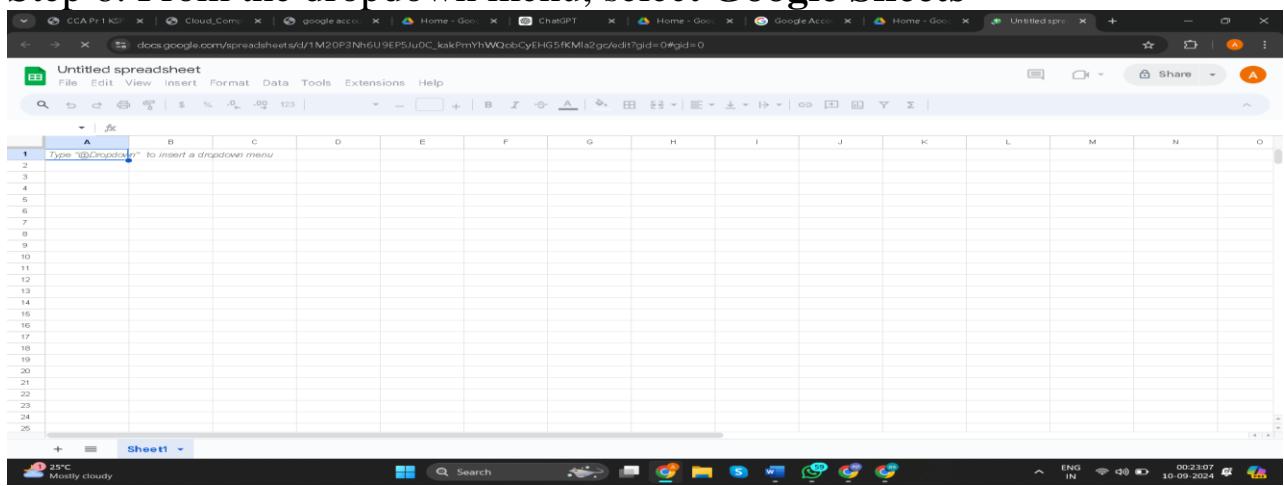
Step 4: click on the google drive



Step 5: On the Google Drive home page, click the + New button in the top-left corner.



Step 6: From the dropdown menu, select Google Sheets



(Or) Search Google Sheets on the browser and click on the official link of Google Workspace

The screenshot shows a Google search results page for the query "google sheets". The first result is a link to the "Google Sheets: Online spreadsheets and templates" page from Google Workspace, which is highlighted with a yellow box. Below this, there are other search results for Google Sheets on the Google Play Store and the App Store, and a link to "Google Sheets training help". To the right of the search results, there is a detailed description of Google Sheets, its features, and its compatibility with Microsoft Excel.

Step 7: Sign in to Google Sheets and select a blank document.

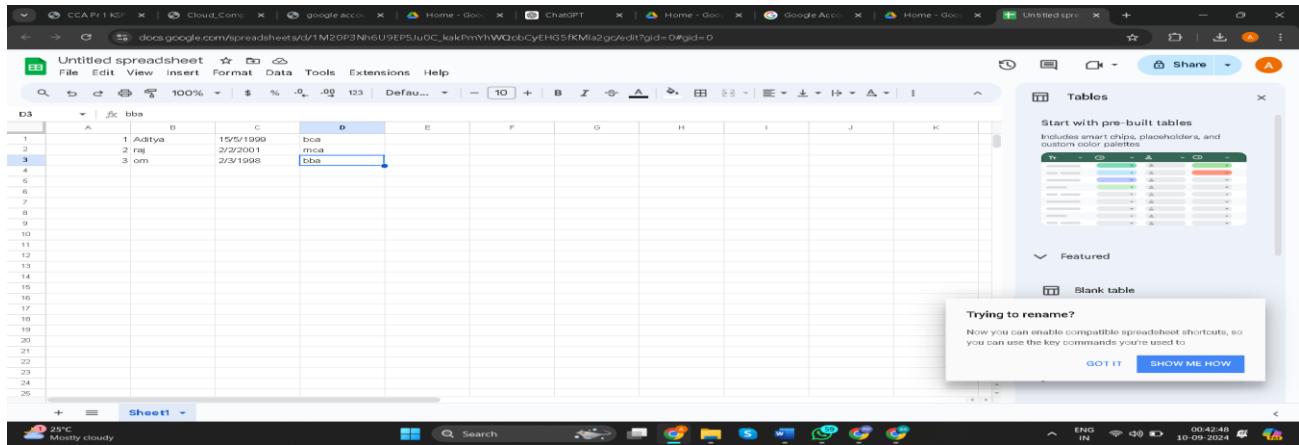
The screenshot shows the Google Sheets interface. At the top, there is a navigation bar with icons for Sheets, File, Edit, View, Insert, Format, Data, Tools, Extensions, Help, and Share. Below the navigation bar, there is a search bar and a "Template gallery" section featuring various template cards like "Blank spreadsheet", "To-do list", "Annual budget", "Monthly budget", "Google Finance Invest...", and "Annual Calendar". Underneath this, there is a "Earlier" section showing a recent document named "2024-Accounts.xlsx" owned by "me" and last opened on "30 Jun 2024".

Step 8: A new spreadsheet will open in a new tab. You can start editing it by entering data into the cells.

The screenshot shows a new Google Sheets spreadsheet titled "Untitled spreadsheet". The spreadsheet has a single row of data in the first sheet. The data is as follows:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Raju Rastogi	8600076769	TYBCA												

Step 9: Make a random table.

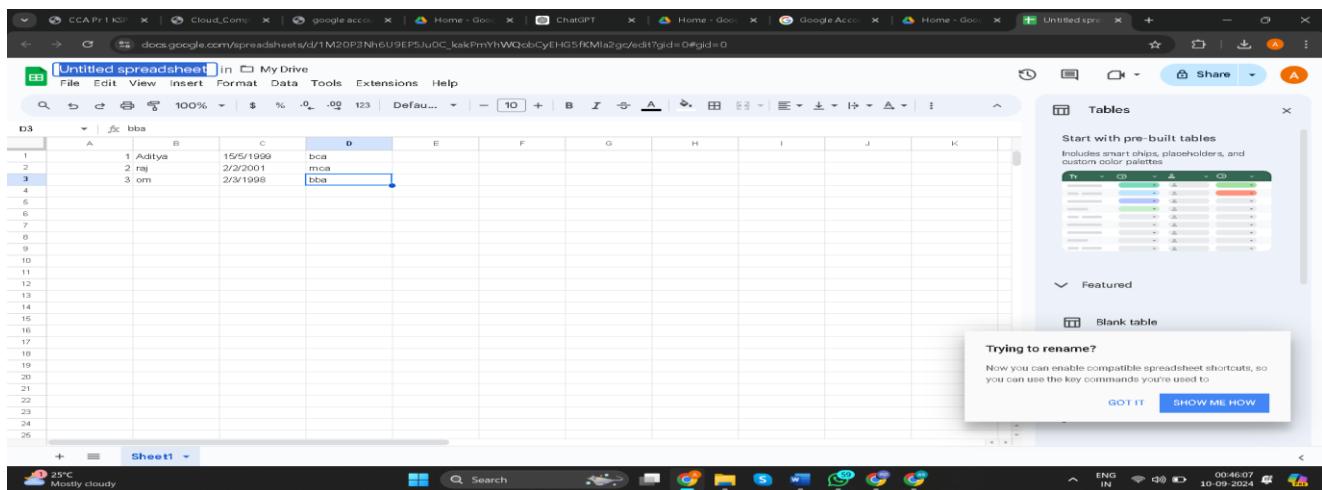


A screenshot of a Google Sheets document titled "Untitled spreadsheet". The sheet contains the following data:

	A	B	C	D	E	F	G	H	I	J	K
1	1	Aditya	15/5/1999	bca							
2	2	raj	2/2/2001	mca							
3	3	om	2/3/1998	bba							
4											
5											
6											
7											
8											
9											
10											
11											
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24											
25											

The sidebar on the right shows a "Tables" section with a "Start with pre-built tables" section containing various table templates and a "Blank table" option. A "Trying to rename?" dialog box is open, providing instructions on how to enable compatible spreadsheet shortcuts.

Step 10: Rename the document as needed.

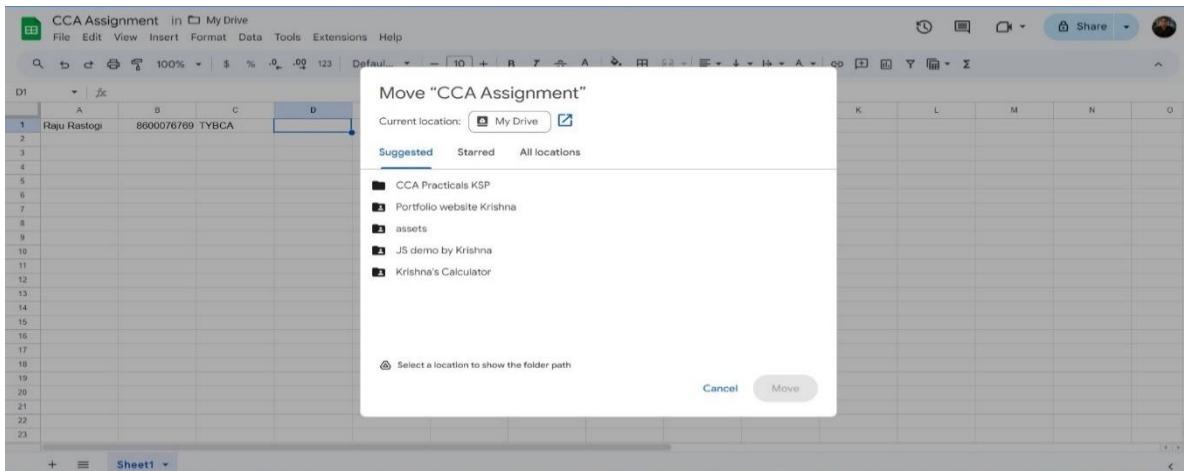


A screenshot of a Google Sheets document titled "Untitled spreadsheet". The sheet contains the same data as the previous screenshot:

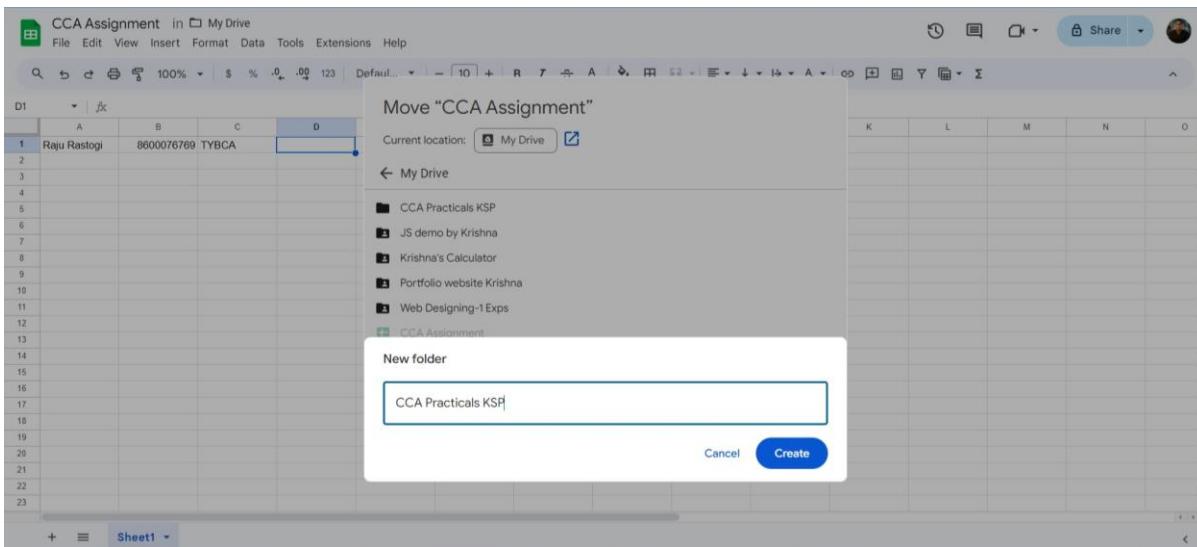
	A	B	C	D	E	F	G	H	I	J	K
1	1	Aditya	15/5/1999	bca							
2	2	raj	2/2/2001	mca							
3	3	om	2/3/1998	bba							
4											
5											
6											
7											
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The sidebar on the right shows a "Tables" section with a "Start with pre-built tables" section containing various table templates and a "Blank table" option. A "Trying to rename?" dialog box is open, providing instructions on how to enable compatible spreadsheet shortcuts.

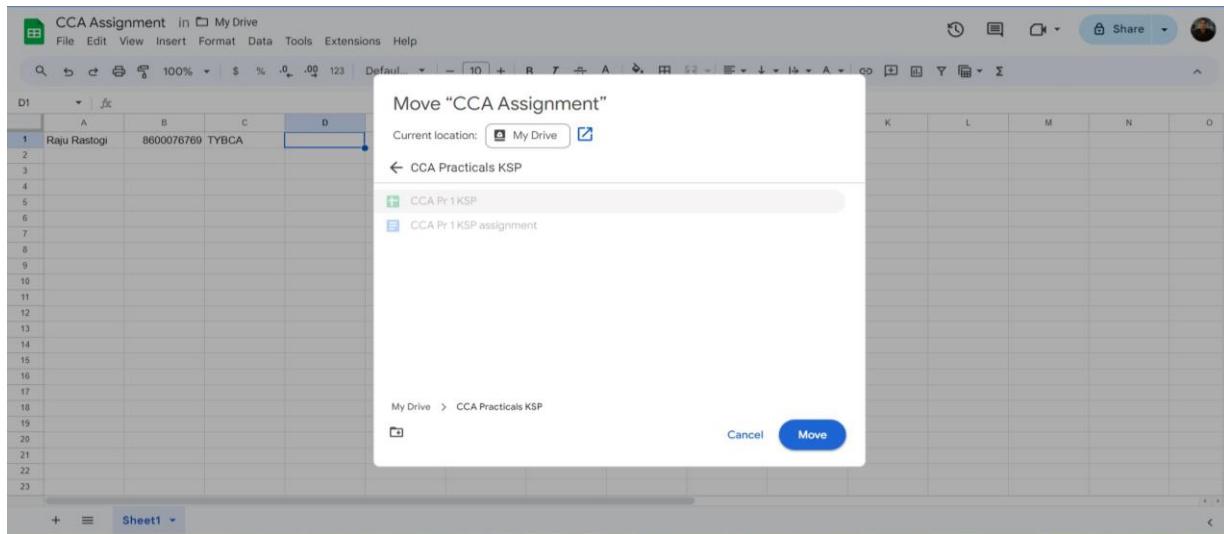
Step 11: click on “in my Drive” option.



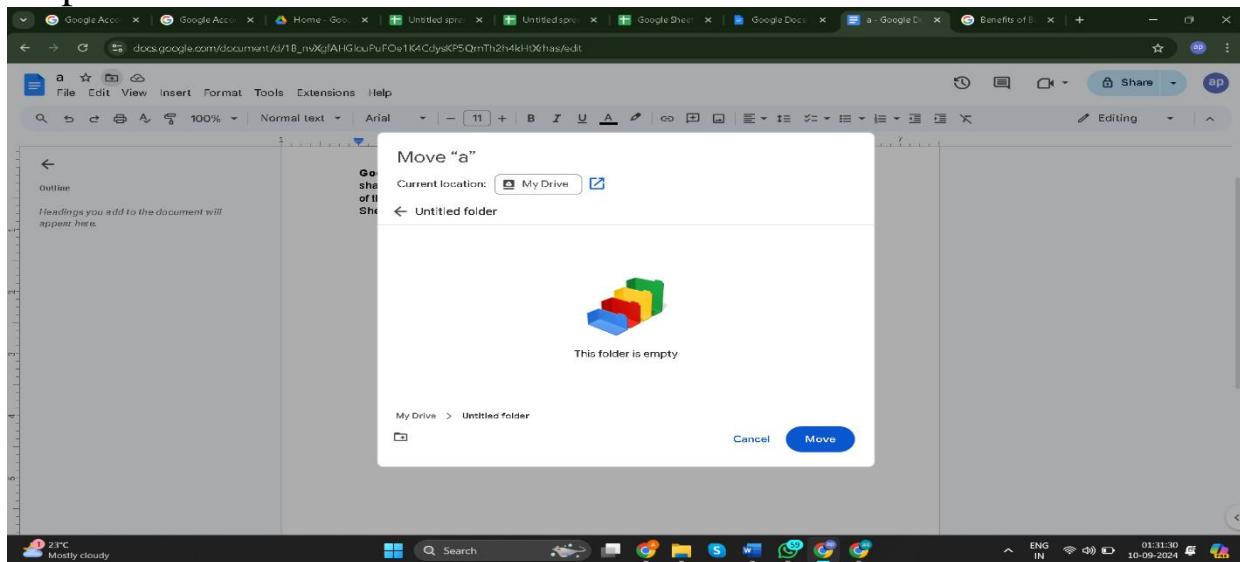
Step 12: Now create a folder by clicking on the button on bottom left of dialog box



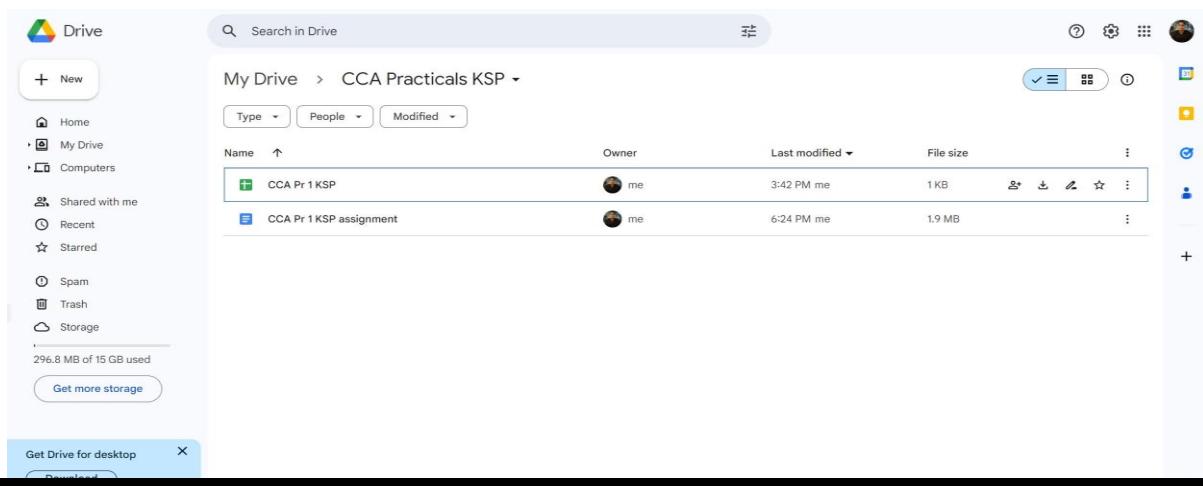
Step 13: Open the folder and click on “Move” button:



Step 14: Click on move :



Step 15: Practical has finished, now you can see the folder with the file created in your respective Google Drive account

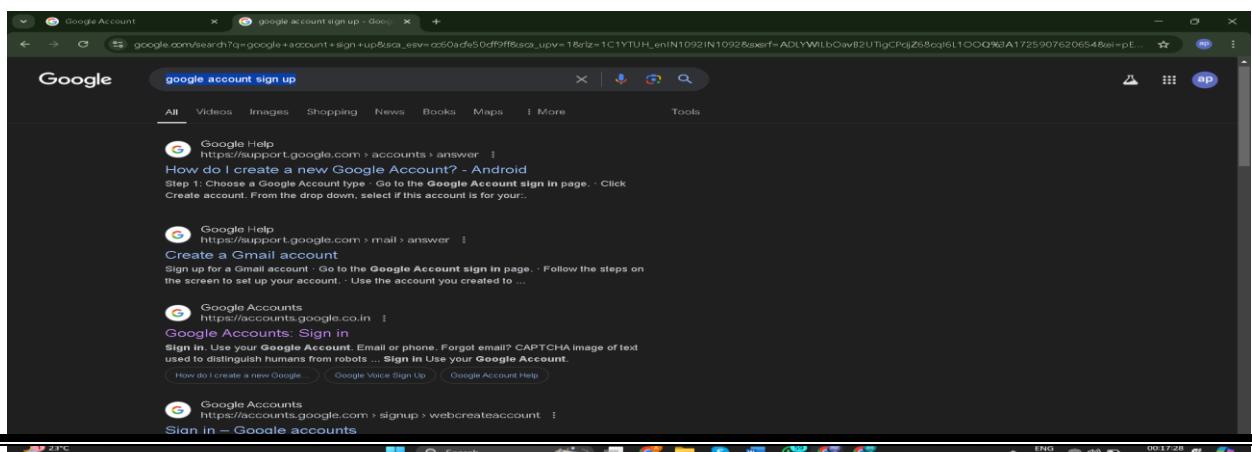


b)For Google Docs :

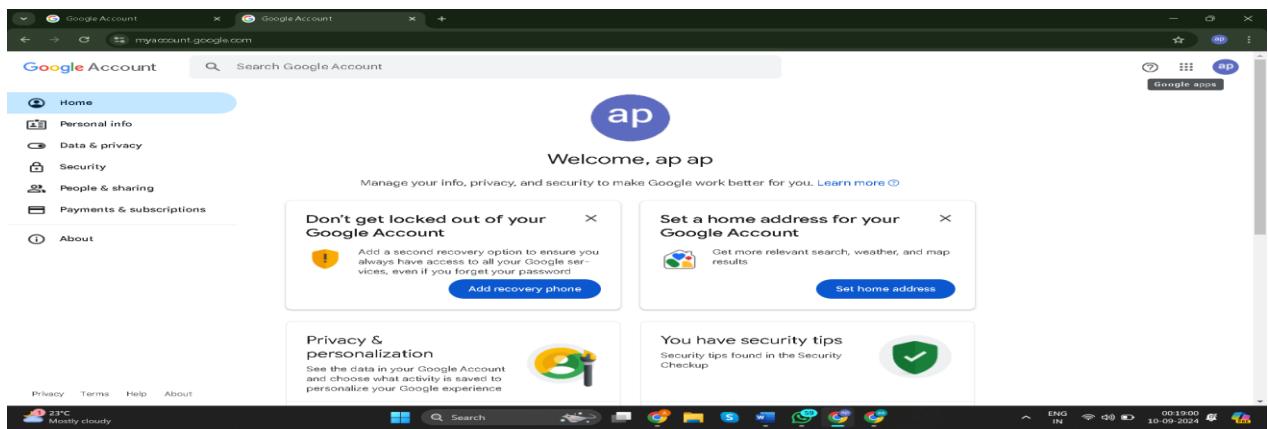
Step 1: Open Google Chrome



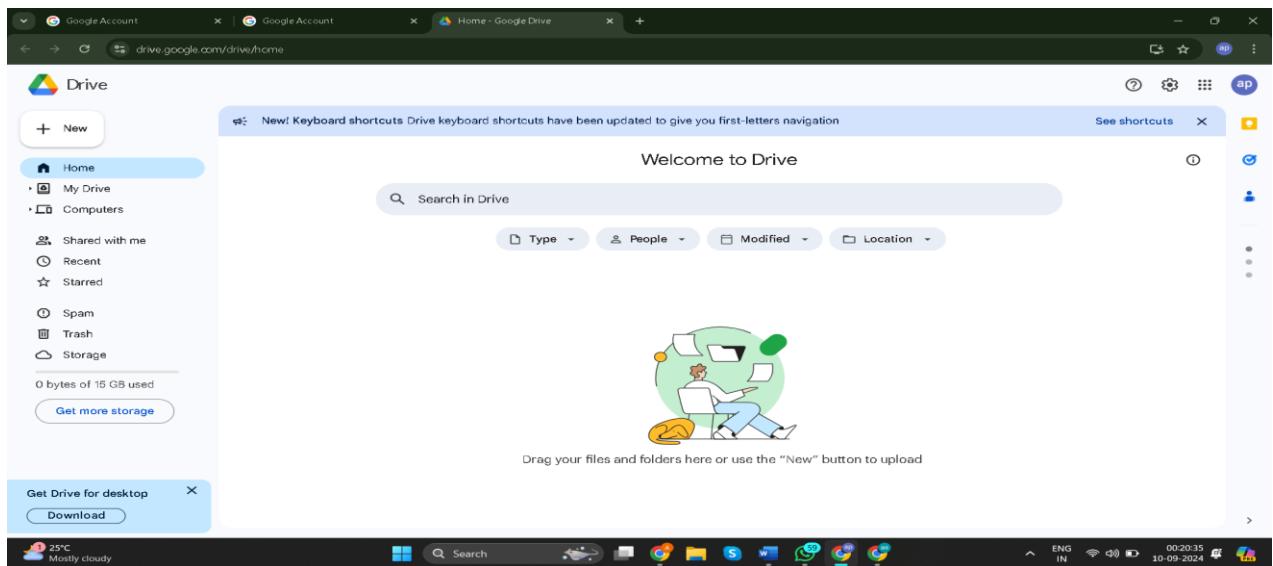
Step 2: search for google account sign in



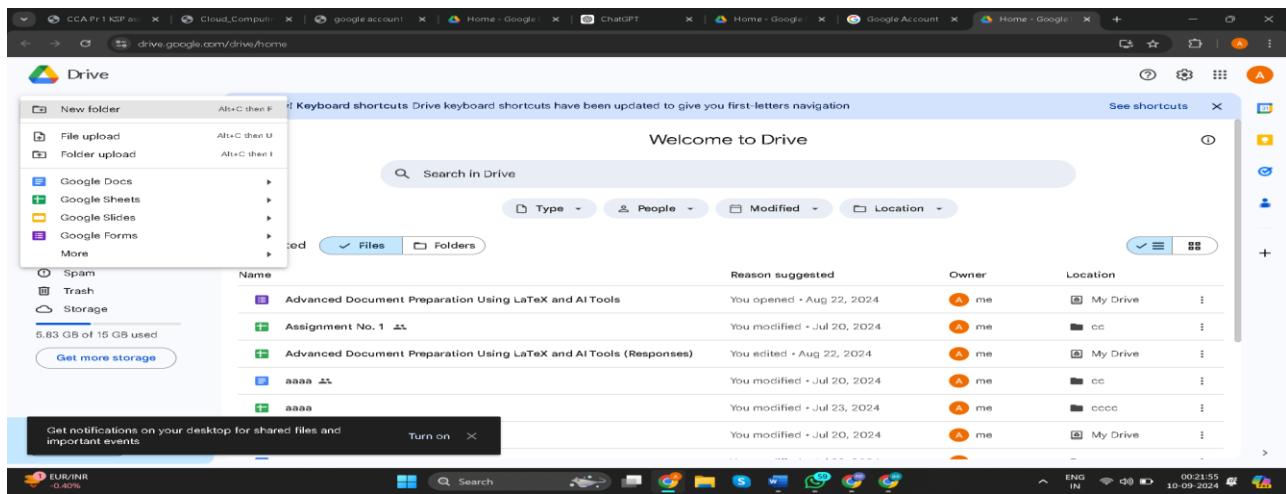
Step 3: click on the google apps



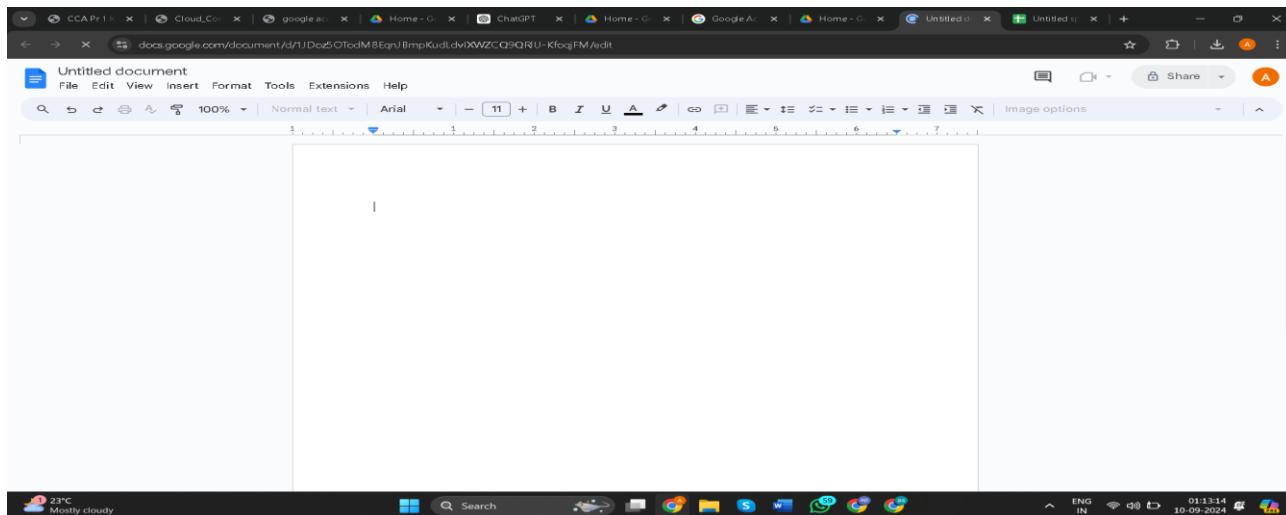
Step 4: click on the google drive



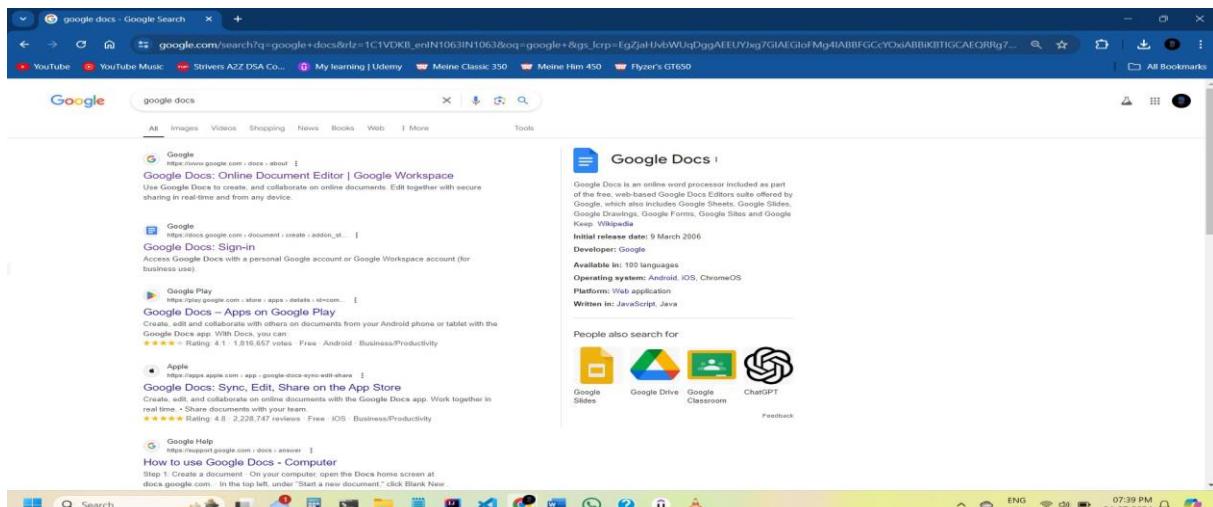
Step 5: On the Google Drive home page, click the + New button in the top-left corner.



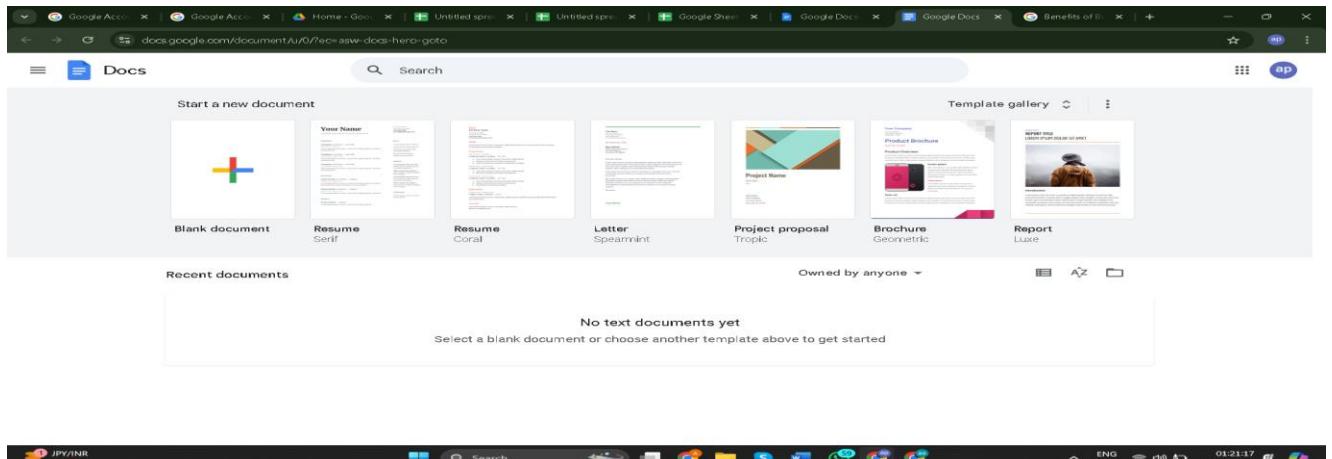
Step 6: From the dropdown menu, select Google Docs



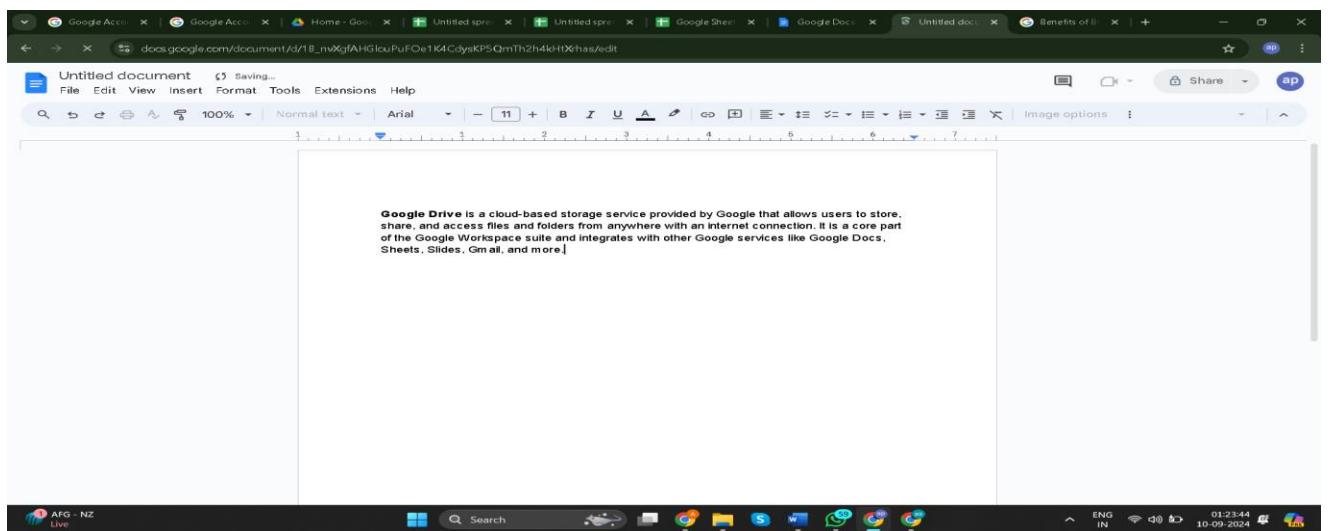
(or) Search Google Sheets on the browser and click on the official link of Google Workspace



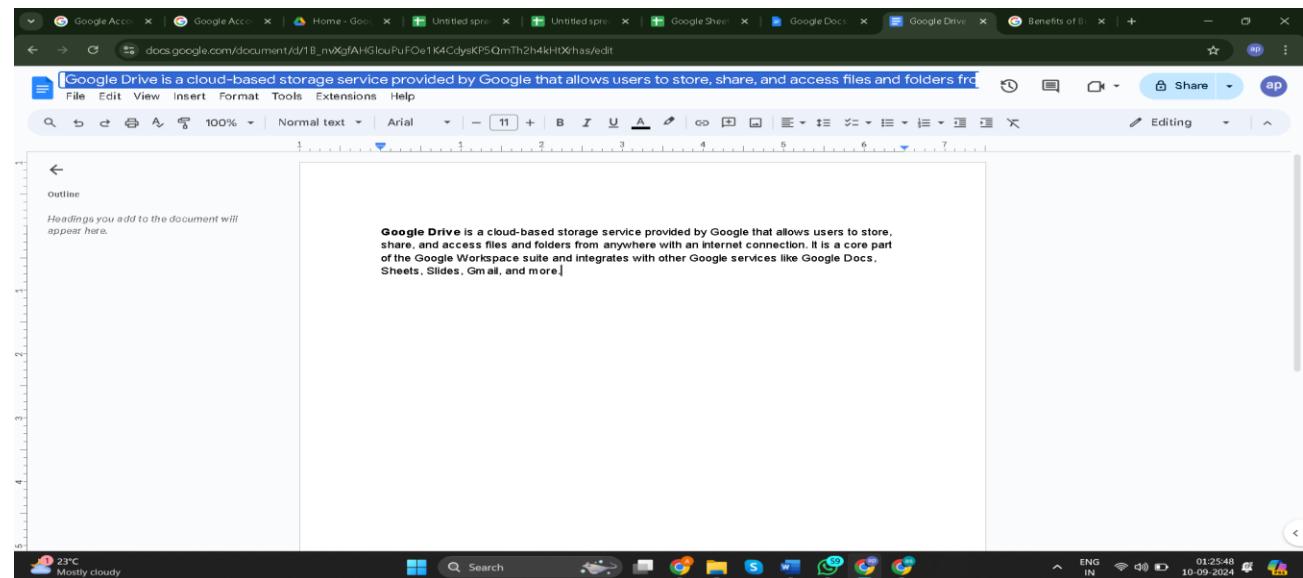
Step 7: select a blank document.



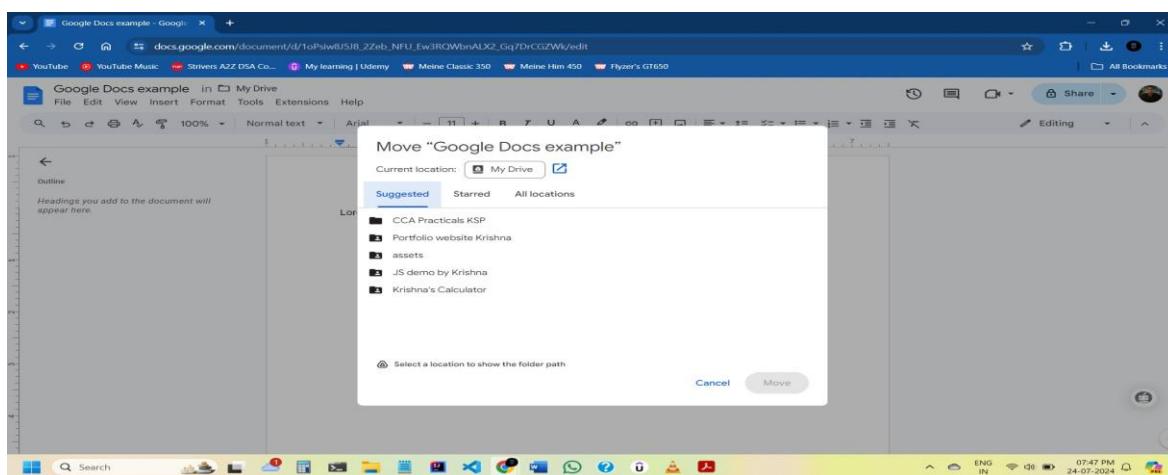
Step 8: Open it and write a random paragraph



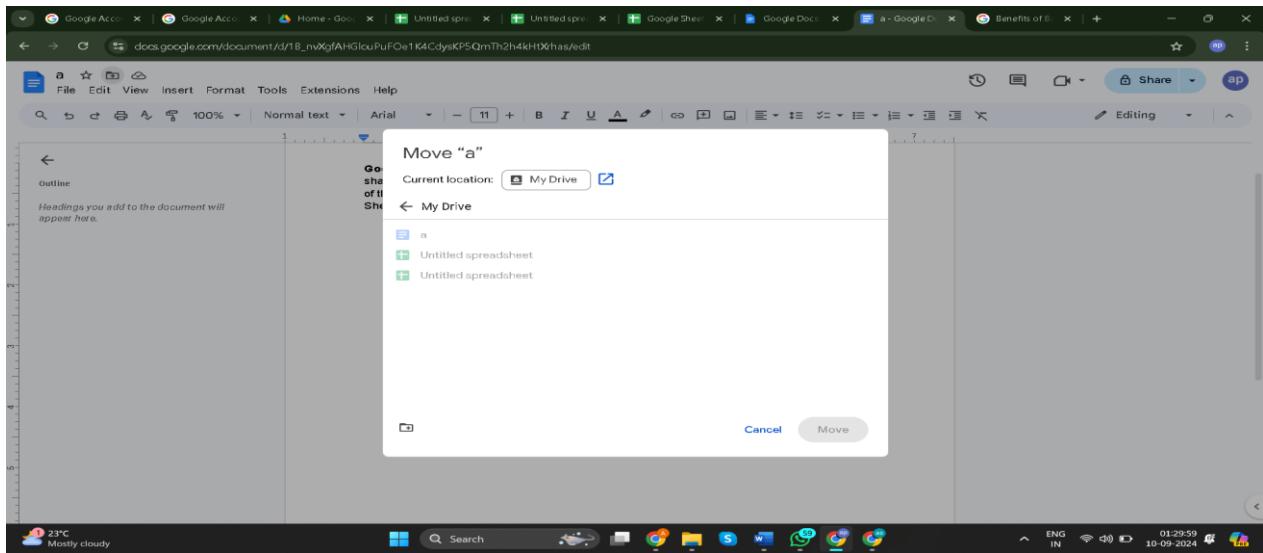
Step 9: Rename the document as needed



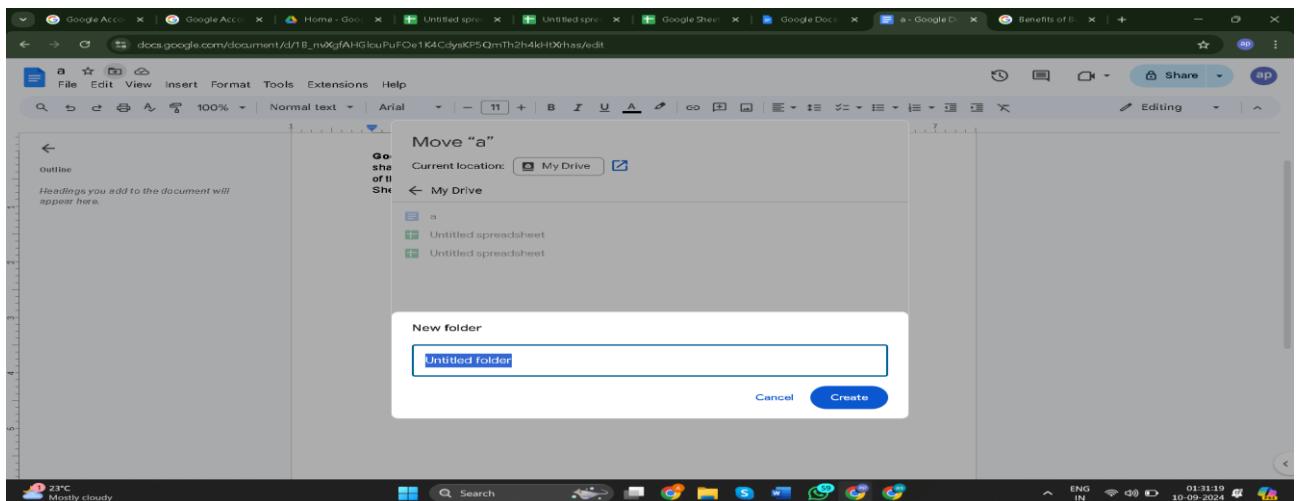
Step 10: click on “in my Drive” option:



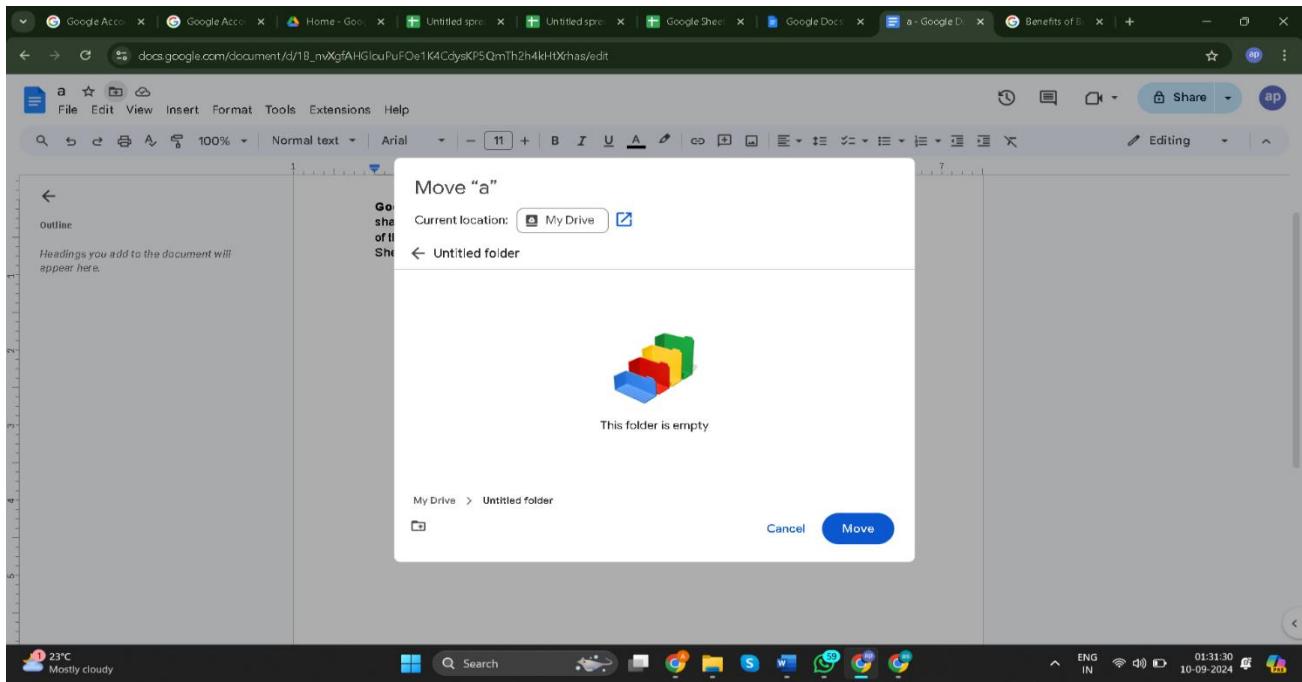
Step 11: click on “in my Drive” option:



Step 12: Now create a folder by clicking on the button on bottom left :



Step 13: Click on move :



Step 14: Practical has finished, now you can see the folder with the file created in your respective Google Drive account

A screenshot of the Google Drive web interface. The left sidebar shows navigation options like Home, My Drive, and Shared with me. The main area shows a folder named "CCA Practicals KSP" containing two items: "CCA Pr 1 KSP" (1KB) and "CCA Pr 1 KSP assignment" (1.9 MB). Both files were uploaded by "me" at different times. A blue banner at the bottom left says "Get Drive for desktop" with a "Download" button.

Conclusion:

By completing this assignment, you have learned how to create and manage spreadsheets

using Google Sheets and organize notes using Google Docs within Google Drive. These tools are essential for efficient project management and collaboration in a cloud-based environment.

Submitted By:

Checked By : Mr. Aditya Nitin Patil

Sign :

Name :

Roll No :

**Shram Sadhana Bombay Trust Sanchlit
Arts, Commerce & Science, Bambhori, college, Jalgaon
Bachelor Of Computer Application (B.C.A)**

Practical: 02

DOP:

DOC:

Title: Installation and Configuration of JustCloud.

Objective : To install and set up JustCloud, which safely backs up your files (documents, photos, music, and videos) to the cloud so you never lose them.

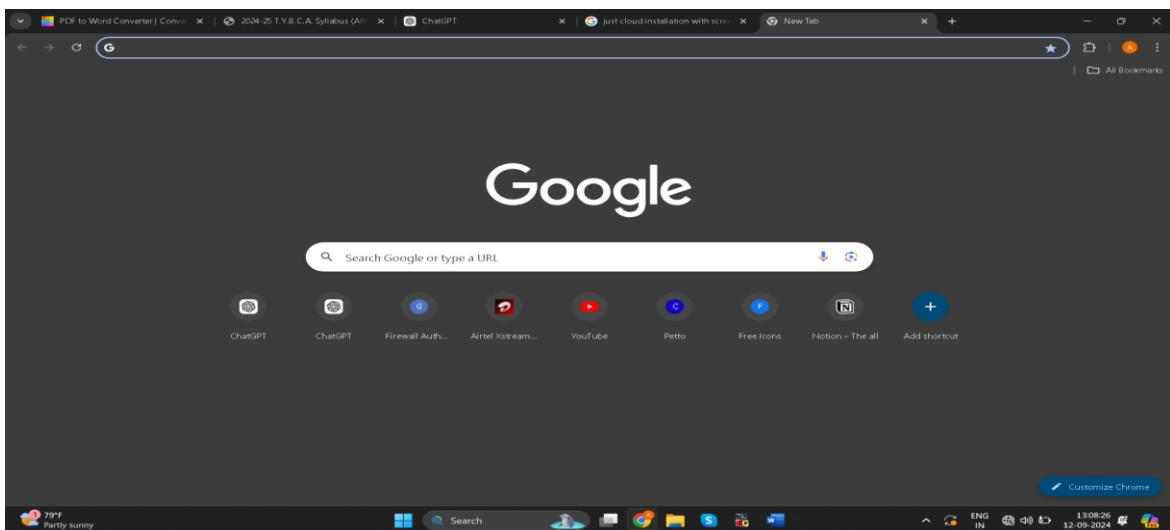
Requirements:

2. A working internet connection.
3. A computer with Windows or macOS operating system.
4. JustCloud account (Free or paid subscription).
5. JustCloud installer downloaded from the official website.
6. Sufficient storage space on your computer for installation.
- 7.

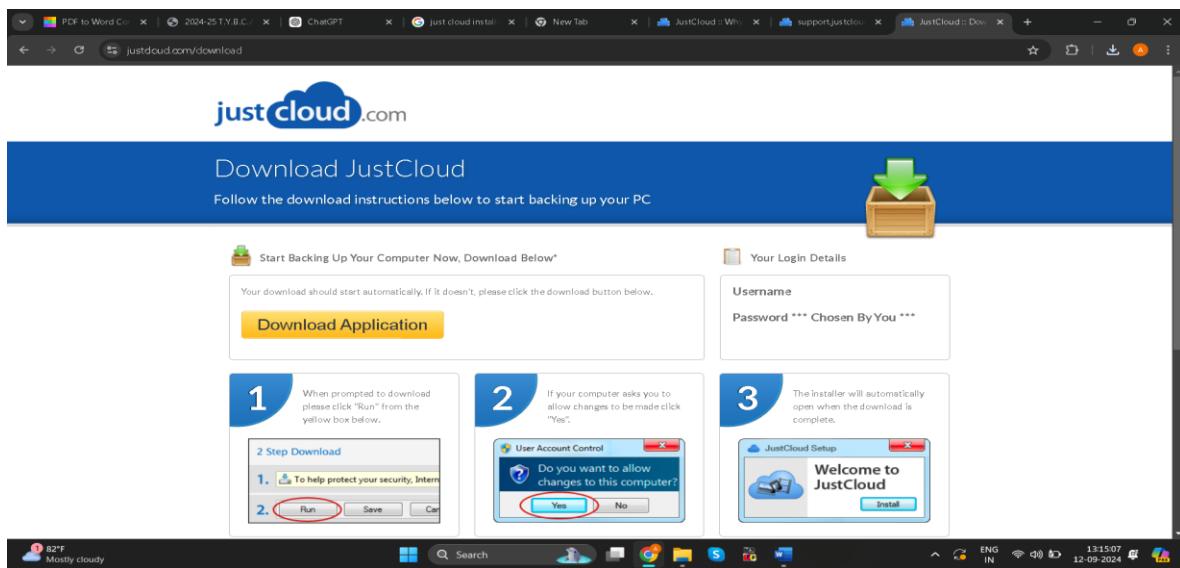
Step-by-Step Instructions:

1. Download JustCloud:

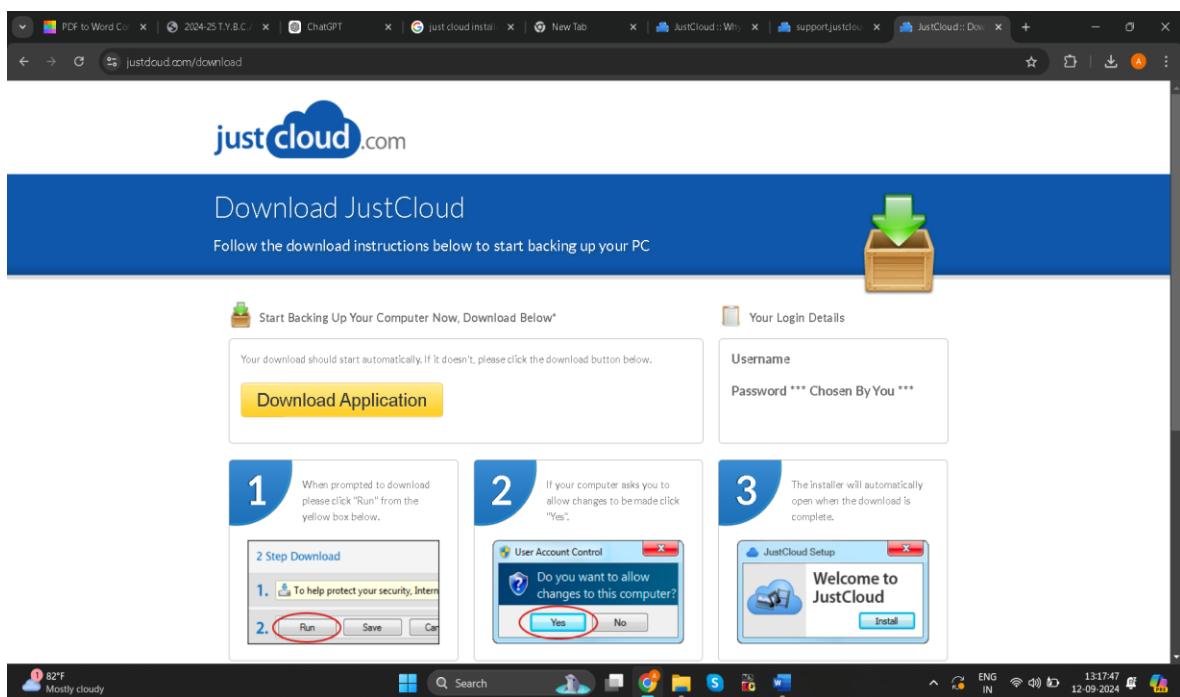
Step 1: Open your browser (e.g., Chrome, Firefox, or Edge).



Step 2: In the address bar at the top, type <https://www.justcloud.com/download> and hit Enter.

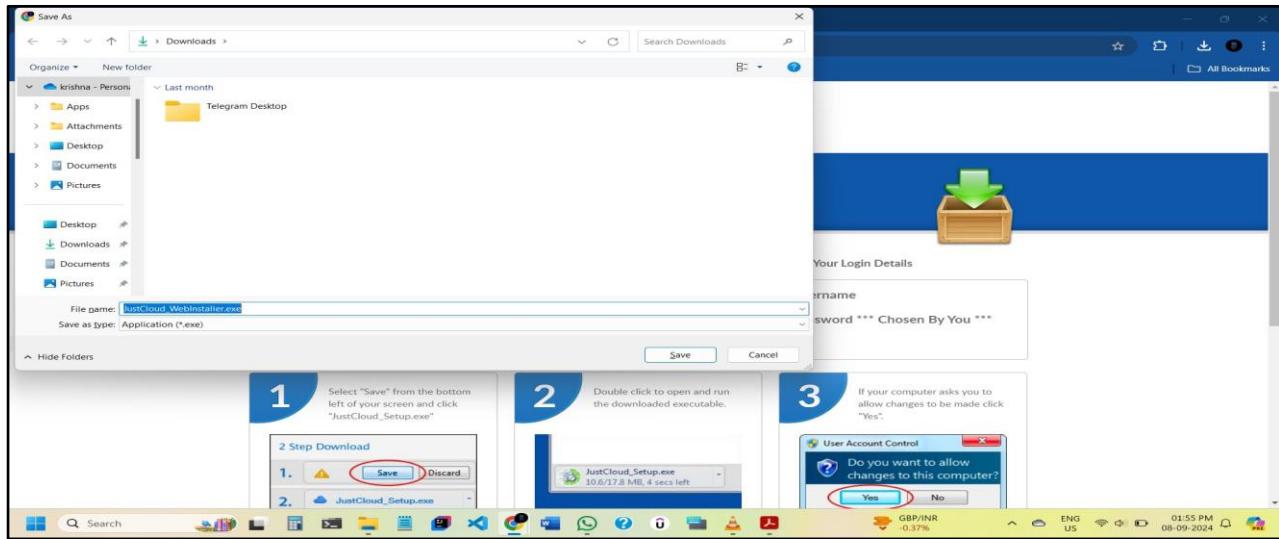


Step 3 : click on the Download Application download will automatically start



2. Install JustCloud:

Step 1: Once the file is downloaded, go to your Downloads folder. Look for the JustCloud installer file (JustCloud_WebInstaller.exe for Windows or .dmg for macOS).



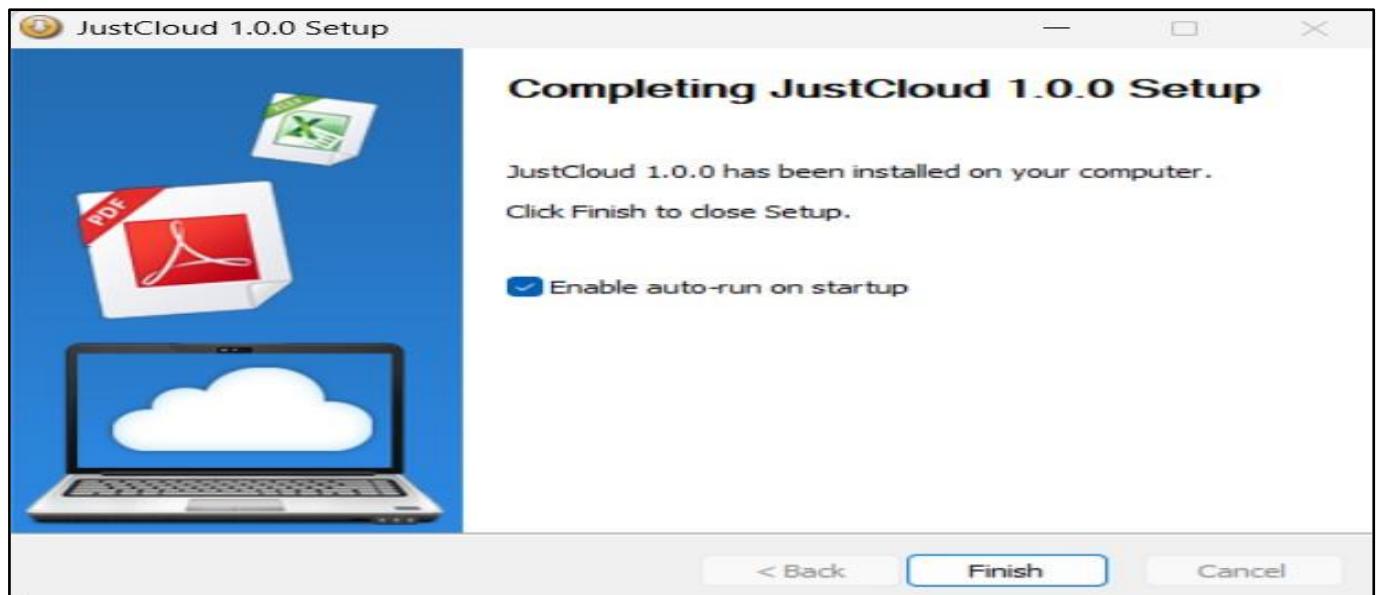
Step 2: Double-click the installer file with the left mouse button to start the installation process

Step 3: If prompted by a security warning, click "Yes"

Step 4: click on Install button



Step 4 : Once completed, click "Finish" to launch JustCloud.



2. Create or Log into Your JustCloud Account :

Step 1 : After installation, JustCloud will automatically open.



Step 2: On the login screen

- If you already have an account, enter your username and password and click "Log In" with the left mouse button.
- If you don't have an account, click "Sign Up" at the bottom left of the screen



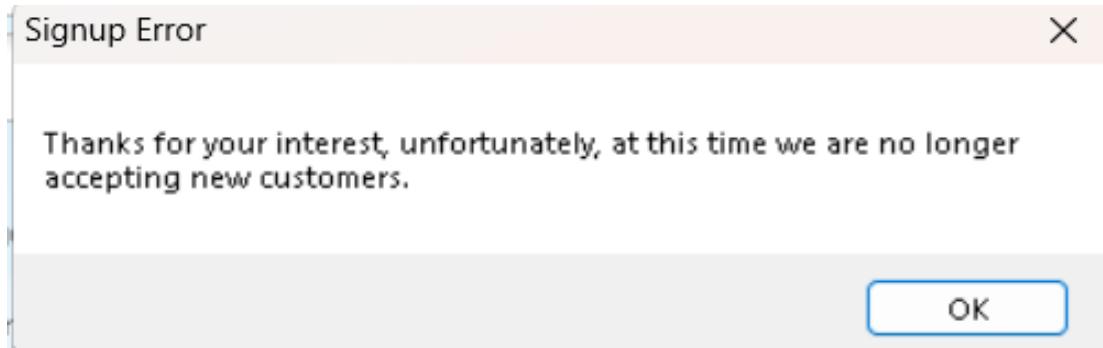
The JustCloud Setup Wizard login screen features a blue header with the title "JustCloud Setup Wizard" and a cloud icon. Below the header is a sub-header: "Please enter your login details that you used to register". There are two input fields: "Username / Email" and "Password". To the right of the "Password" field is a link "Forgot your Password?". At the bottom left is a link "Don't have an account? Click here to create one today". On the right side is a yellow "Next" button. At the very bottom are links for "Privacy Notice", "Terms and Conditions", and "Do Not Sell My Personal Information".



The JustCloud Account Creation screen features a blue header with the title "JustCloud Account Creation" and a cloud icon. Below the header is a sub-header: "Enter your details to create your 1GB Free Account". There are three input fields: "Name", "Email", and "Password". Below these fields are two checkboxes:

- I do not want to receive marketing emails
- I agree to the Terms and Conditions and acknowledge receipt of the Privacy Notice.

At the bottom left is a link "By creating an account, I agree to my personal information being transferred and stored in the United States in order for JustCloud to provision my account.". On the right side is a yellow "Next" button. At the bottom left is a link "Already have an account?".



Justcloud doesn't want to accept any new customers

(If account is created in JustCloud)

3. Set Up Backup:

- 1) Once logged in, you'll see the JustCloud dashboard.
- 2) On the dashboard, find the Settings icon (gear symbol) in the top right.
- 3) Click "Backup Settings" on the left side.
- 4) Choose the file types (photos, music, documents) you want to back up by checking the boxes.
- 5) Select the folders you want by clicking "Browse" on the right side.
- 6) Click "Apply".

4. Start the Backup:

- 1) Click the "Start Backup" button in the center of the screen.
- 2) JustCloud will begin backing up your files.
- 3) Watch the progress bar at the bottom.

5. Restore Files:

- 1) If you want to restore files, click the "Restore" tab at the top left.
- 2) Pick the files or folders you want to restore, then click "Restore Now" on the bottom right.

Conclusion:

You have successfully installed, set up, and started using JustCloud to securely back up and restore your important files.

Submitted By:

Checked By : Mr. Aditya Nitin Patil

Sign :

Name :

Roll No :

**Shram Sadhana Bombay Trust Sanchlit
Arts, Commerce & Science, Bambhori, college, Jalgaon
Bachelor Of Computer Application (B.C.A)**

Practical: 03

DOP:

DOC:

Title: Implementing Virtual Machines with VirtualBox:

Objective:

To understand how virtualization works by creating and managing virtual machines (VMs) using VirtualBox. In this practical, you will learn how to set up, configure, and handle VMs, which is important for using cloud-based systems.

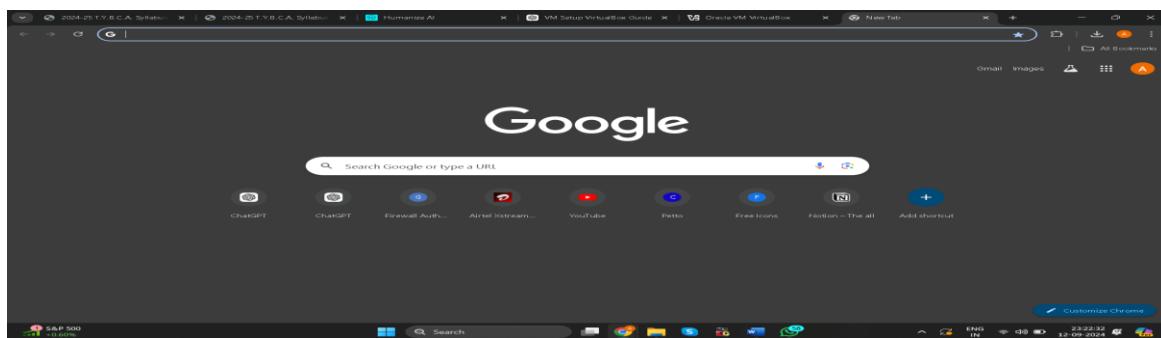
Requirements:

- 1) A computer with sufficient RAM (at least 4 GB)
- 2) VirtualBox software installed
- 3) ISO file of an operating system (e.g., Ubuntu, Windows,kali-linux)
- 4) Internet connection (for downloading VirtualBox or ISO files if not already available)

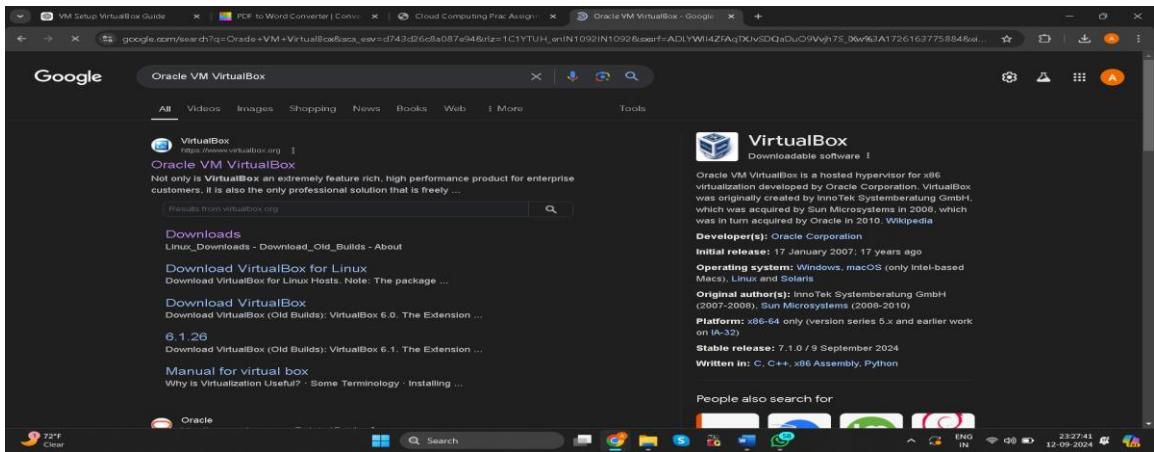
Step-by-Step Instructions:

1) Download and Install VirtualBox:

Step 1: Go to Google Chrome.

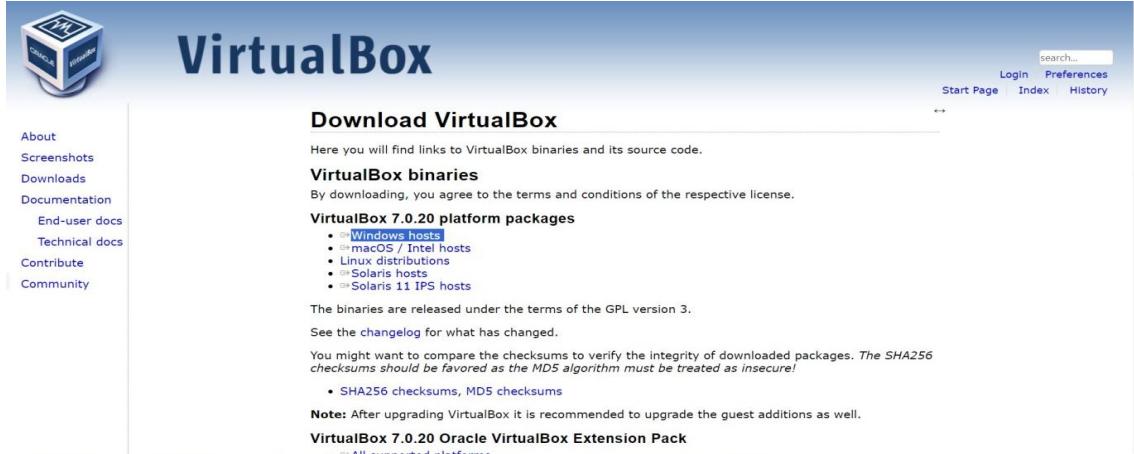


Step 2: Search for “Oracle VM VirtualBox” on a browser and click on the official link

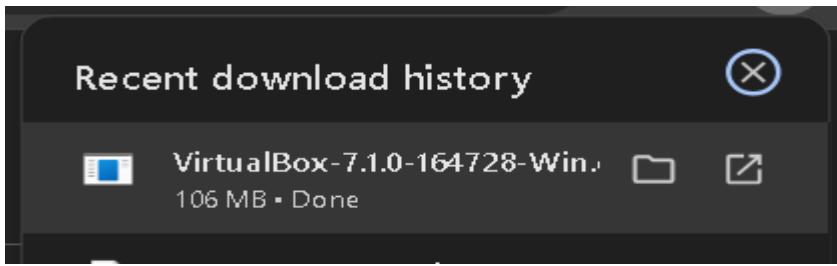


Step 3: click on the Download VirtualBox 7.0. 20

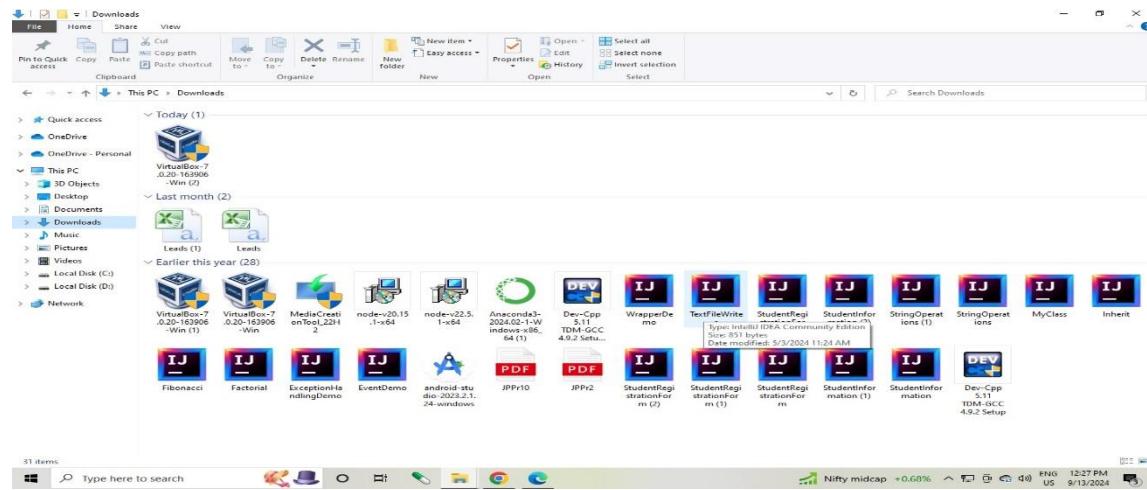
Step 4: Choose your operating system (Windows, macOS, Linux) header select your "VirtualBox Platform Packages" and click the corresponding link.



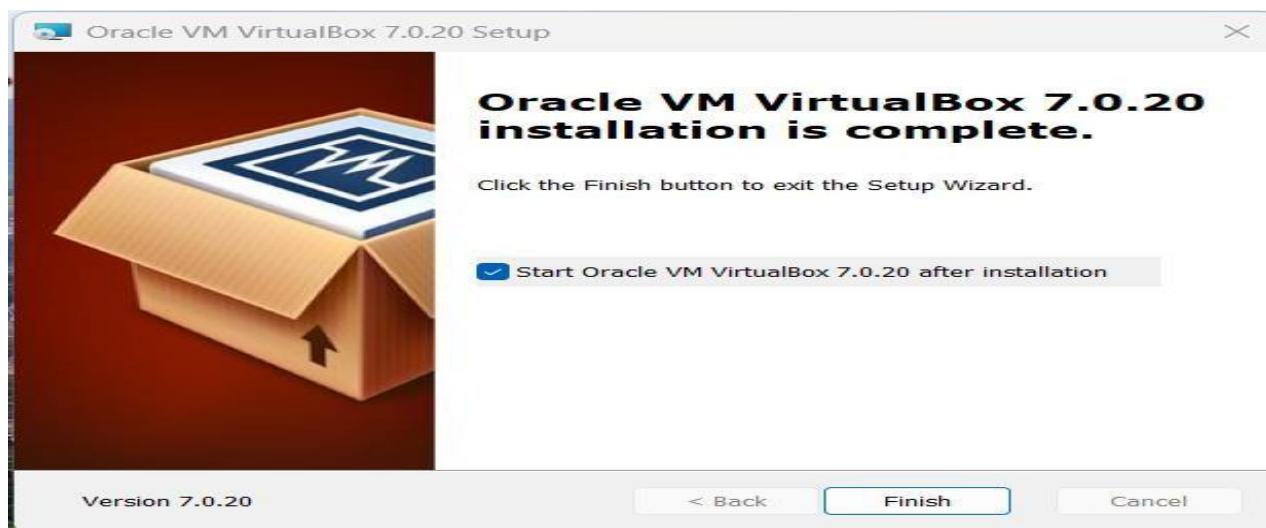
Step 5: Wait for Downloading file



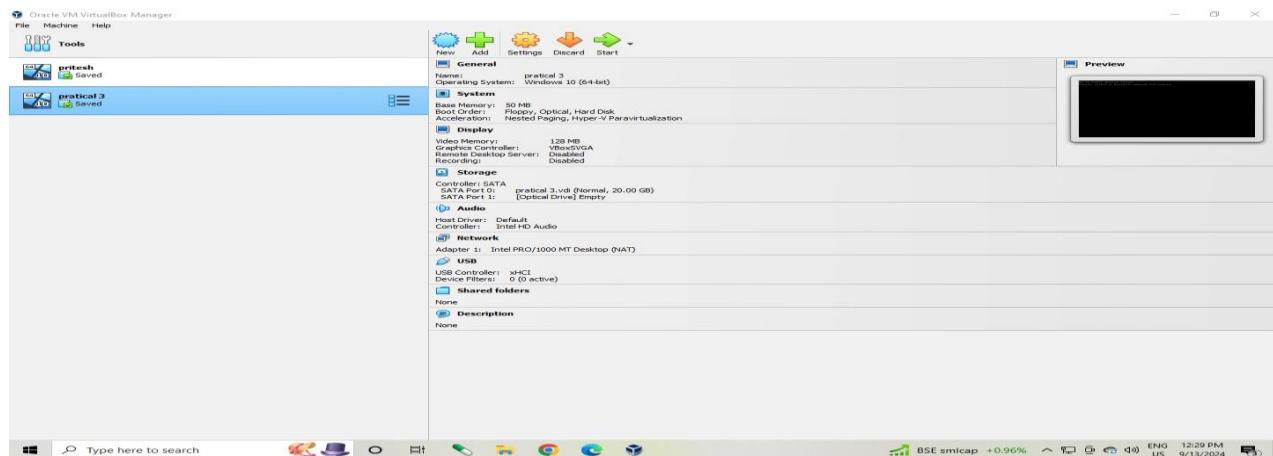
Step 6: Once the file is downloaded, go to your Downloads folder. Look for the Just installer file



Step 7: Double-click the installer file with the left mouse button to start the installation process

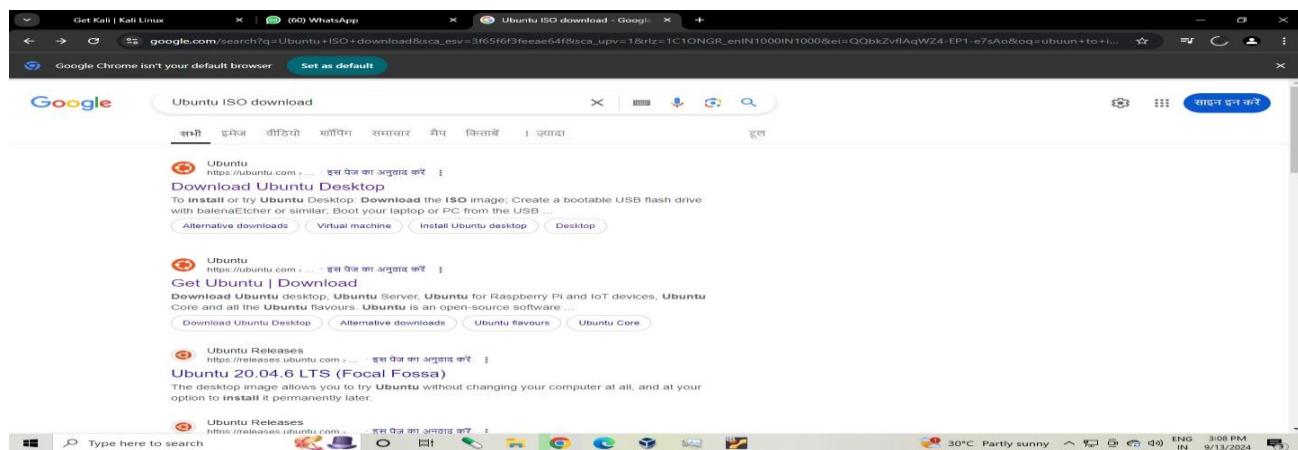


Step 8: After installation is complete, launch VirtualBox.



2. Download an Operating System ISO

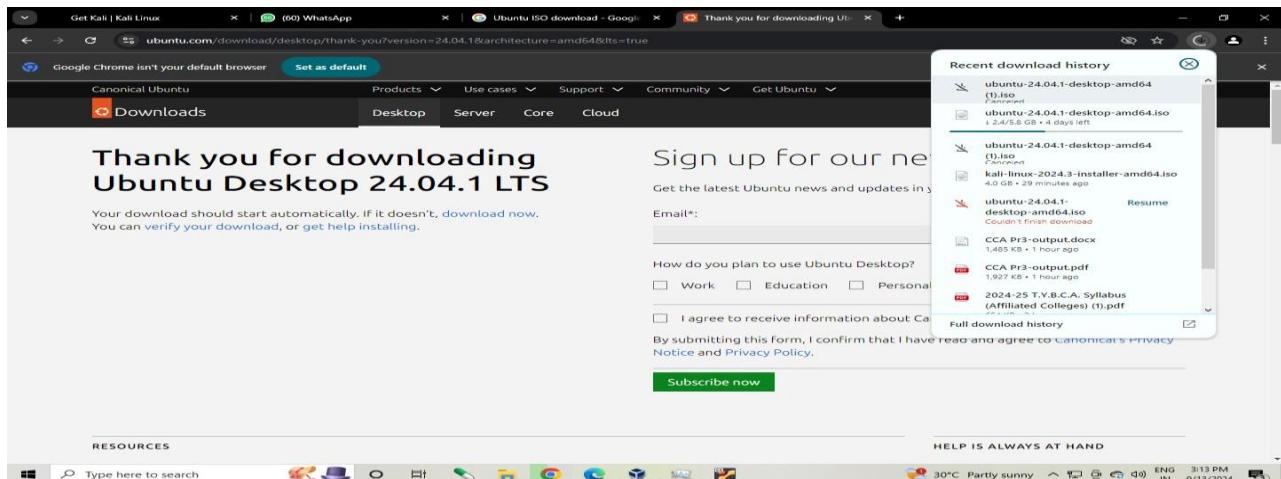
Step 1: Select an OS: Visit the official website of your preferred operating system (e.g., Ubuntu)



Step 2: click on the Download 24.04 LTS

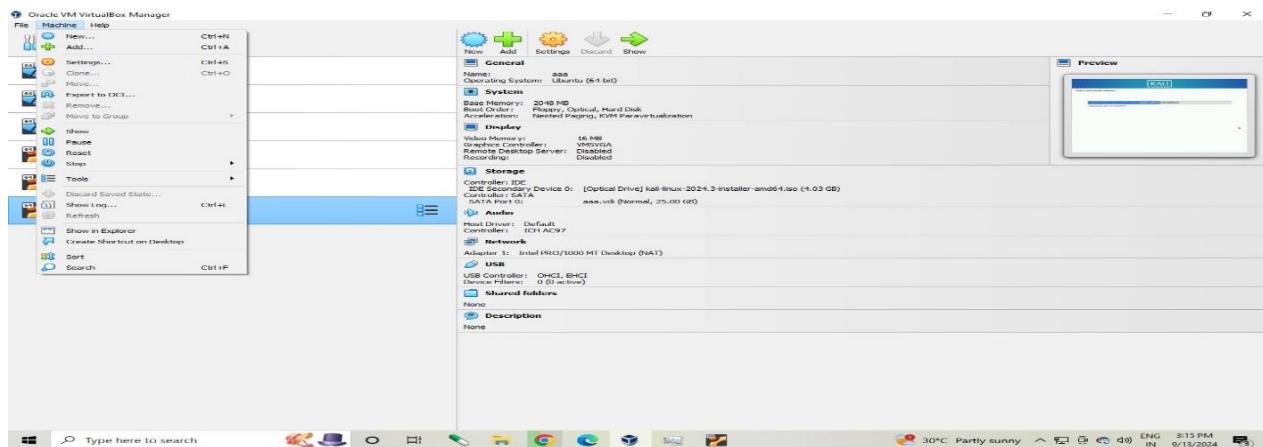


Step 3 : Downloading is started



3. Create a New Virtual Machine:

Step 1 : Open VirtualBox: Launch VirtualBox from your desktop or Start menu.
Click on the machine Located at the top-left of the VirtualBox window.

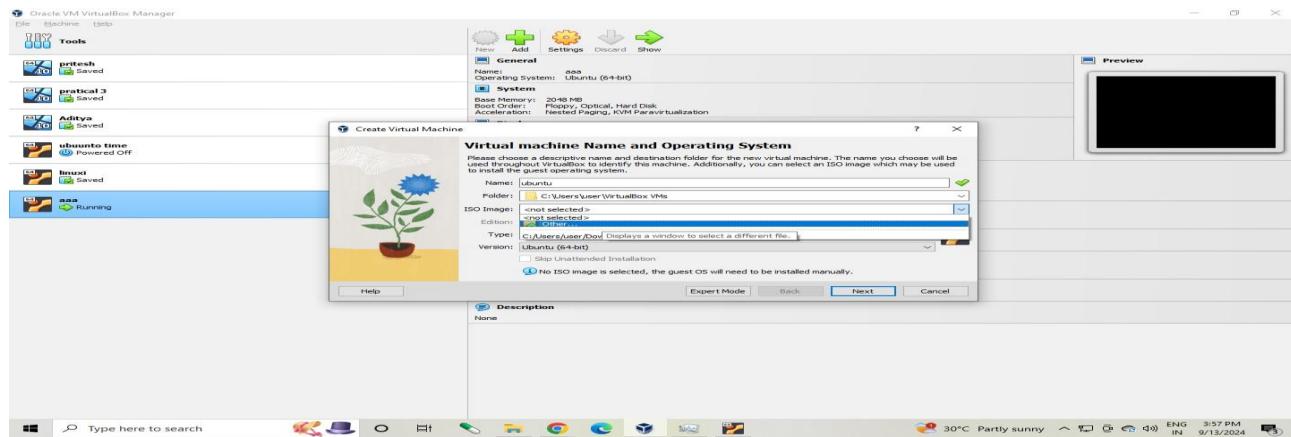


Step 2 : Click on "New" button

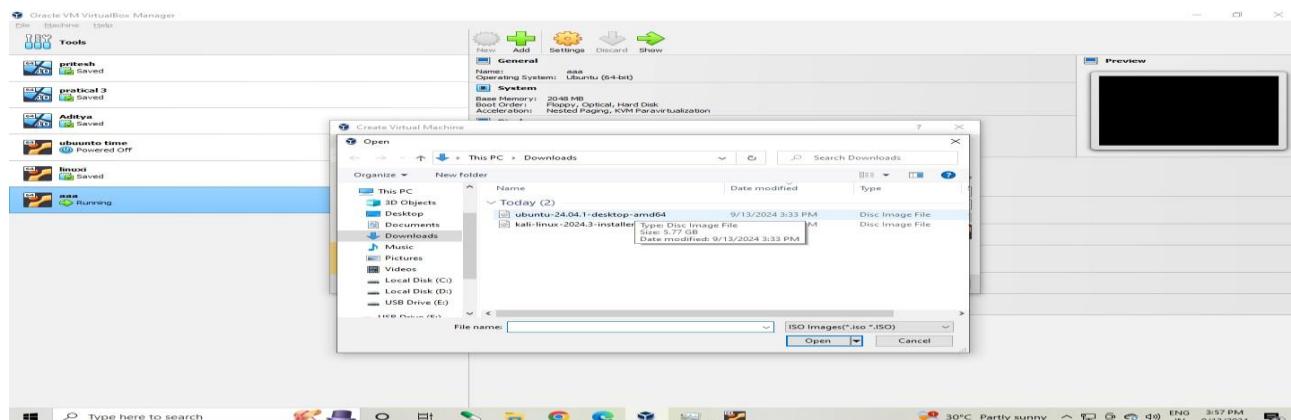


Step 3: A pop-up window titled "Create Virtual Machine" will appear

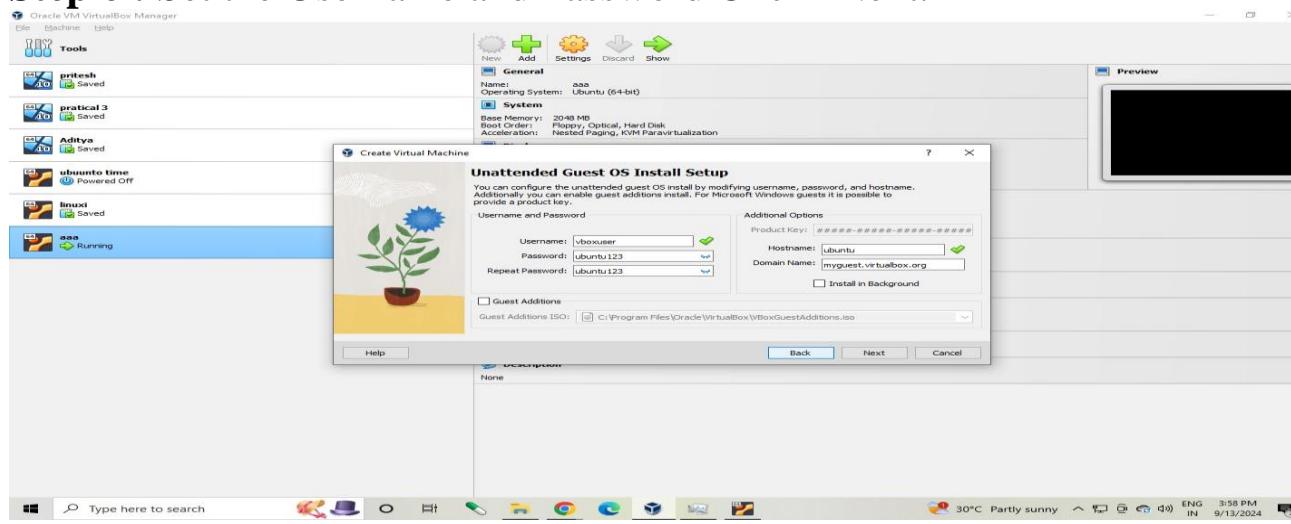
Step 4: In the "Name" field, give a name to your VM.



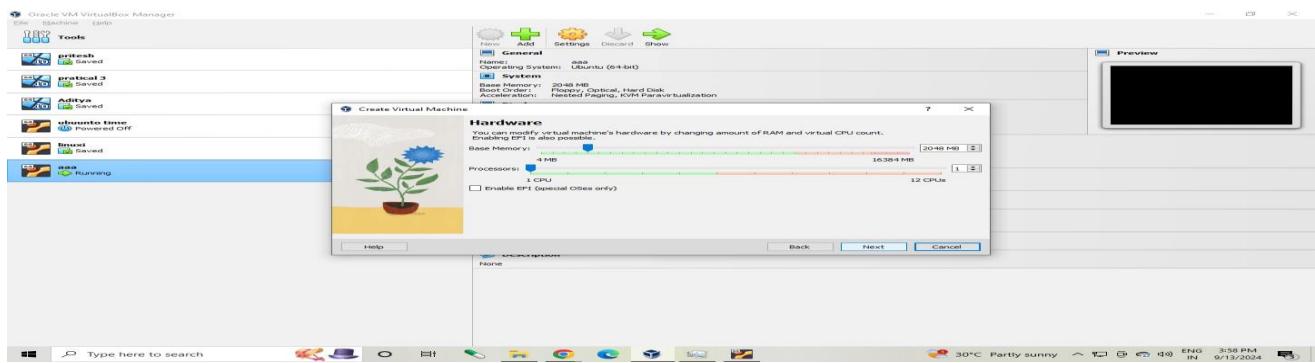
Step 5: Select the Type of the OS (e.g ubuntu, Linux, Windows)



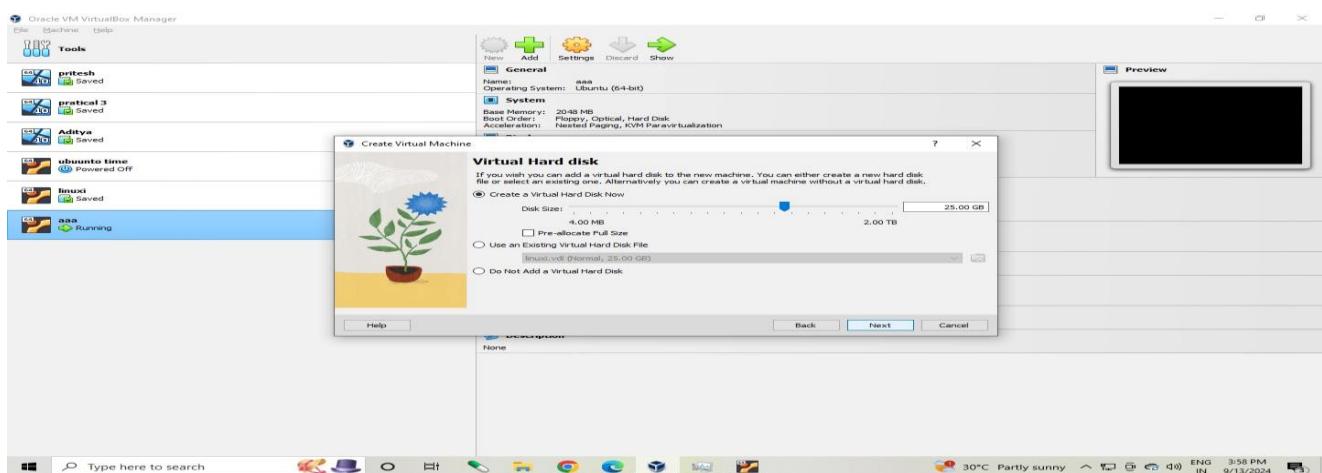
Step 6 : Set the Username and Password Click "Next."



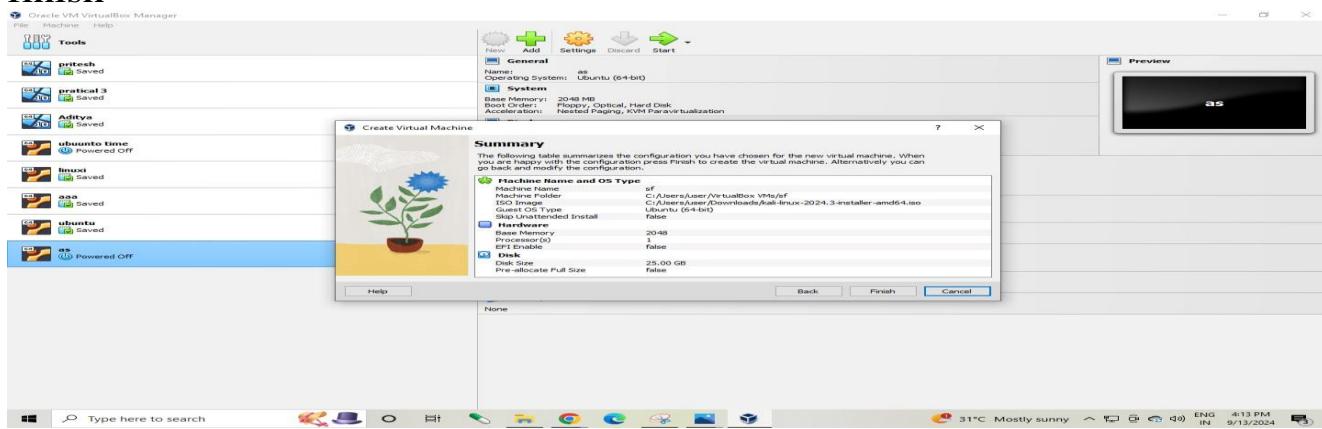
Step 7: Allocate Memory (Select the size of memory & no of CPU cores you want to allocate to your VM) Click "Next."



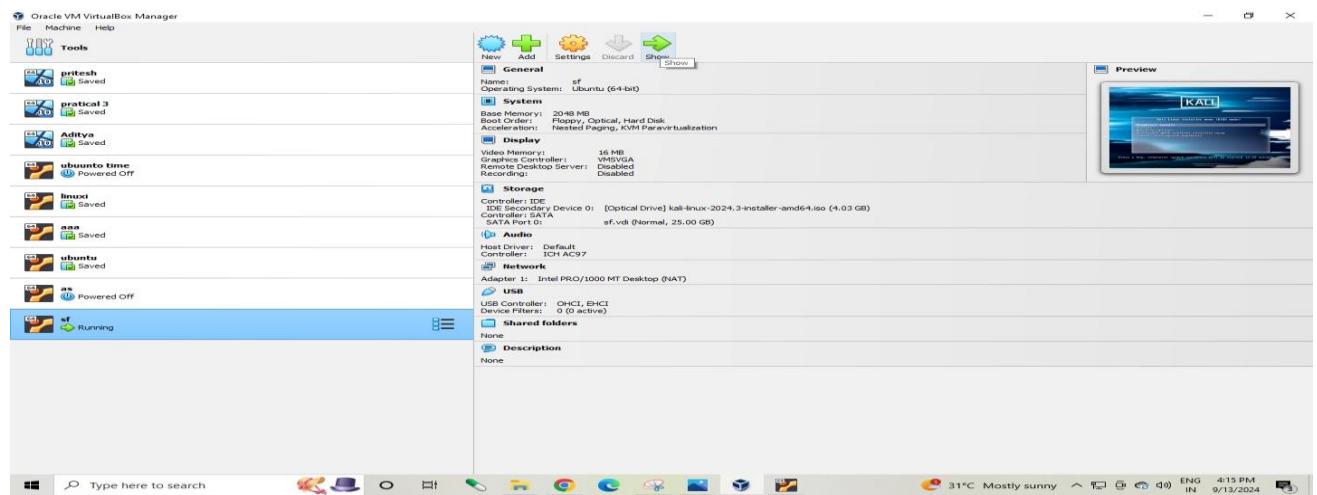
Step 8: Create a Virtual Hard Disk (Select the size of storage you want to allocate) Click "Next."



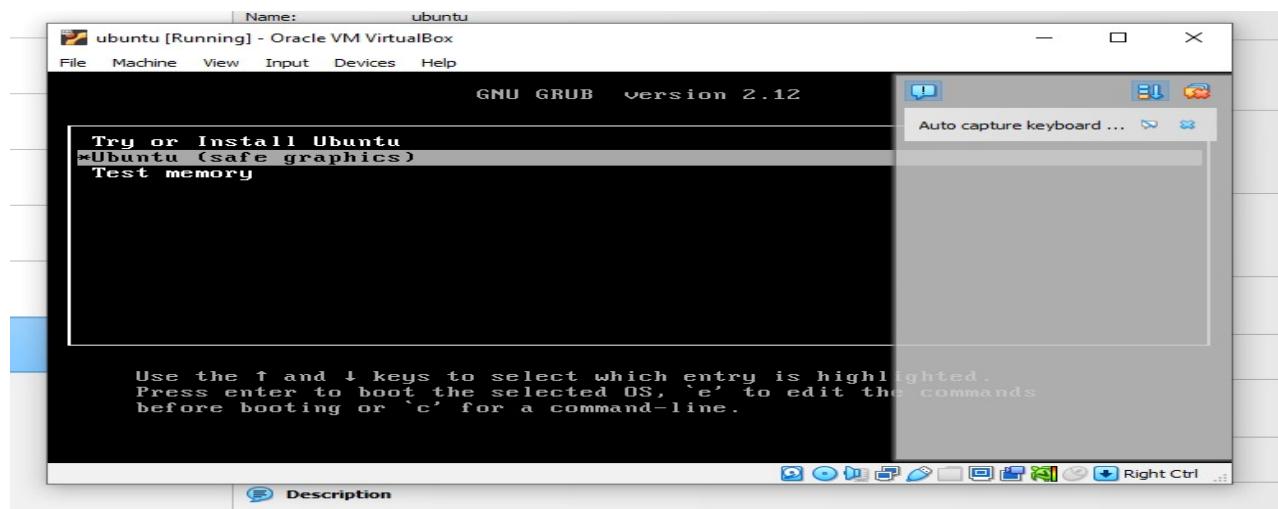
Step 9: Summary(Verify if the information about your VM is correct) click on finish



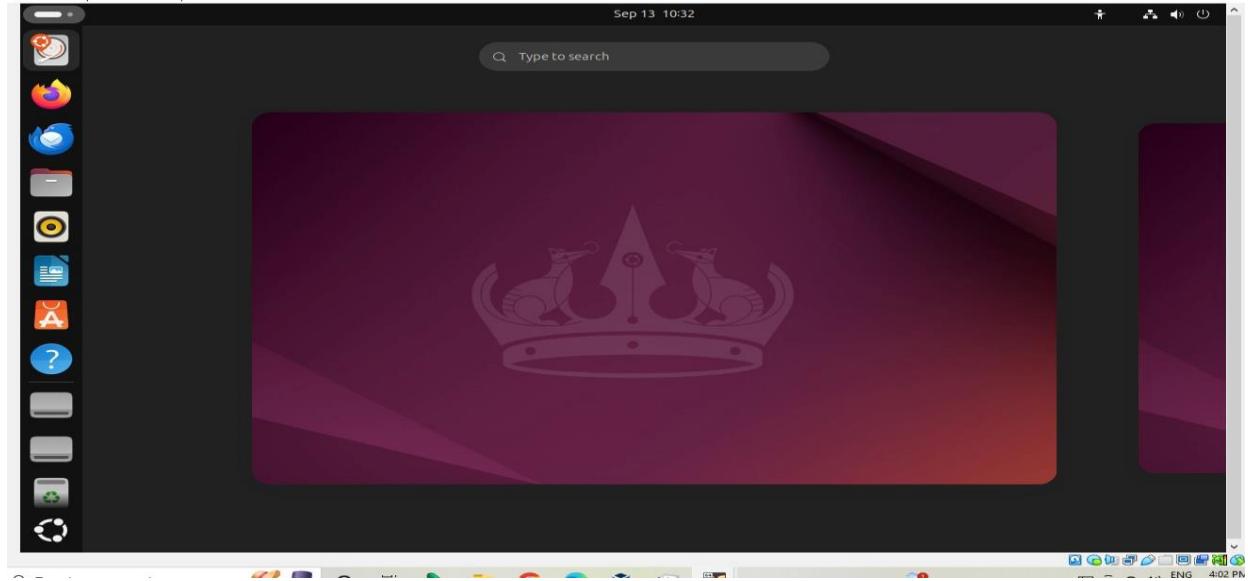
Step 10: Start the VM(In the main VirtualBox window, click the Start button at the top)



Step 11: Now you need to setup your OS click on the Ubuntu(safe Graphics)



Step 12: now you can used the ubuntu



Conclusion:

By completing this practical, you will have learned how to create and configure virtual machines using VirtualBox. This skill is foundational for understanding how cloud service providers use virtualization to offer scalable resources. Virtualization allows you to simulate real-world computing environments, giving you the flexibility to run multiple operating systems on a single machine, just like in a cloud infrastructure.

Submitted By:

Checked By: Mr.aditya nitin patil

Sign :

Name :

Roll No :

**Shram Sadhana Bombay Trust Sanchlit
Arts, Commerce & Science, Bambhori, college, Jalgaon
Bachelor Of Computer Application (B.C.A)**

Practical: 04

DOP:

DOC:

Title: Setting up a Cloud Environment with OpenStack

Objective :

The objective of this assignment is to set up a cloud environment using OpenStack to gain practical skills in cloud infrastructure development and management. By setting up OpenStack on Ubuntu running in VirtualBox, you will create and manage a customized cloud environment to understand the fundamentals of cloud computing.

Requirements:

1) Hardware Requirements:

- a) A machine with at least:
- b) RAM: 8GB (Minimum), 16GB (Recommended)
- c) Processor: Quad-core (Intel or AMD)
- d) Disk Space: 100 GB or more
- e) Software Requirements:

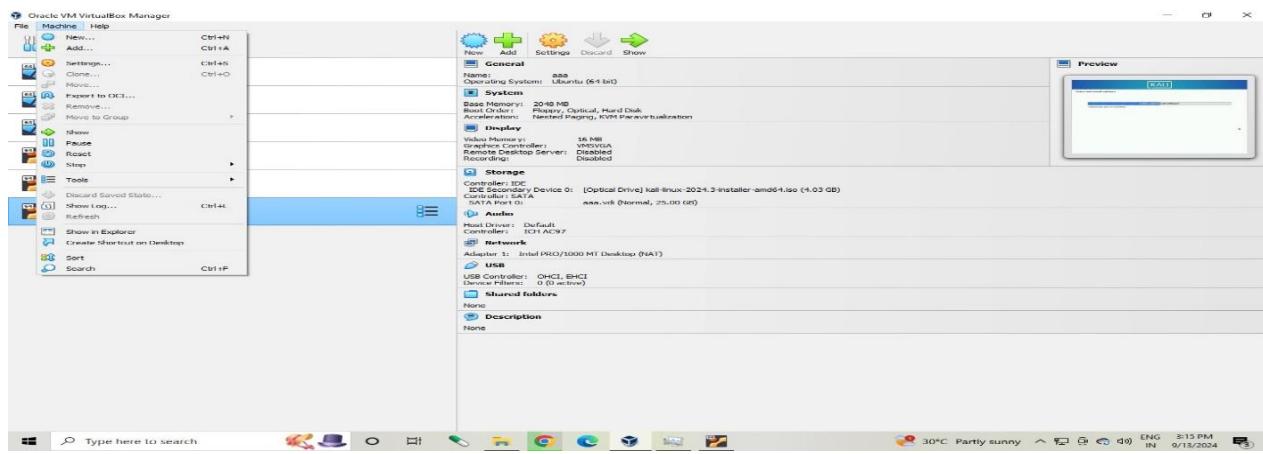
2) Host OS: Windows/macOS/Linux

- a) VirtualBox: Latest version
- b) Ubuntu 22.04 LTS ISO: Download here
- c) OpenStack DevStack: The lightweight version of OpenStack for personal and educational use.
- d) Internet Connection: To download packages and perform installations.

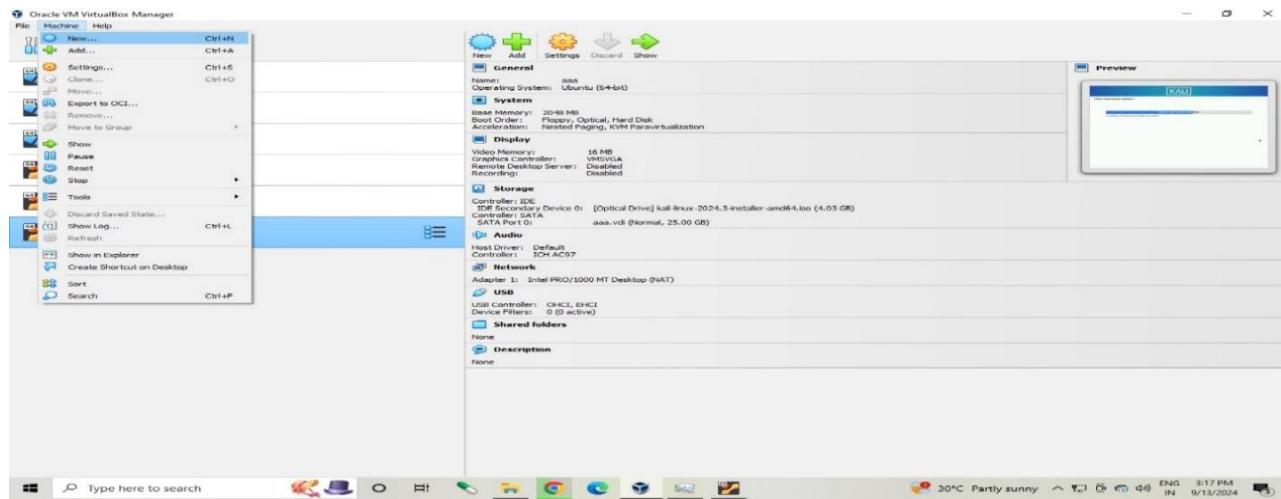
Step-by-Step Instructions:

1. Create a New Virtual Machine:

Step 1 : Open VirtualBox: Launch VirtualBox from your desktop or Start menu.
Click on the machine Located at the top-left of the VirtualBox window.

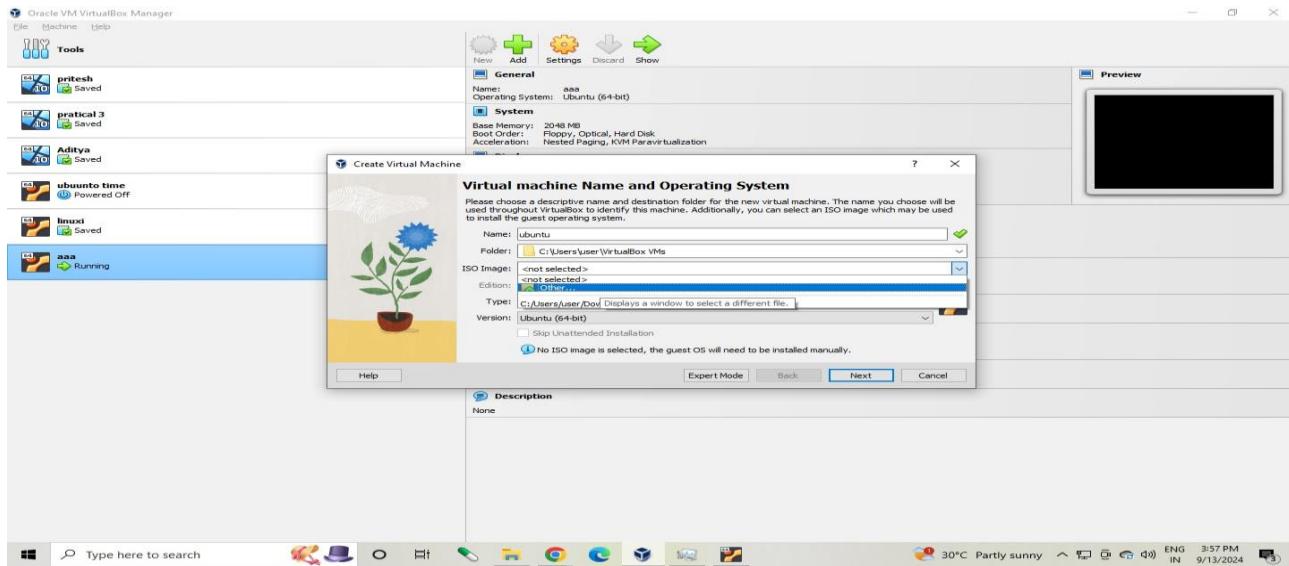


Step 2 : Click on "New" button

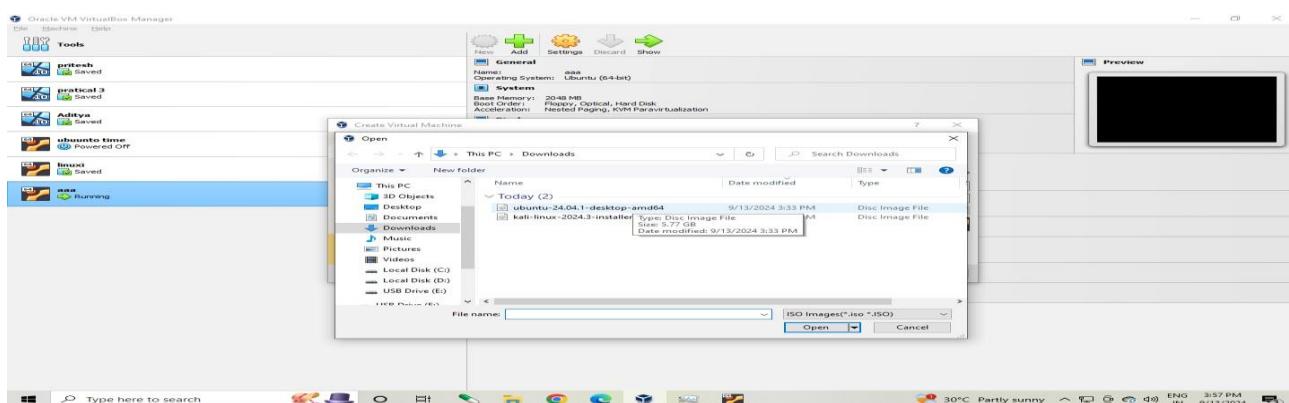


Step 3: A pop-up window titled "Create Virtual Machine" will appear

Step 4: In the "Name" field, give a name to your VM.



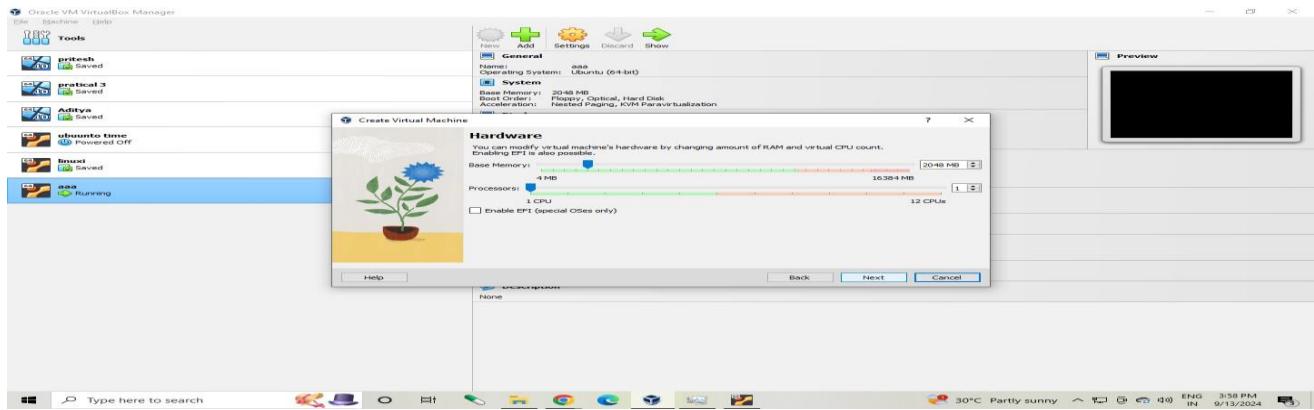
Step 5: Select the Type of the OS (e.g ubuntu, Linux, Windows)



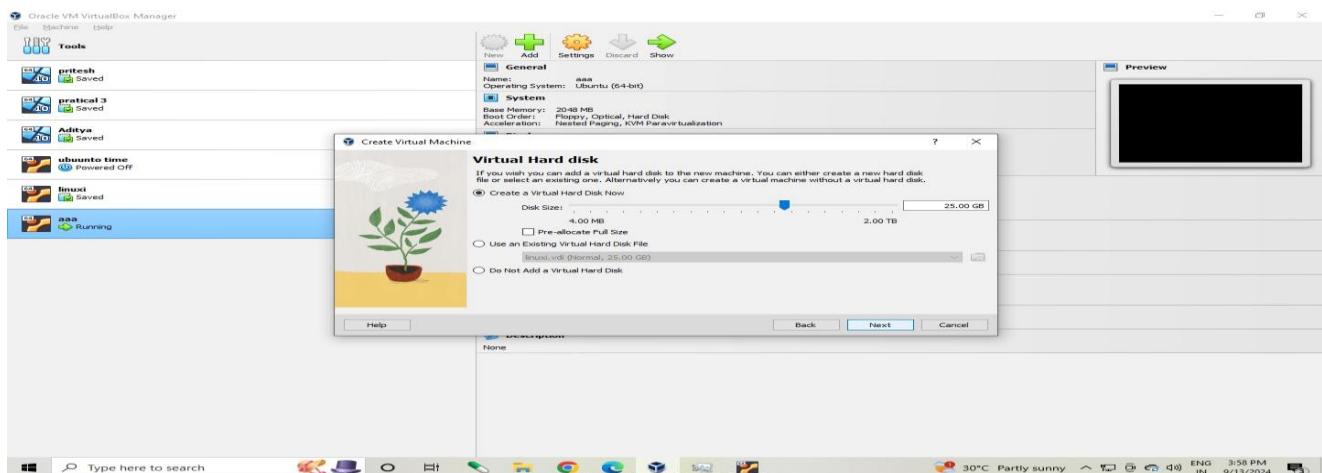
Step 6 : Set the Username and Password Click "Next."



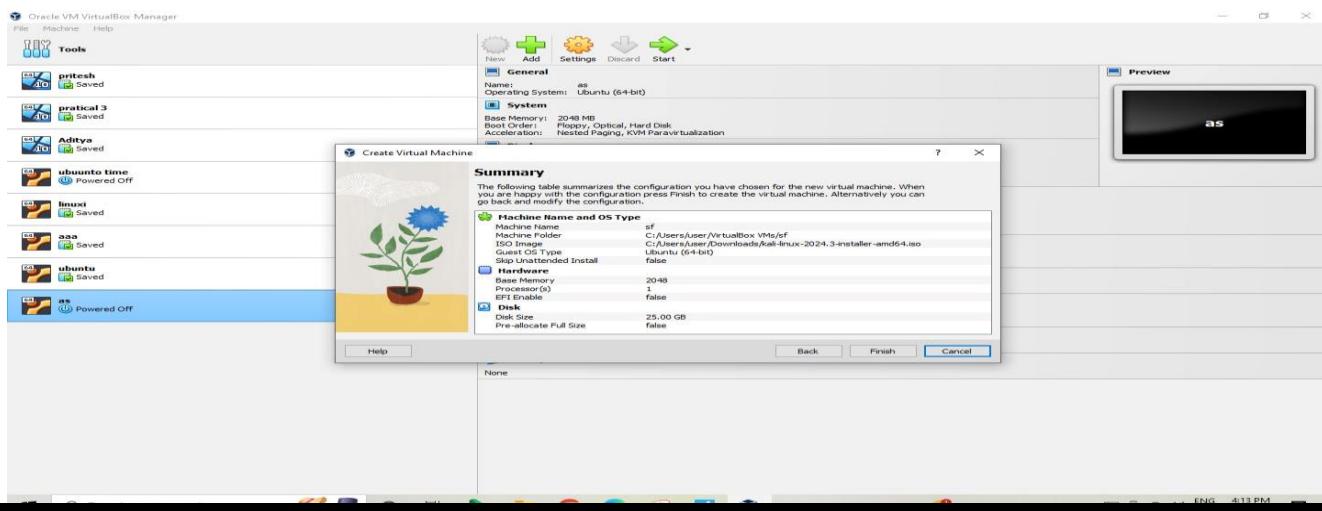
Step 7: Allocate Memory (Select the size of memory & no of CPU cores you want to allocate to your VM) Click "Next."



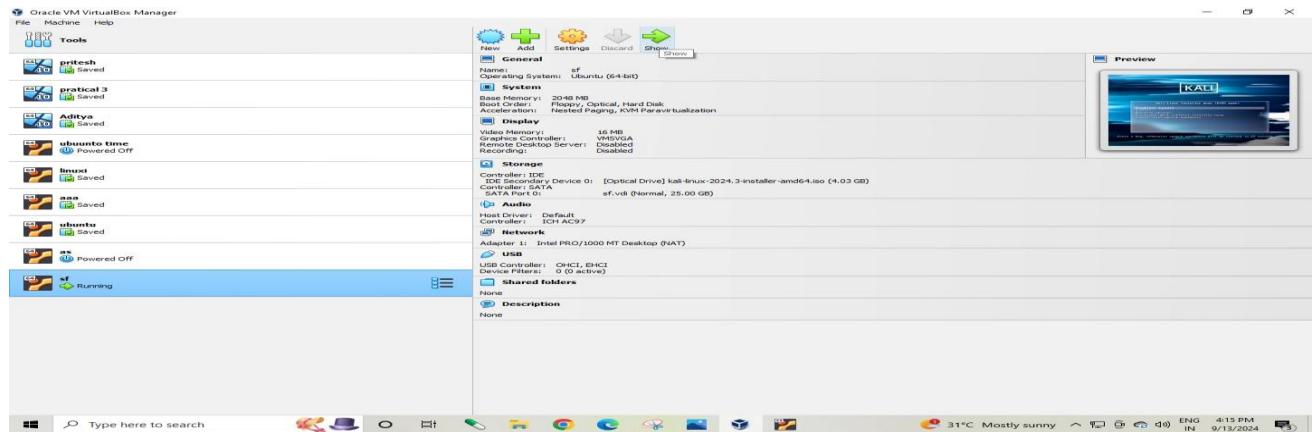
Step 8: Create a Virtual Hard Disk (Select the size of storage you want to allocate) Click "Next."



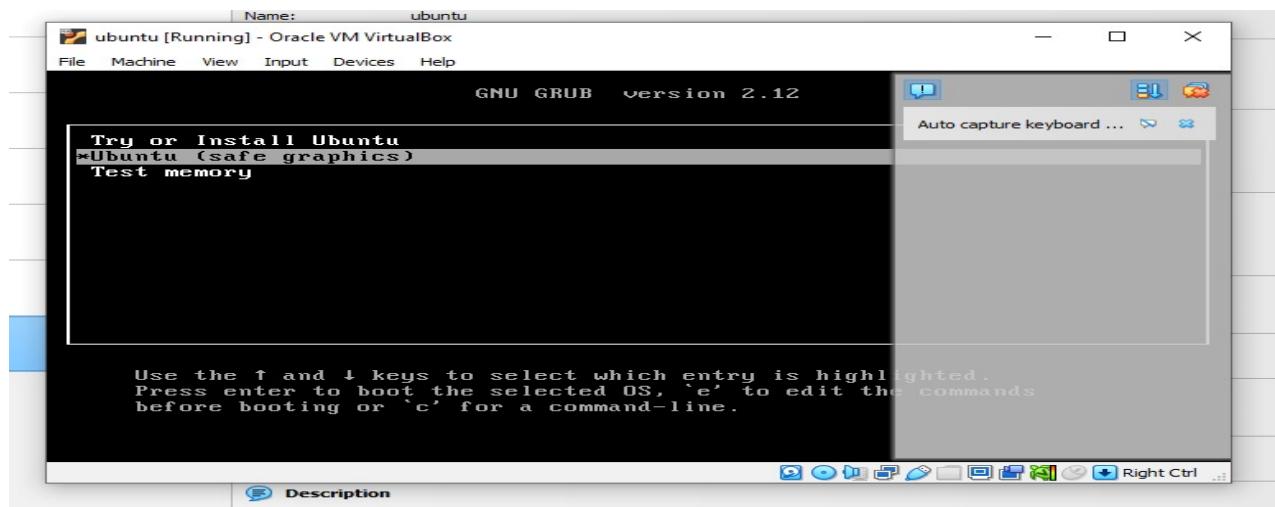
Step 8: Summary(Verify if the information about your VM is correct) click on finish



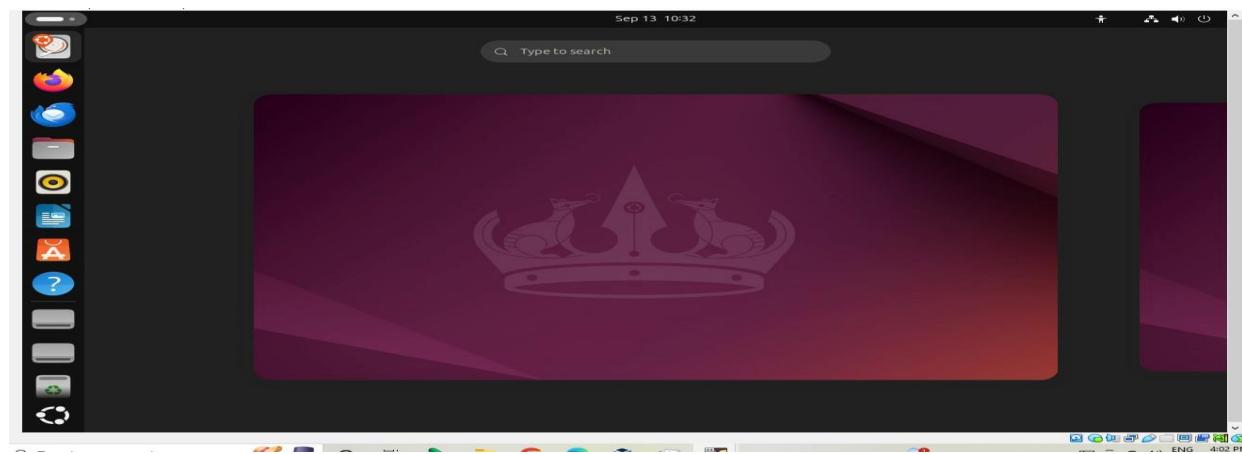
Step 8: Start the VM(In the main VirtualBox window, click the Start button at the top)



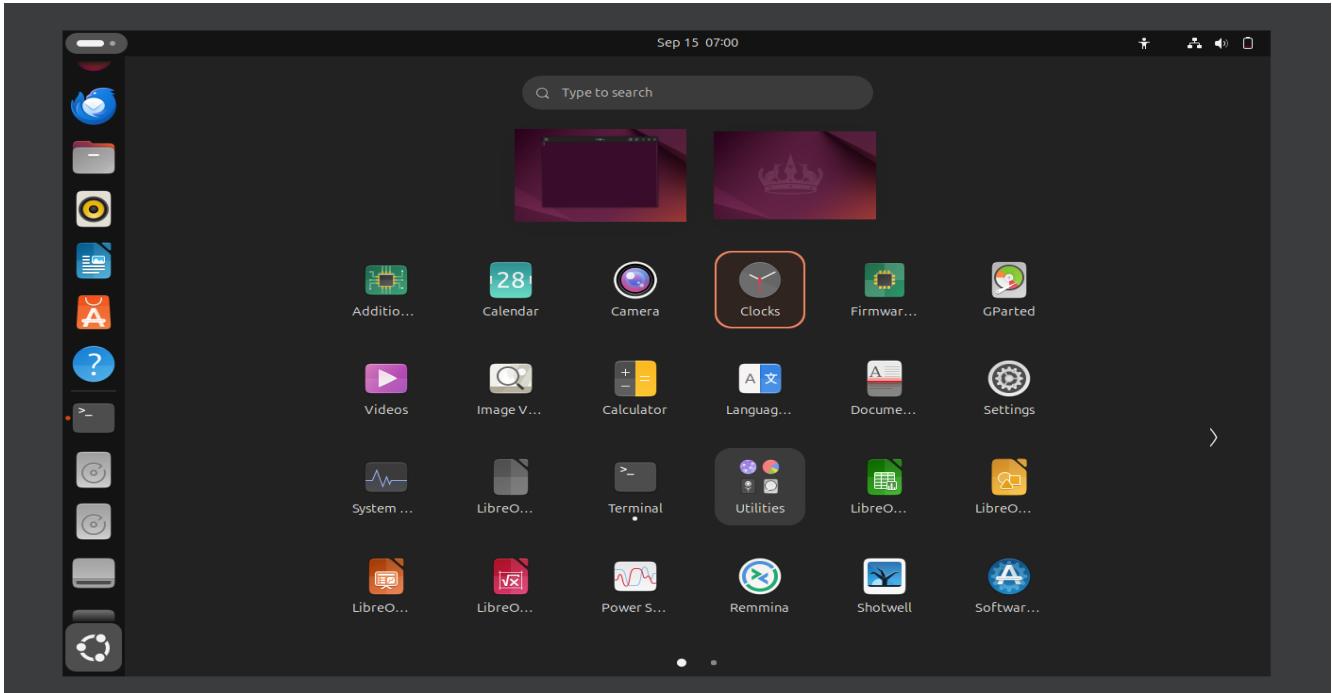
Step 8: Now you need to setup your OS click on the Ubuntu(safe Graphics)



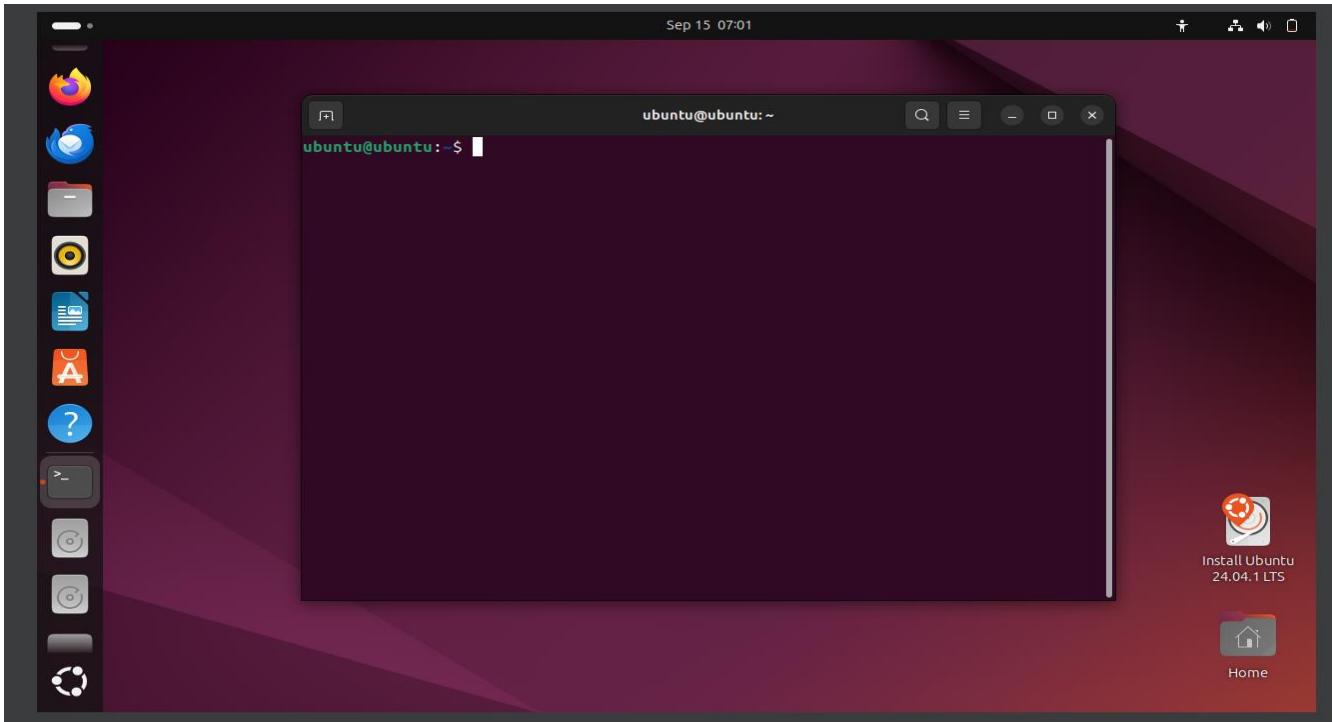
Step 9: now you can used the ubuntu



2. Steps to Install OpenStack on Ubuntu VM



Click on the terminal :



Step 1: Update Ubuntu System

First, update your Ubuntu VM:

```
apt update -y && apt upgrade -y
```

Sample Output:-

```
root@ubuntu:/# apt update -y && apt upgrade -y
Hit:1 http://us-central1.gce.archive.ubuntu.com/ubuntu bionic InRelease
Get:2 http://us-central1.gce.archive.ubuntu.com/ubuntu bionic-updates InRelease [88.7 kB]
Get:3 http://us-central1.gce.archive.ubuntu.com/ubuntu bionic-backports InRelease [74.6 kB]
Get:4 http://us-central1.gce.archive.ubuntu.com/ubuntu bionic/universe amd64 Packages [8570 kB]
Get:5 http://archive.canonical.com/ubuntu bionic InRelease [10.2 kB]
Get:6 http://security.ubuntu.com/ubuntu bionic-security InRelease [88.7 kB]
Get:7 http://us-central1.gce.archive.ubuntu.com/ubuntu bionic/universe Translation-en [4941 kB]
Get:8 http://us-central1.gce.archive.ubuntu.com/ubuntu bionic/multiverse amd64 Packages [151 kB]
Get:9 http://us-central1.gce.archive.ubuntu.com/ubuntu bionic/multiverse Translation-en [108 kB]
Get:10 http://us-central1.gce.archive.ubuntu.com/ubuntu bionic-updates/main amd64 Packages [627 kB]
```

Step 2: Create a Stack User

DevStack must be run as a non-root user. Create a new user named stack:

```
sudo adduser -s /bin/bash -d /opt/stack -m stack
```

Give the stack user sudo privileges:

```
echo "stack ALL=(ALL) NOPASSWD: ALL" | sudo tee /etc/sudoers.d/stack
```

Sample Output:-

```
root@ubuntu:/# sudo useradd -s /bin/bash -d /opt/stack -m stack
root@ubuntu:/#
root@ubuntu:/# echo "stack ALL=(ALL) NOPASSWD: ALL" | sudo tee /etc/sudoers.d/stack
stack ALL=(ALL) NOPASSWD: ALL
root@ubuntu:/#
```

Step 3: Install OpenStack DevStack on Ubuntu

Once you have successfully created the user ‘stack’ and assigned sudo privileges, switch to the user using the command.

```
su - stack
```

You’ll need Git to clone the DevStack repository.

```
sudo apt install git -y
```

Sample output:

```
root@ubuntu:~# su - stack
stack@ubuntu:~$ 
stack@ubuntu:~$ sudo apt install git -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
git is already the newest version (1:2.17.1-1ubuntu0.4).
The following packages were automatically installed and are no longer required:
  grub-pc-bin libnuma1
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
```

Using git, clone devstack’s git repository as shown.

```
git clone https://git.openstack.org/openstack-dev/devstack
```

Sample output :

```
stack@ubuntu:~$ git clone https://git.openstack.org/openstack-dev/devstack
Cloning into 'devstack'...
warning: redirecting to https://opendev.org/openstack/devstack/
remote: Enumerating objects: 43615, done.
remote: Counting objects: 100% (43615/43615), done.
remote: Compressing objects: 100% (12575/12575), done.
remote: Total 43615 (delta 31152), reused 42370 (delta 30360)
Receiving objects: 100% (43615/43615), 8.27 MiB | 24.61 MiB/s, done.
Resolving deltas: 100% (31152/31152), done.
stack@ubuntu:~$ 
stack@ubuntu:~$ ls
devstack
stack@ubuntu:~$
```

Step 4: Create devstack configuration file :

In this step, navigate to the devstack directory.

```
cd devstack
```

Then create a local.conf configuration file.

```
vim local.conf
```

Paste the following content

```
[[local|localrc]]

# Password for KeyStone, Database, RabbitMQ and Service
ADMIN_PASSWORD=StrongAdminSecret
DATABASE_PASSWORD=$ADMIN_PASSWORD
RABBIT_PASSWORD=$ADMIN_PASSWORD
SERVICE_PASSWORD=$ADMIN_PASSWORD

# Host IP - get your Server/VM IP address from ip addr command
HOST_IP=10.208.0.10
```

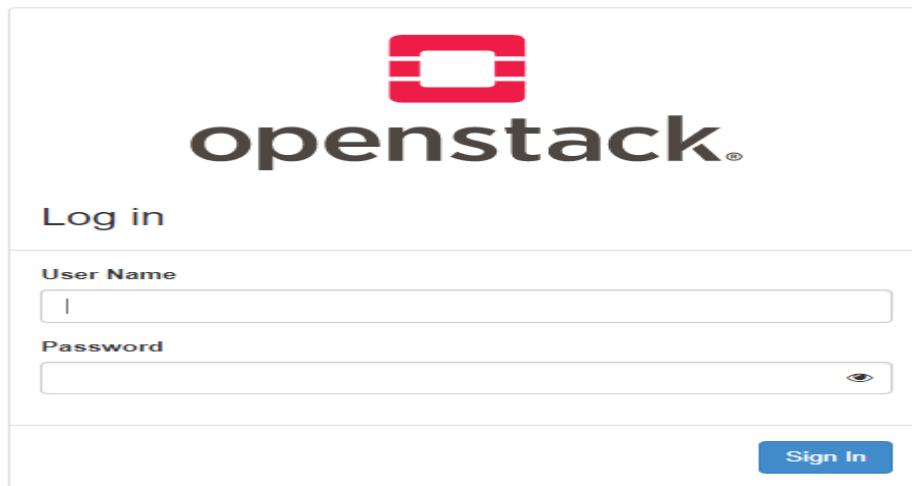
Step 5: Start DevStack Installation

Run the stack.sh script to install OpenStack:

```
./stack.sh
```

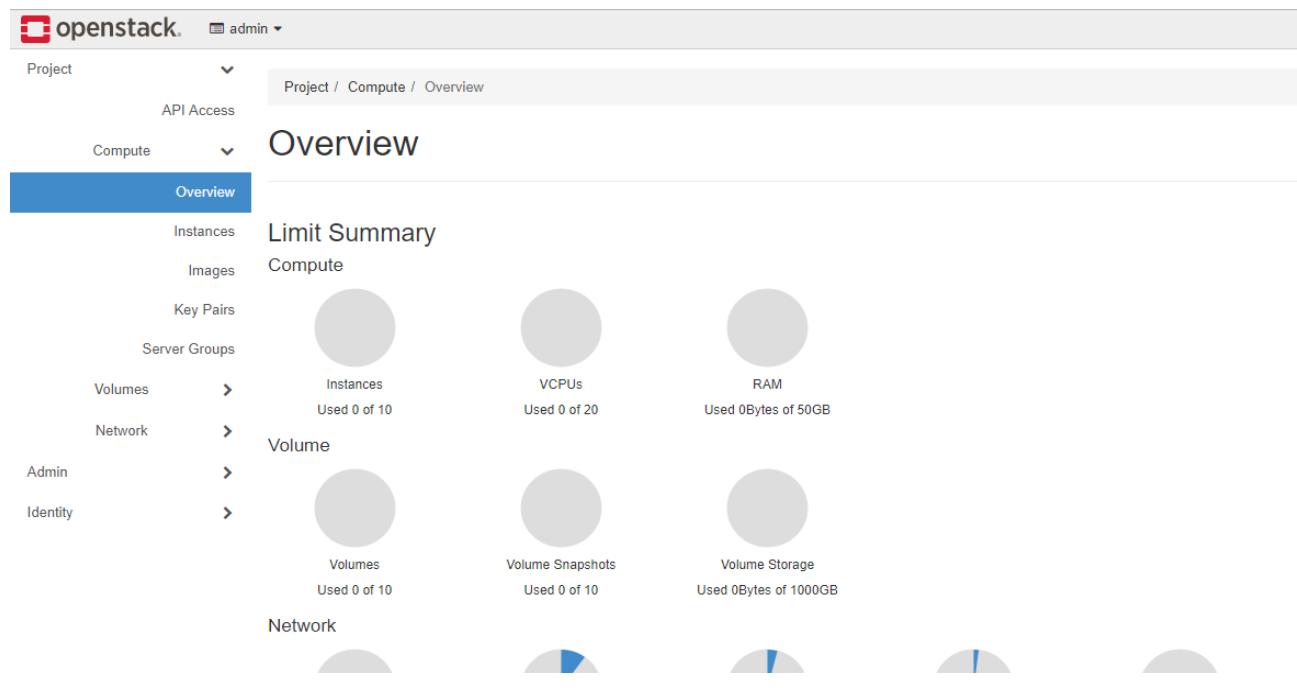
Step 6: Accessing OpenStack on a web browser:

To access OpenStack via a web browser browse your Ubuntu's IP address as shown.
<https://server-ip/dashboard> This directs you to a login page as shown.



The image shows the OpenStack login interface. At the top is the OpenStack logo, which consists of a red square icon with four white horizontal bars of decreasing length from left to right, followed by the word "openstack." in a bold, lowercase sans-serif font. Below the logo is a "Log in" header. The form contains two input fields: "User Name" with a placeholder of a single vertical bar character, and "Password" with a placeholder of a single vertical bar character and an "eye" icon for password visibility. A "Sign In" button is located at the bottom right of the form area.

Enter the credentials and hit “Sign In” You should be able to see the Management console dashboard as shown below.



Conclusion:

By completing this practical, you will have successfully installed OpenStack on Ubuntu within VirtualBox, creating your own cloud environment. You will now be able to manage instances, networks, and volumes via OpenStack's Horizon dashboard, gaining hands-on experience in cloud infrastructure management.

Submitted By:

Checked By:Aditya Nitin Patil

Sign :

Name :

Roll No :

**Shram Sadhana Bombay Trust Sanchlit
Arts, Commerce & Science, Bambhori, college, Jalgaon
Bachelor Of Computer Application (B.C.A)**

Practical: 05

DOP:

DOC:

Title: Setting Up a Simple Website on GitHub:

Objective : To deploy a simple static website on GitHub Pages, showcasing the use of GitHub's cloud-based hosting service for web content.

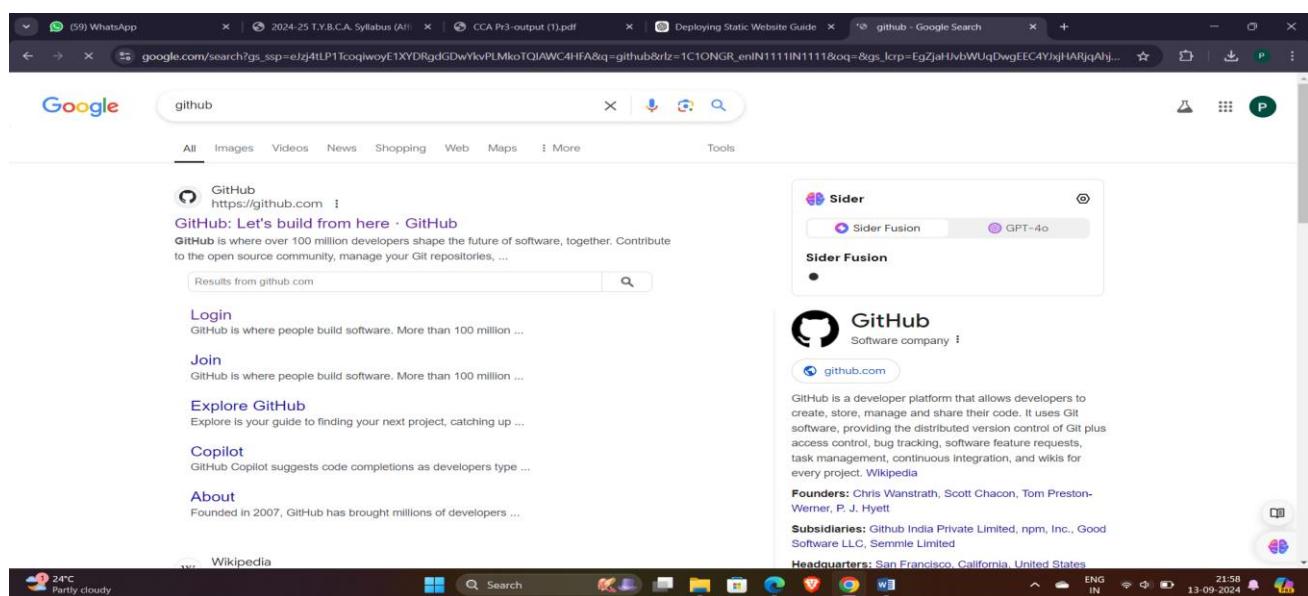
Requirements:

- 1) GitHub account (create one at GitHub if you don't have it)
- 2) Basic knowledge of HTML/CSS (for creating a simple static website)
- 3) Internet connection (for uploading files to GitHub)

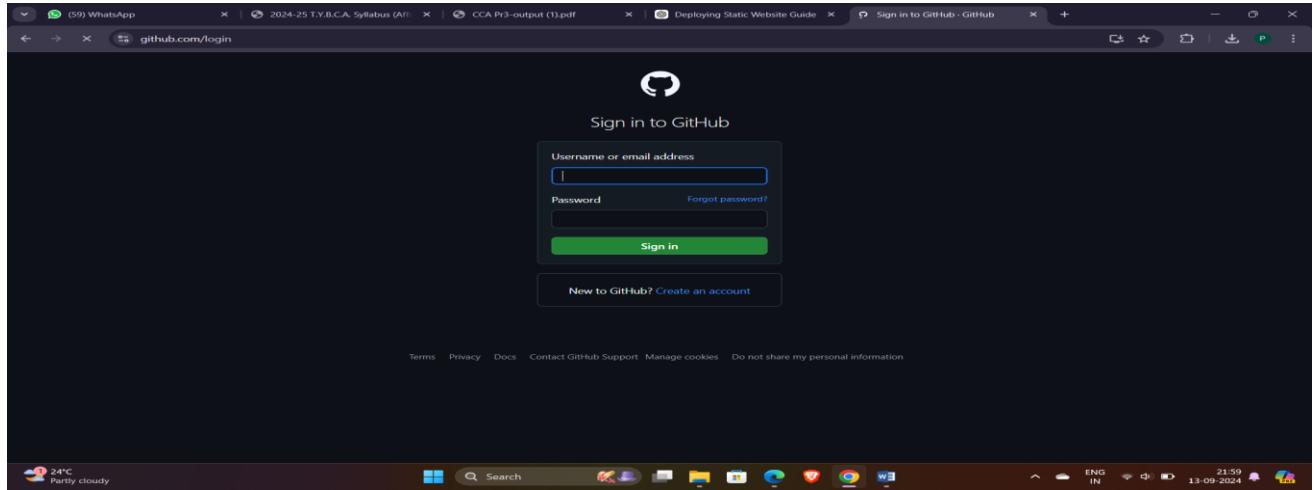
Step-by-Step Instructions:

1. Create a GitHub Repository

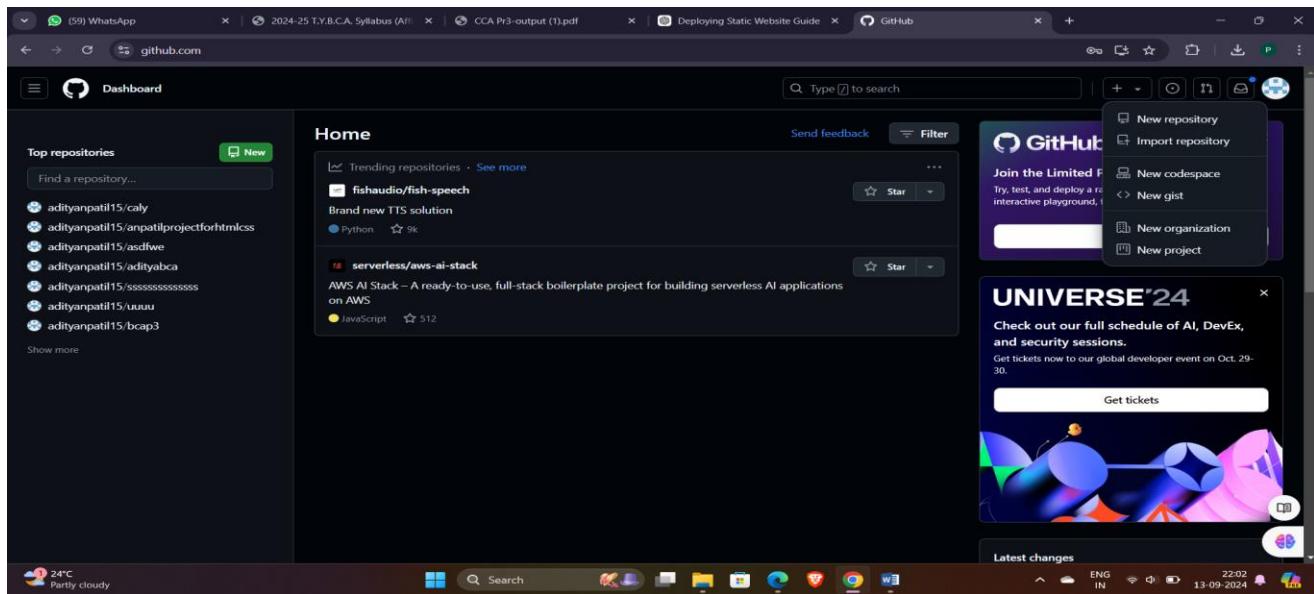
Step 1: Search for GitHub in a browser.



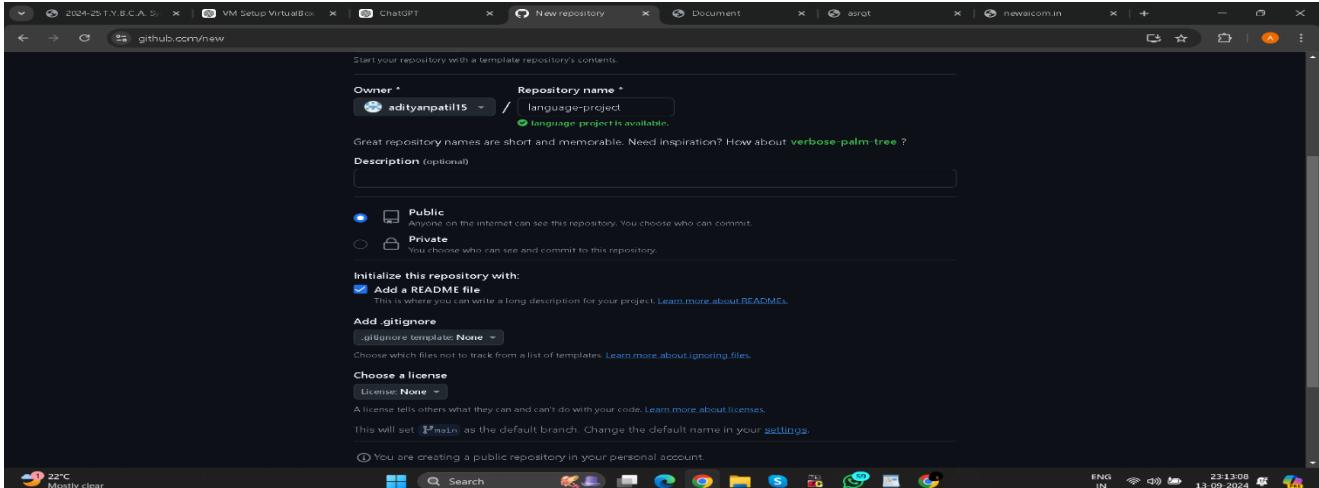
Step 2: Log in to your GitHub account.



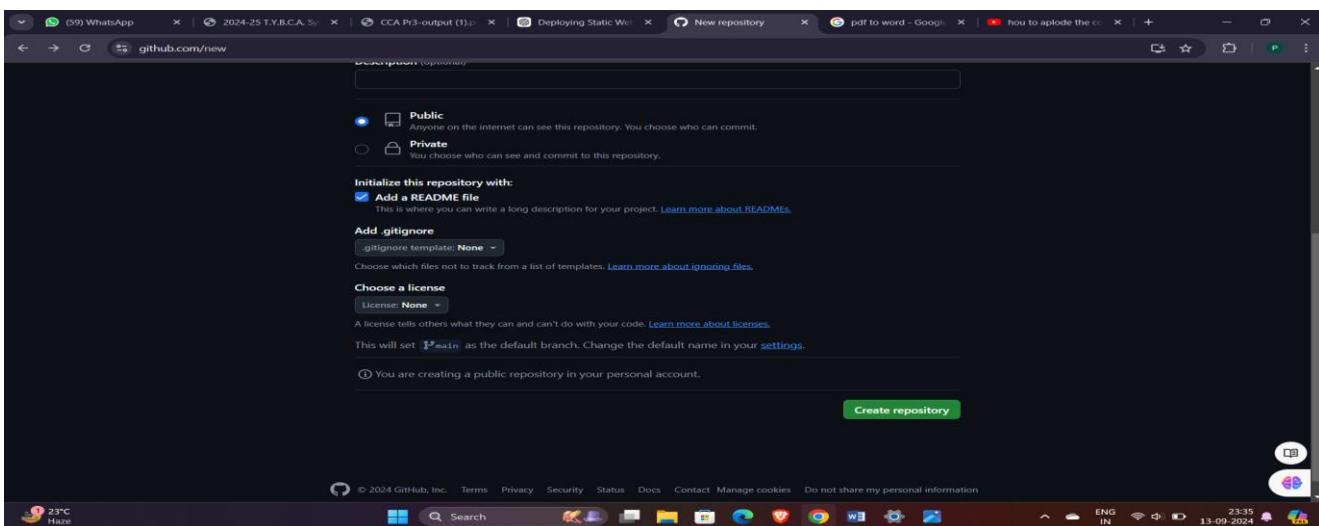
Step 3: On the top-right corner, click the + icon, then select New repository from the dropdown.



Step 4: Name your repository (e.g., my-website), set it to Public, and tick the "Initialize this repository with a README" option..

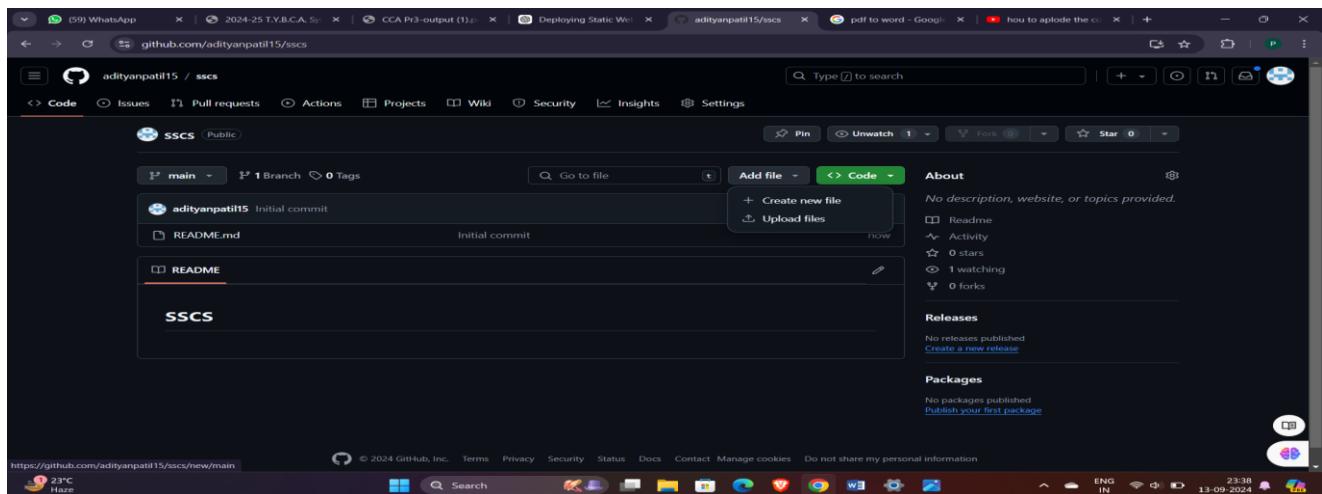


Step 5: Click the "Create repository" button (bottom of the form).

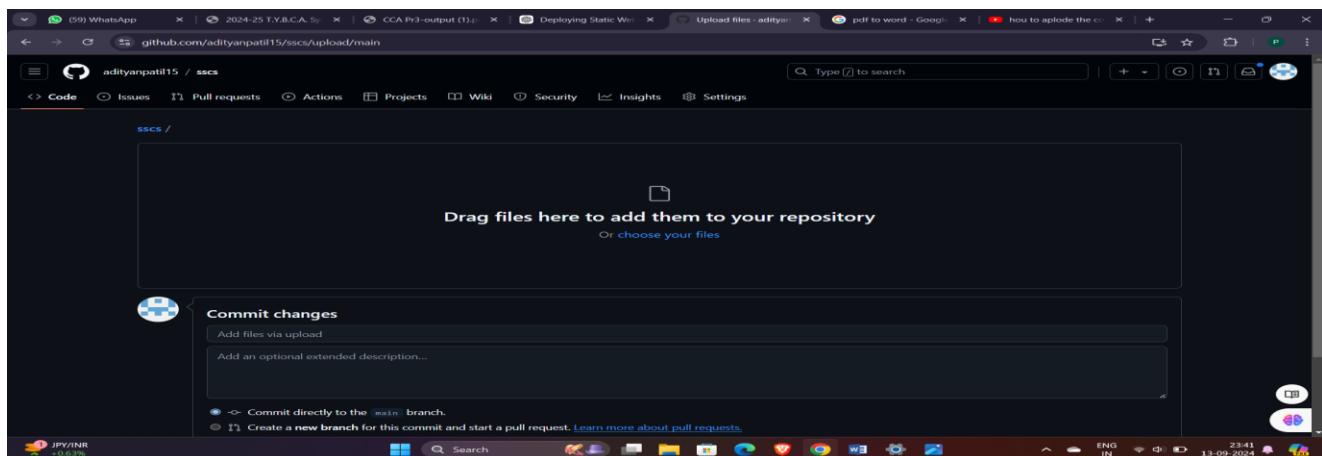


2: Upload Your Website Files

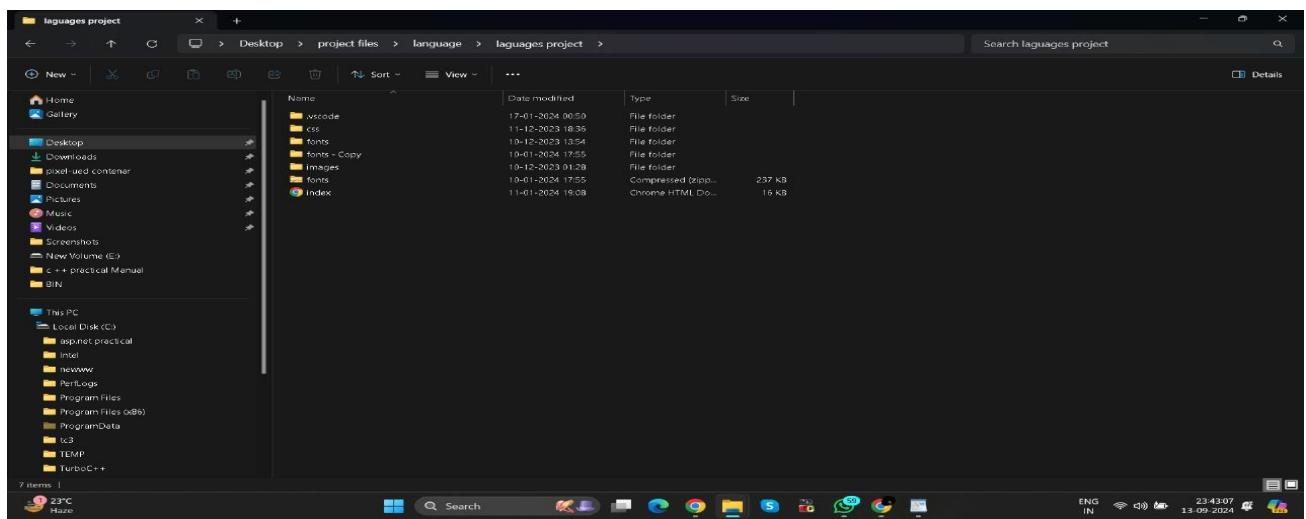
Step 1: Click the "Add file" button (top-right side).



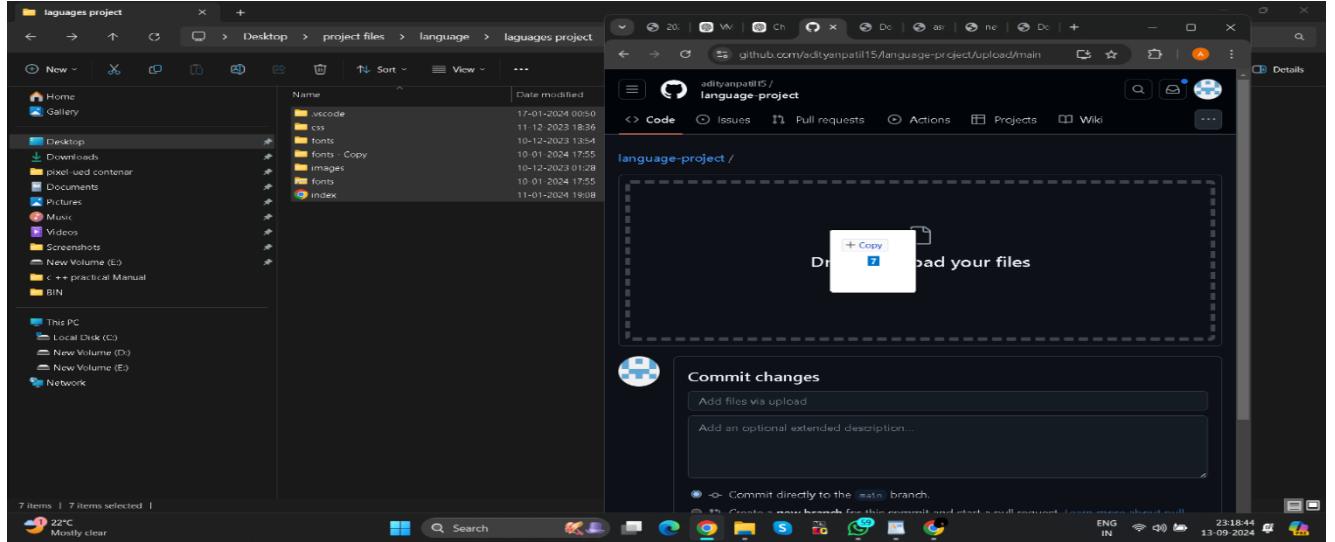
Step 2: Select "Upload files" from the dropdown.



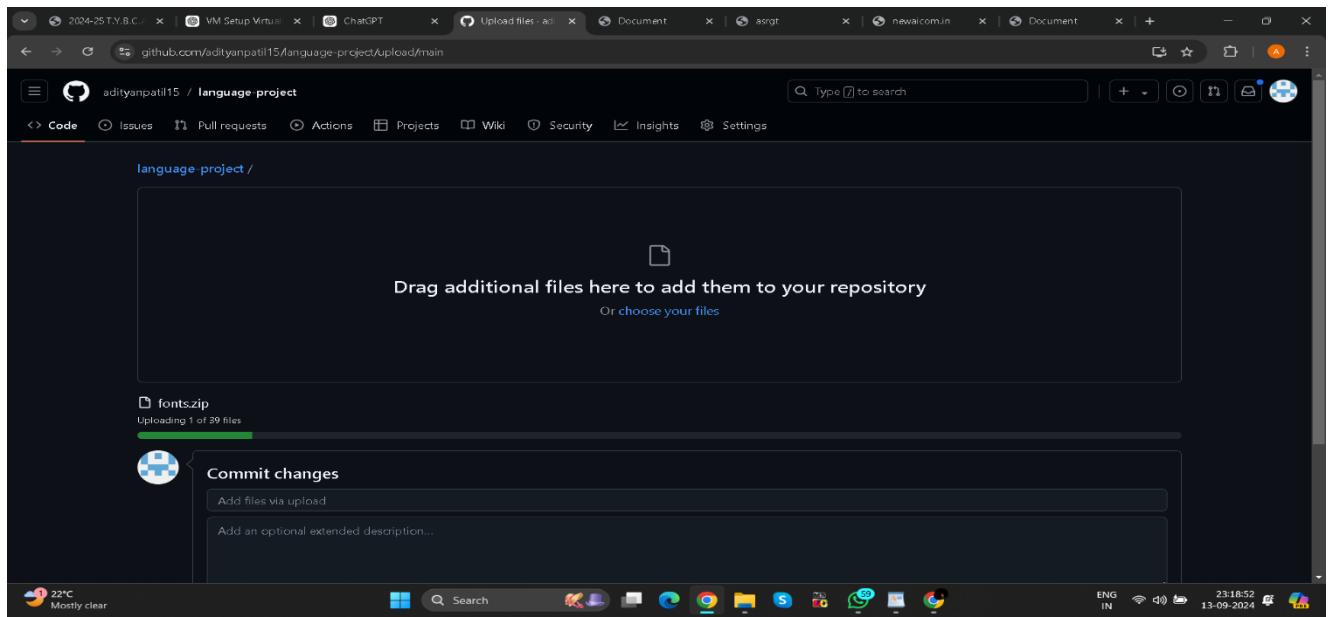
Step 3: select all files(Ctrl + A)



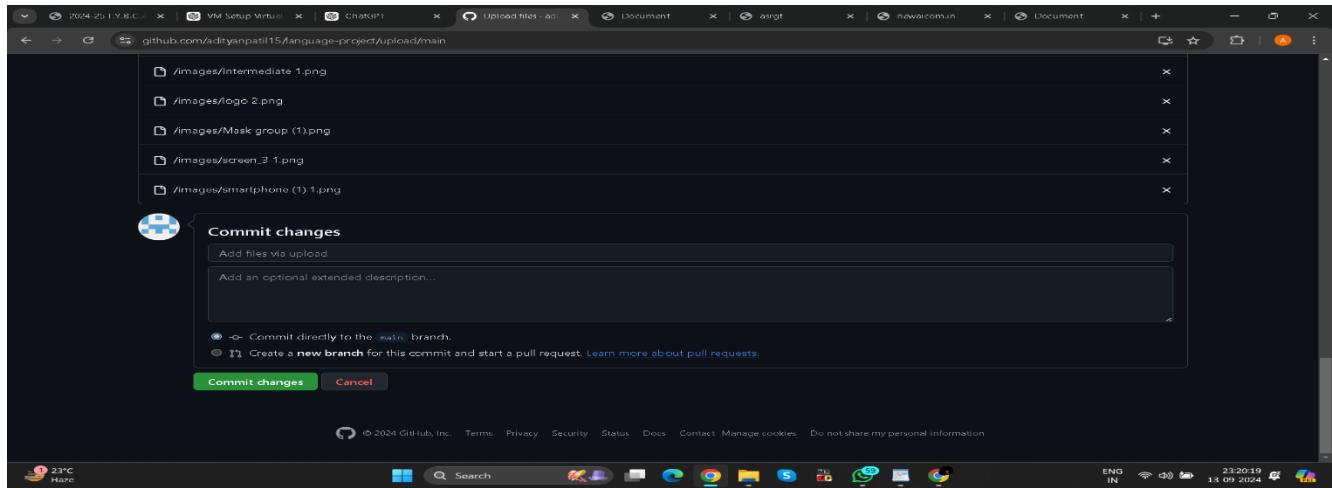
Step 4: Drag and drop your website files (HTML, CSS, images) into the upload area or click the "choose your files" button to browse.



Step 5: uploading the files

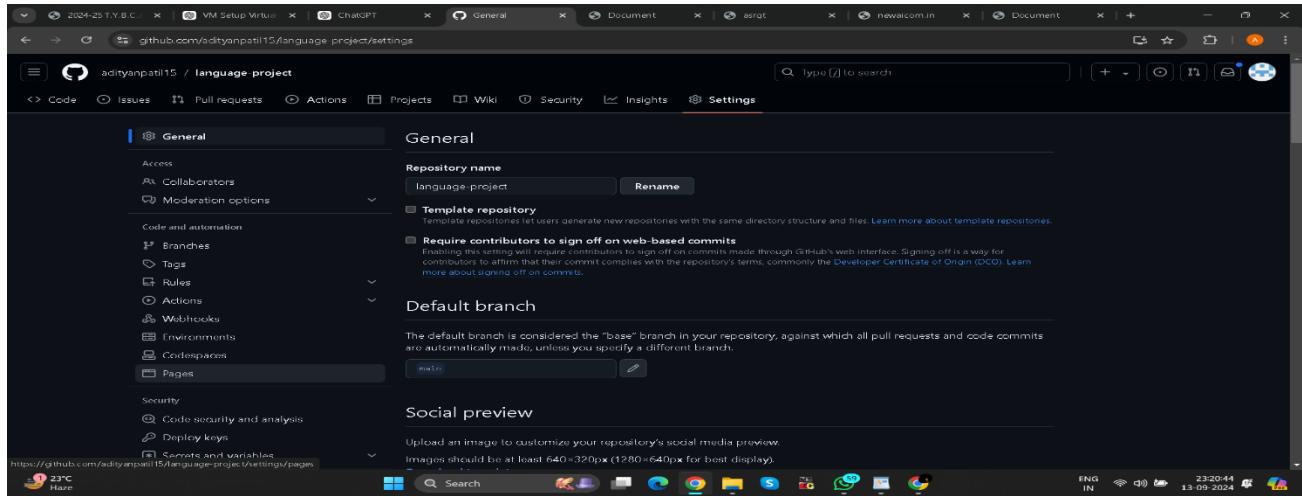


Step 6: After uploading the files, scroll down and click the "Commit changes" button (bottom-left).

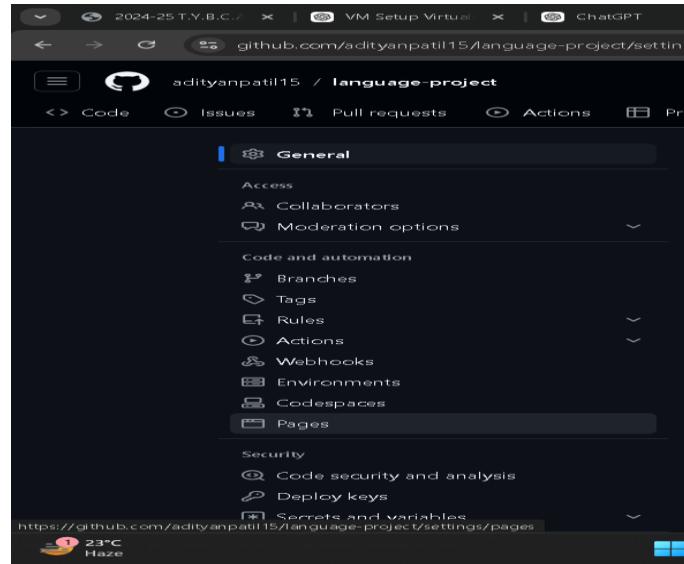


3: create link

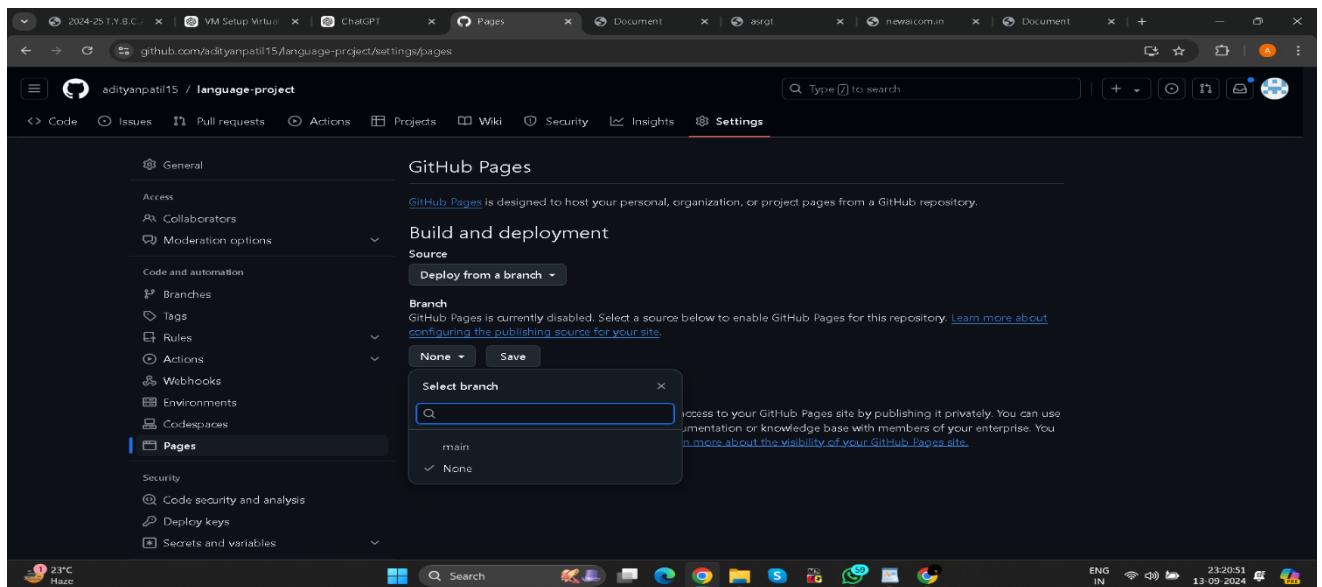
Step 1: Click on the "Settings" tab (top-right corner of the repository page).



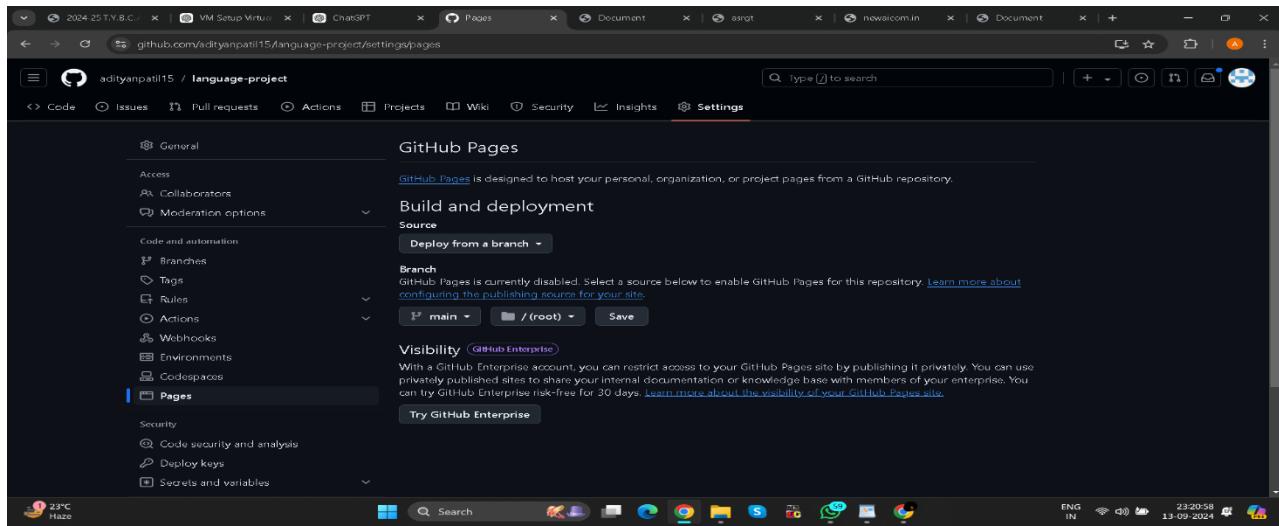
Step 2: On the left sidebar, scroll down and select "Pages".



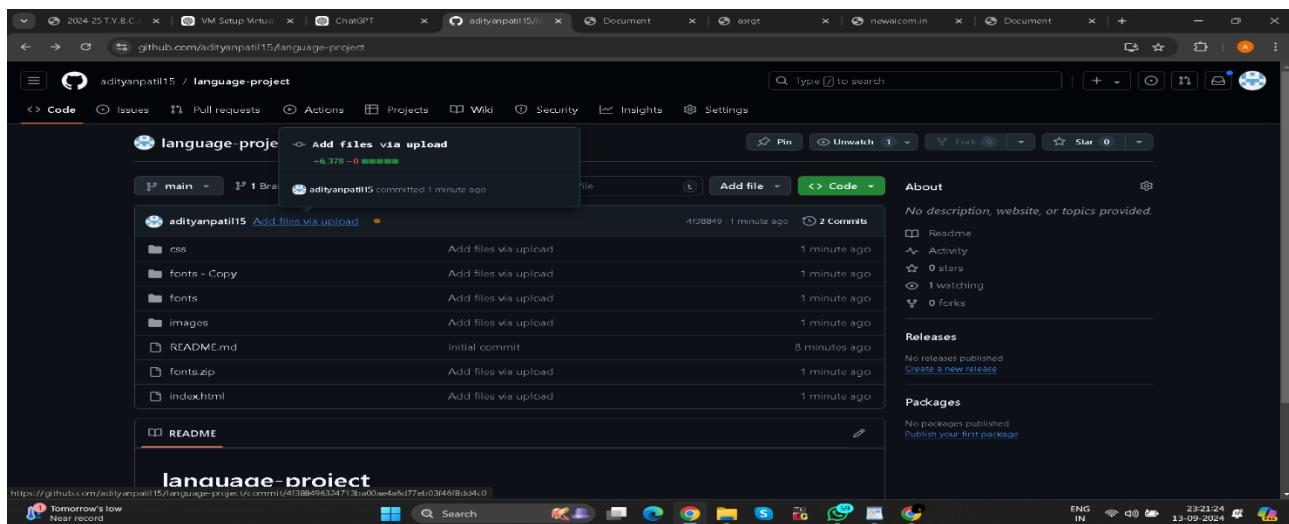
Step 3 : In the "Source" section, select the branch as "main" and folder as "/ (root)".



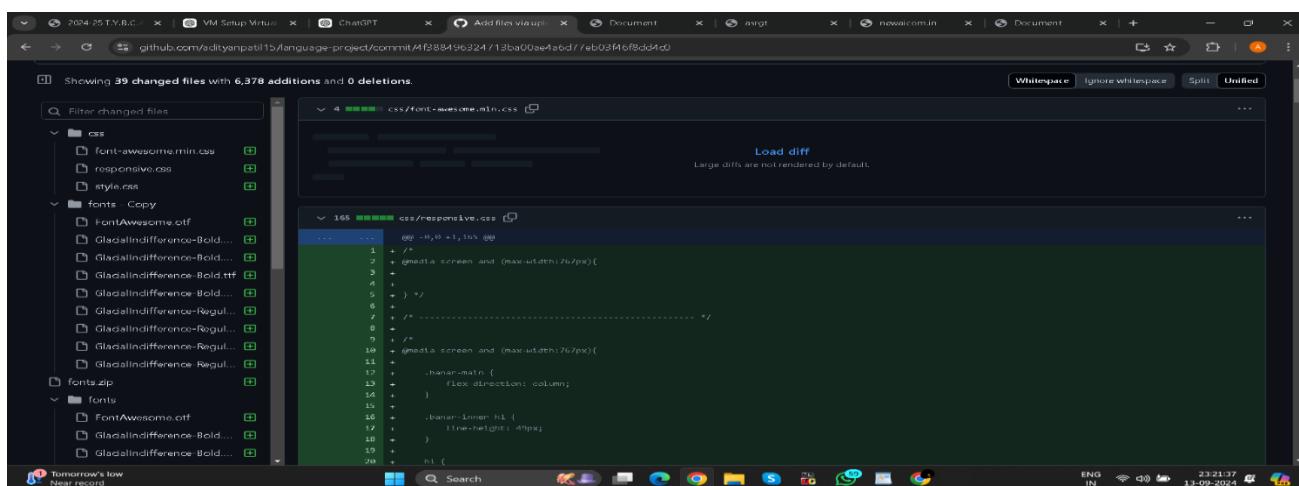
Step 4 : click on save (wait for some time)



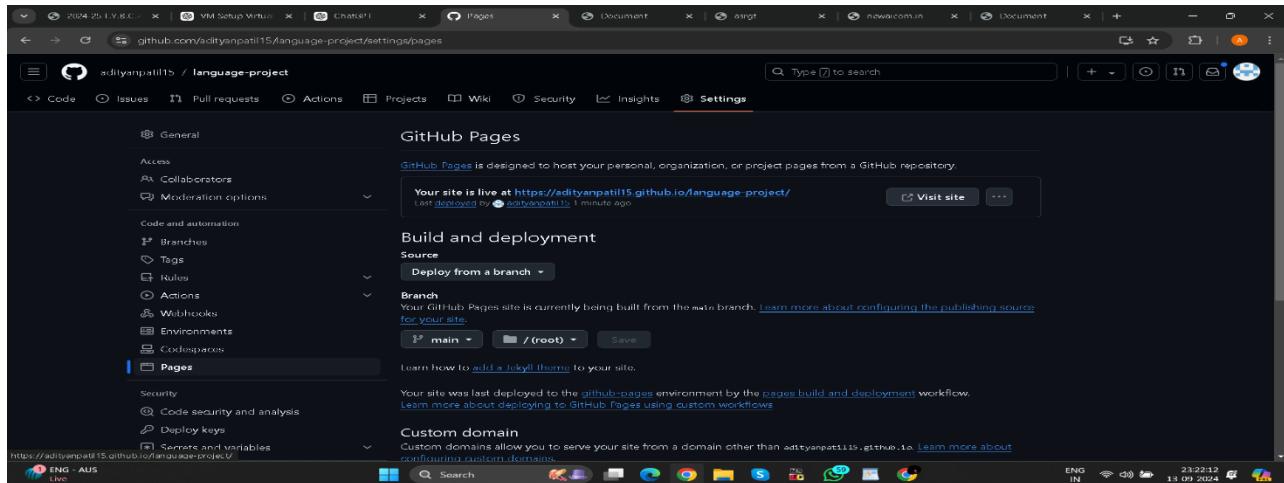
Step 5: create link for files are upload



Step 6: uploading

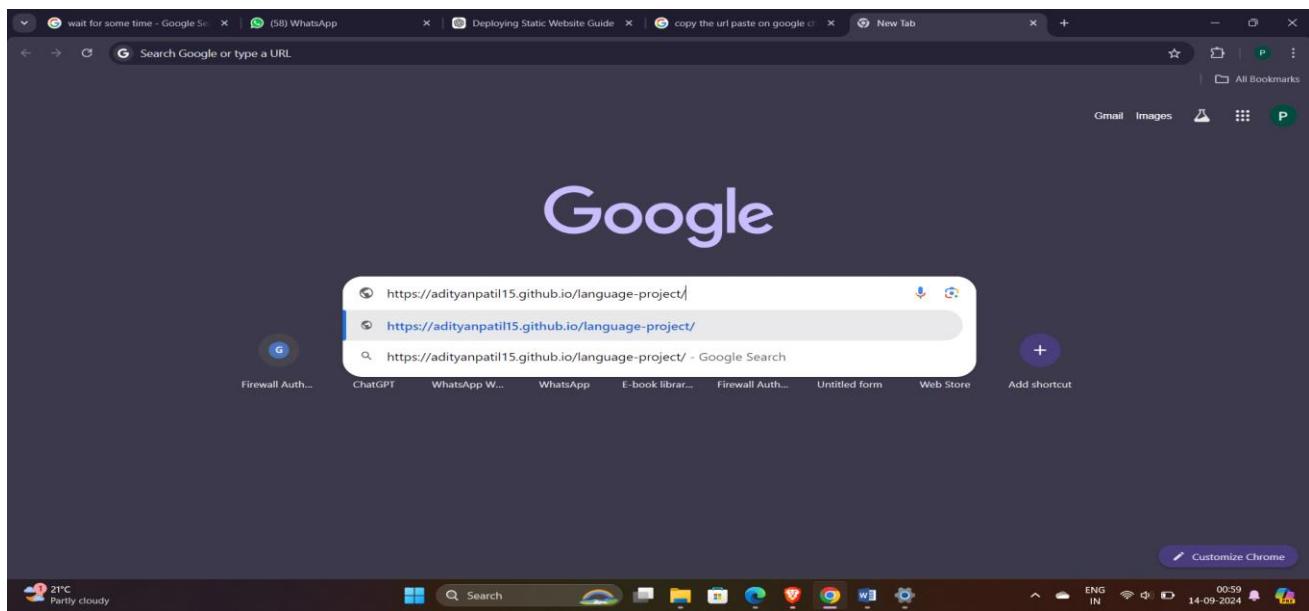


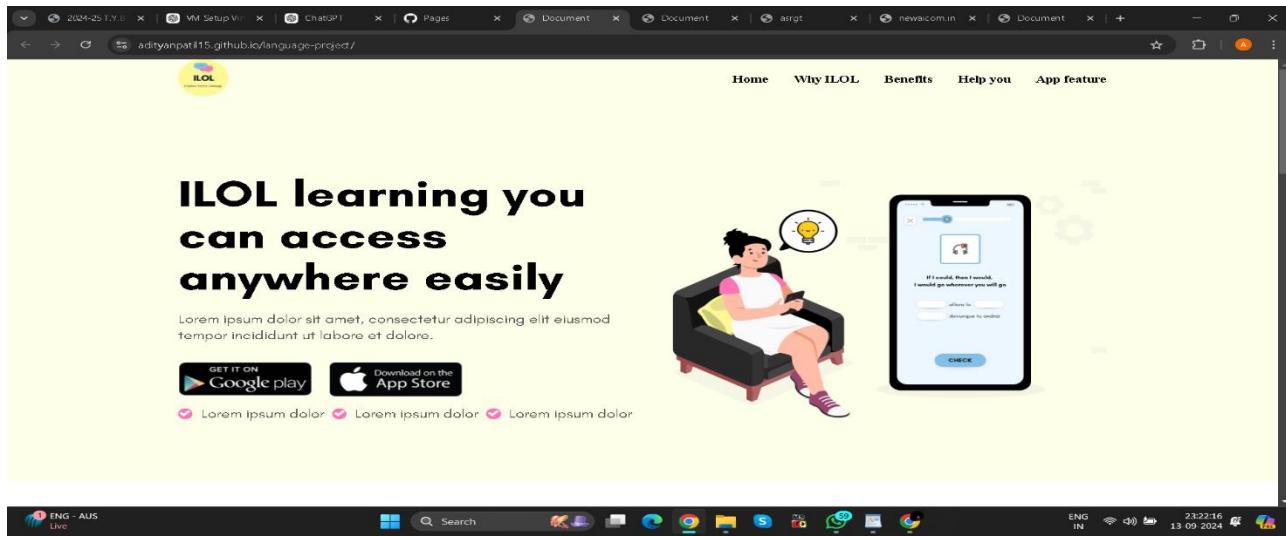
Step 6: In the "Pages" section we can create link



4: View Your Live Website

Step 1: copy the url paste on google chrome or (Click on the Visit site)





Conclusion:

You have successfully deployed a static website on GitHub Pages. Now, your website is hosted for free on GitHub's servers, and you can share the link with anyone. This process demonstrates a simple method to host personal projects or static content without needing complex server setups.

Submitted By:

Sign :

Name :

Roll No :

Checked By: Mr. Aditya Nitin Patil

**Shram Sadhana Bombay Trust Sanchlit
Arts, Commerce & Science, Bambhori, college, Jalgaon
Bachelor Of Computer Application (B.C.A)**

Practical: 06

DOP:

DOC:

Title: Introduction to Cloud CRM (Salesforce).

Objective :

The goal of this practical assignment is to understand Customer Relationship Management (CRM) using Salesforce, a leading cloud-based platform. You will learn how to navigate Salesforce's Developer platform, create basic CRM functions, and gain insights into the customer relationship lifecycle.

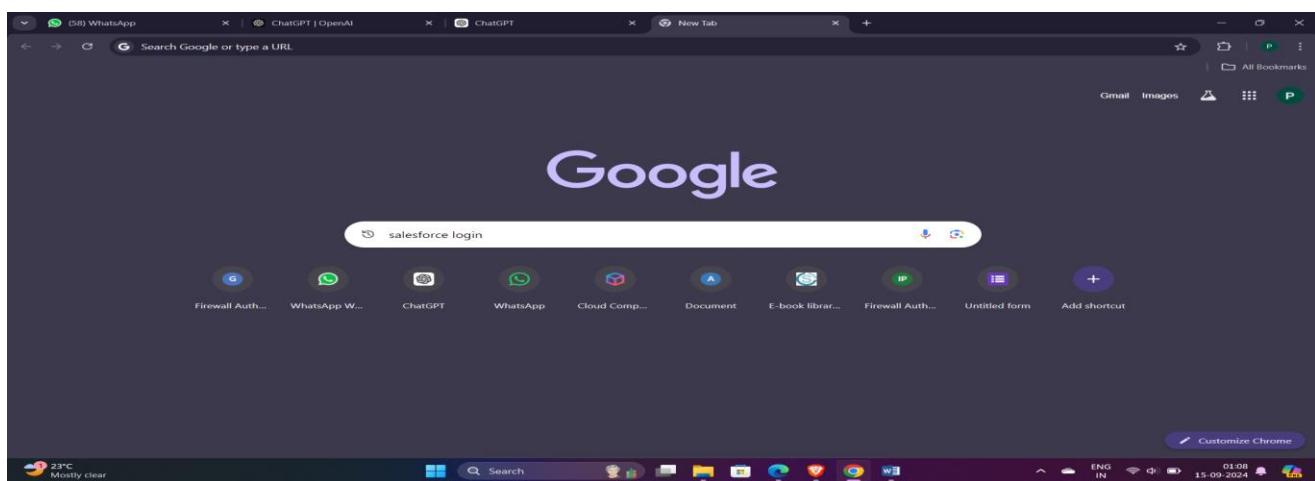
Requirements:

1. Salesforce Developer Account (Free)
2. A laptop or desktop with internet connectivity
3. Basic knowledge of CRM concepts
4. Google Chrome or any updated browser

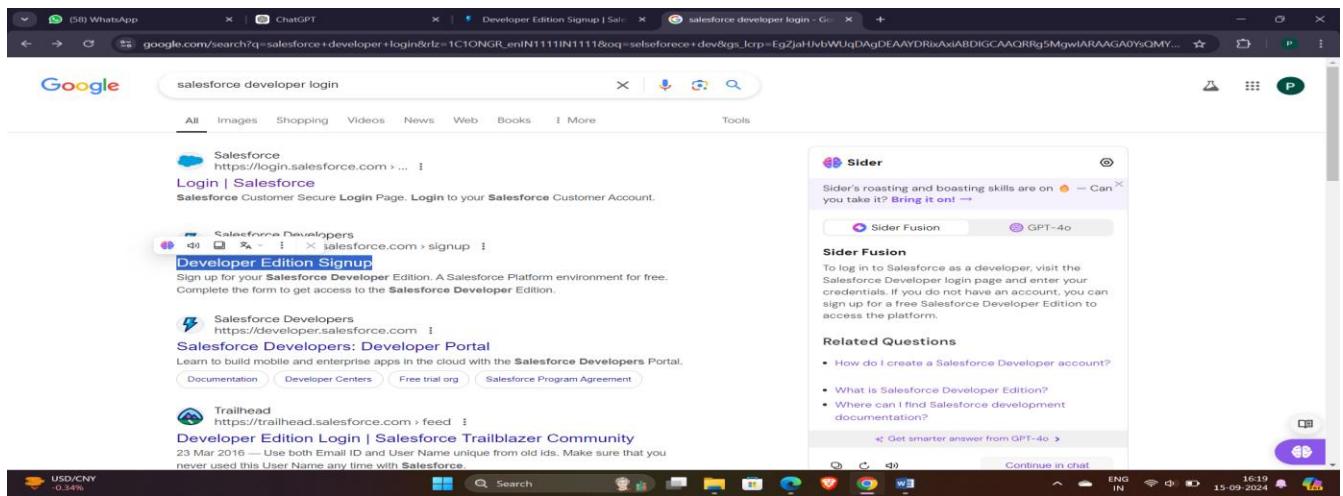
Step-by-Step Instructions:

1: Create a Salesforce Developer Account

Step1: Go to Google Chrome.

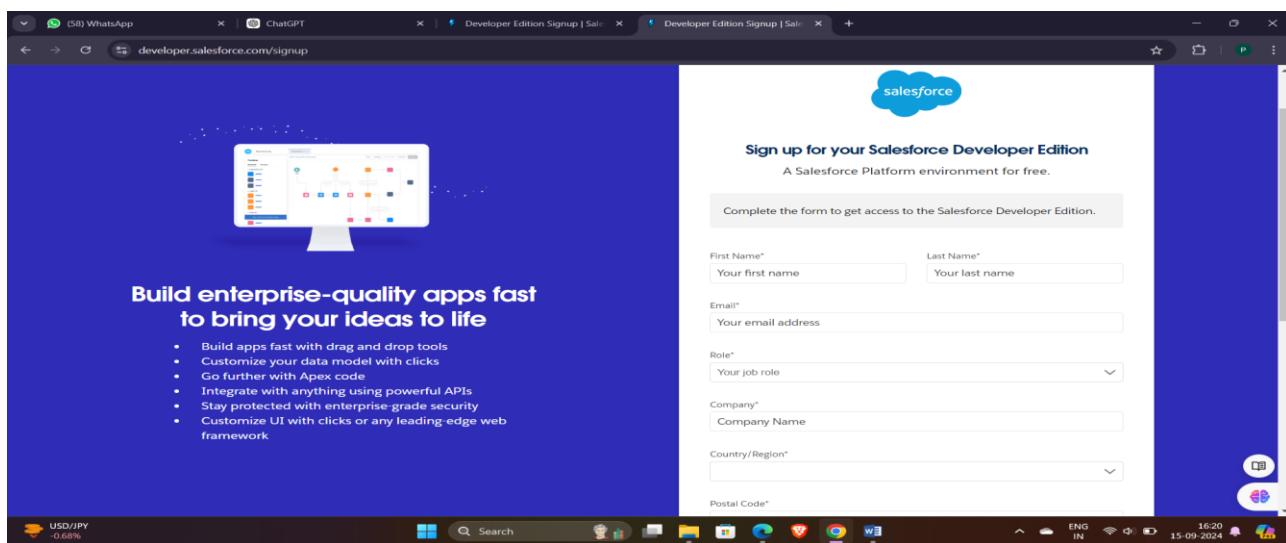


Step 2: Search for “Developer Edition Signup” on a browser and click on the official link

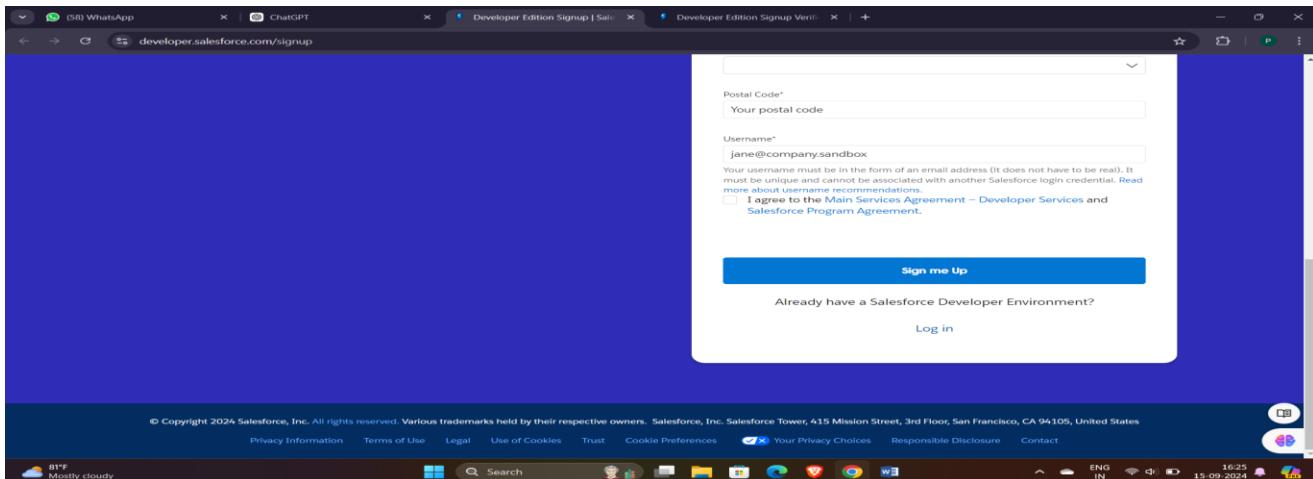


Step 3: Fill in your details:

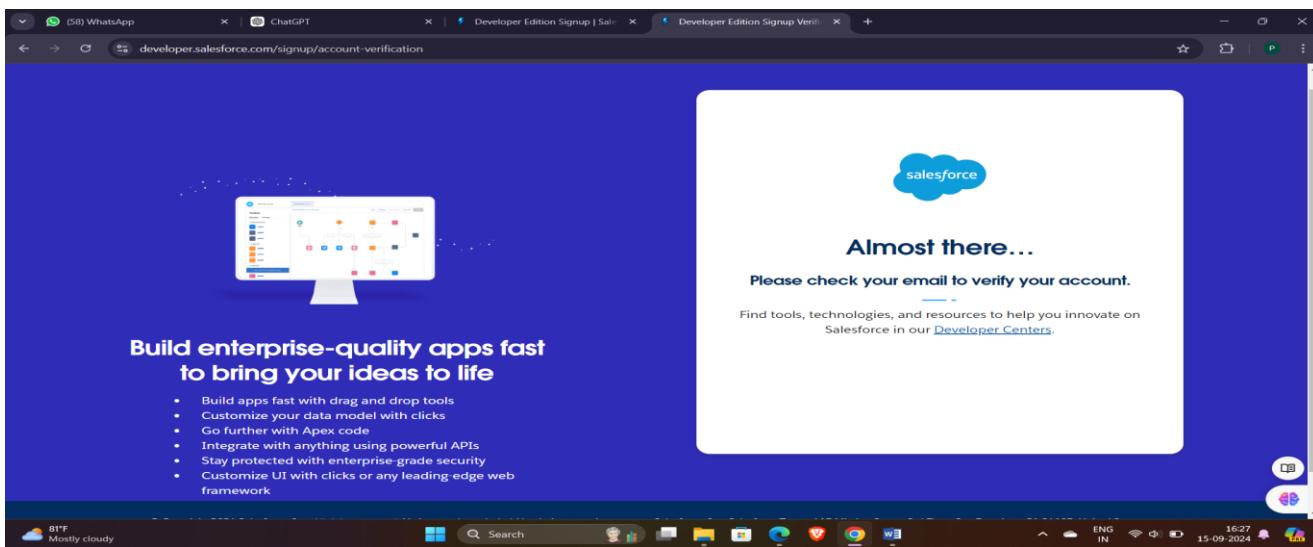
1. First Name
2. Last Name
3. Email (Use a valid email address)
4. Job Title (Choose "Student" or leave it blank if not applicable)
5. Company (Use "Self" if not part of a company)
6. Country



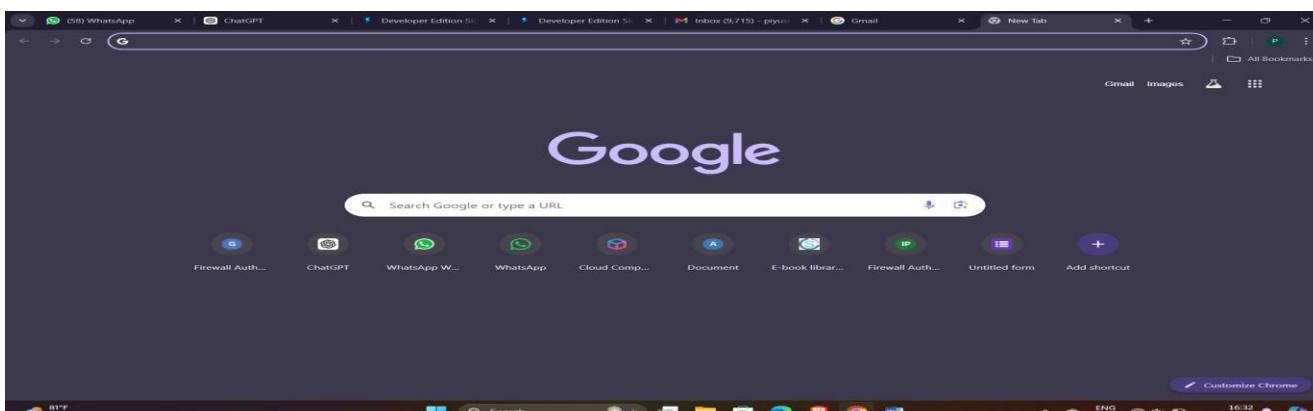
Step 4: Click on: "Sign Me Up" (Right side button)



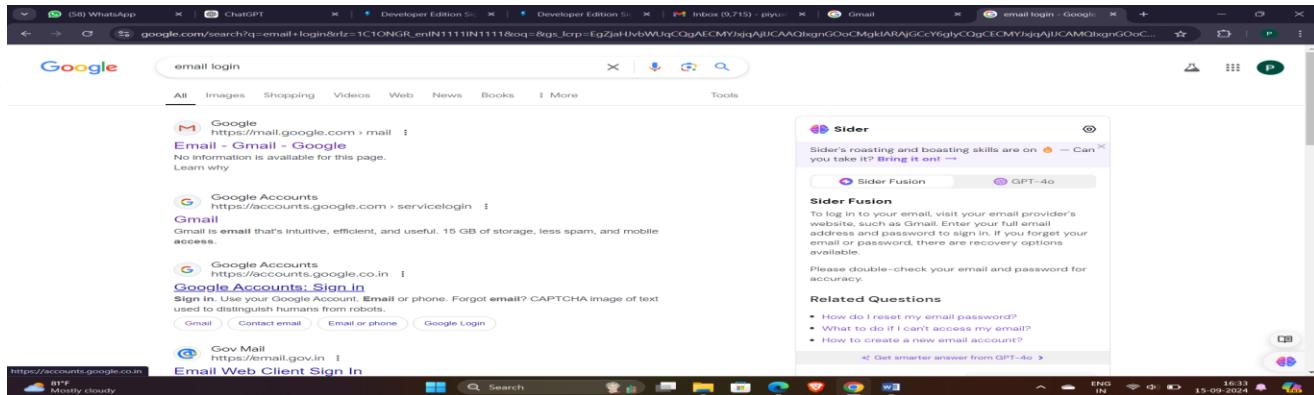
Step 5: Verify your email:



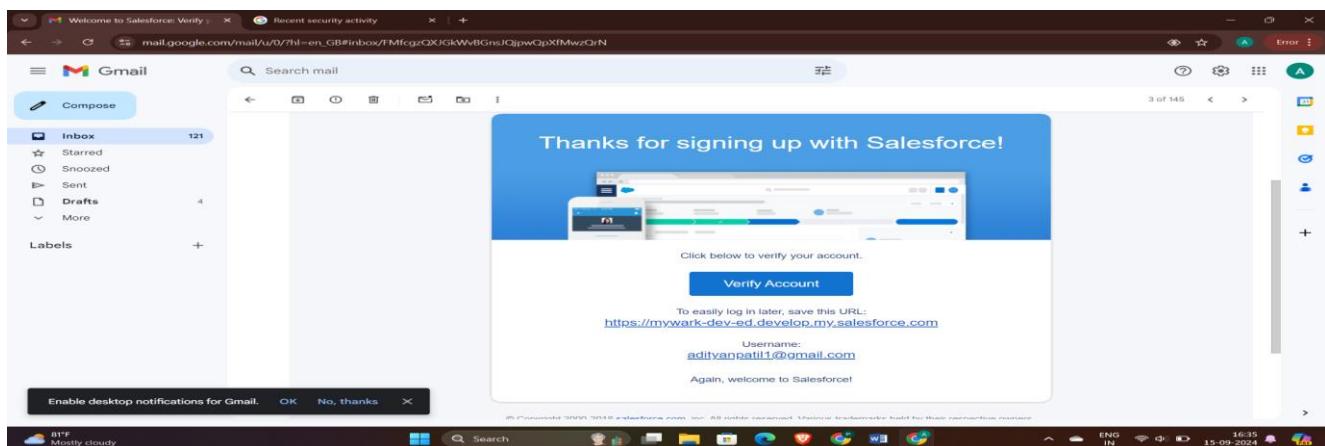
A) Go to Google Chrome.



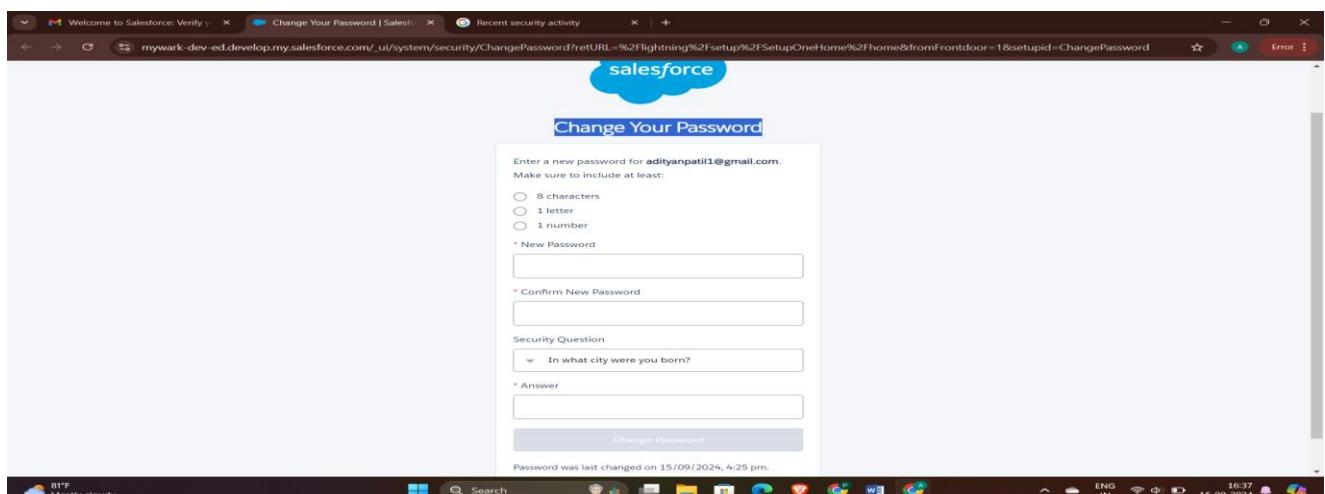
B) Search for “Email” on a browser and click on the official link



C) Check your inbox for the verification email from Salesforce.

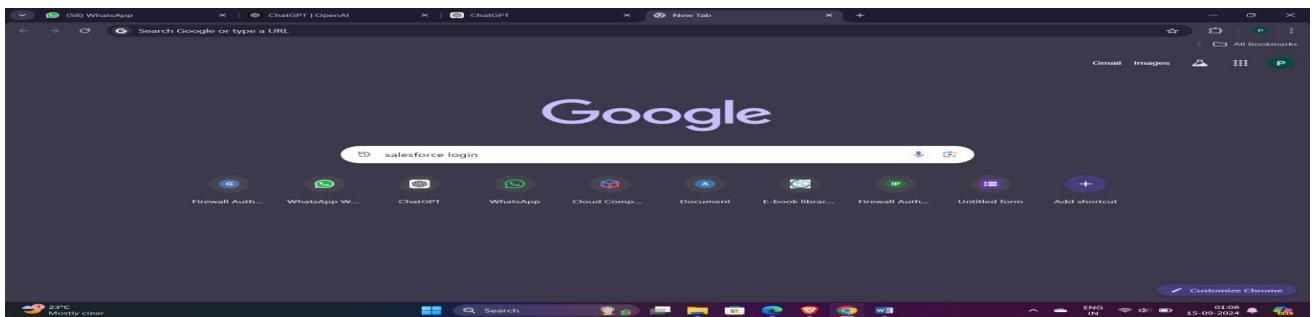


D) Click on the link in the email to verify your account.(Change Your Password)

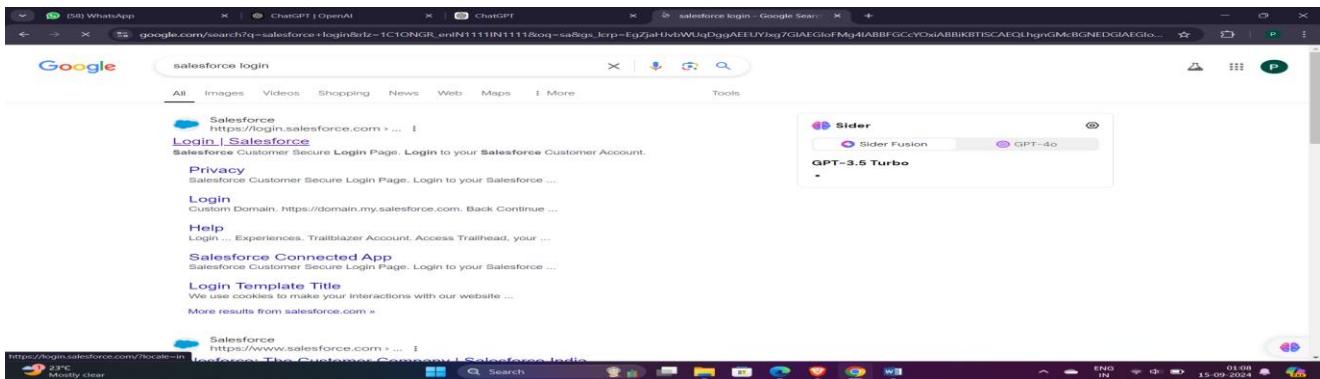


2: Log into Salesforce Developer Account

Step1: Go to Google Chrome.

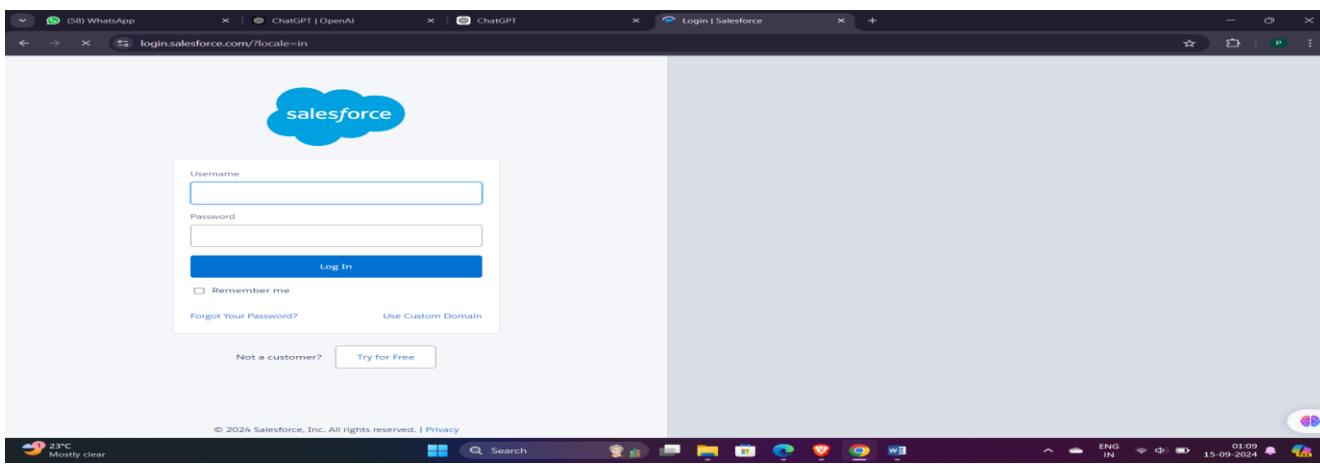


Step 2: Search for “ Salesforce login ” on a browser and click on the official link



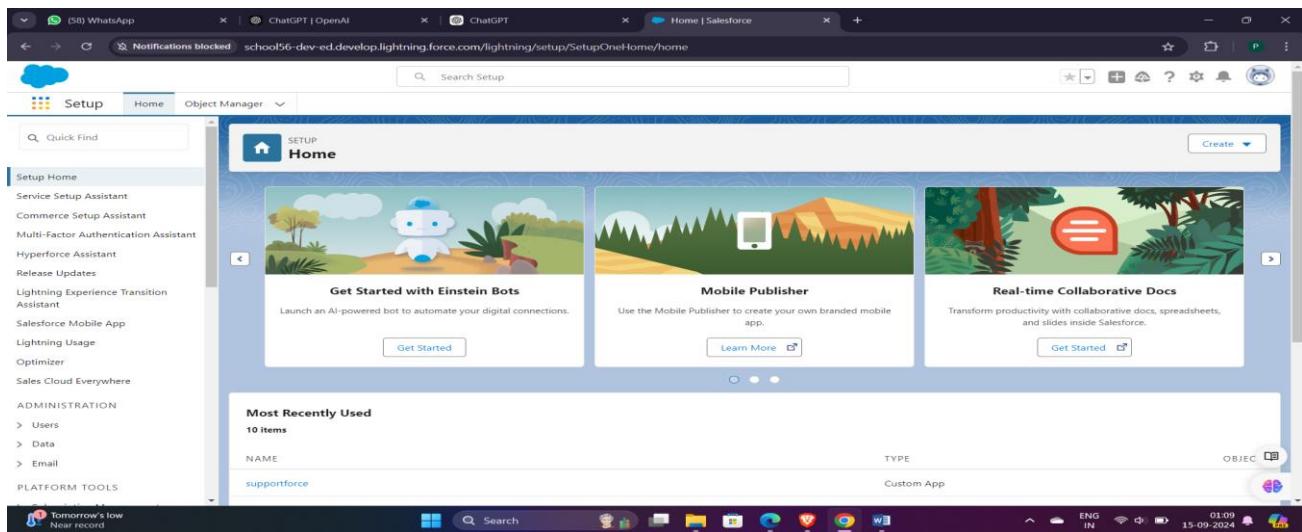
Step 3: Enter your

- Username (email you used for signing up)
- Password

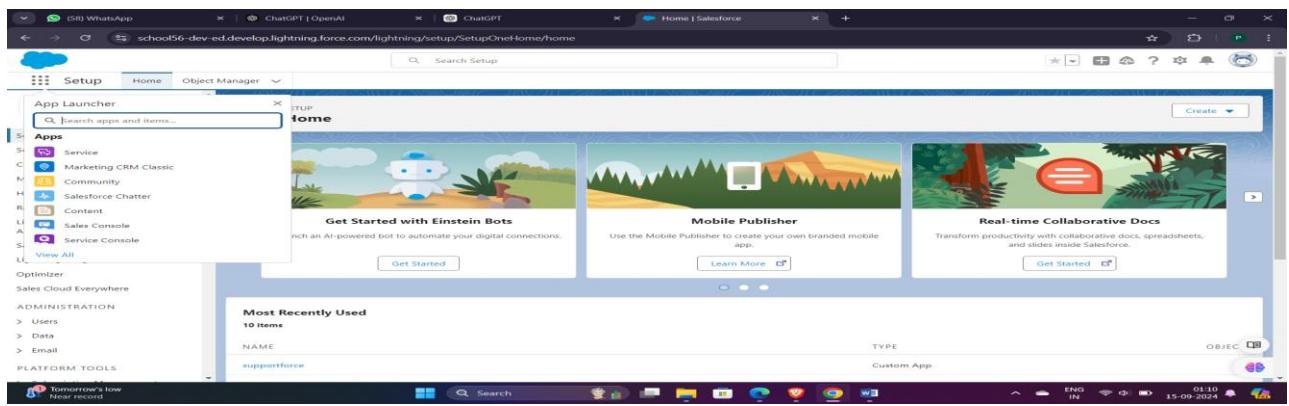


3: Understand the Salesforce Interface

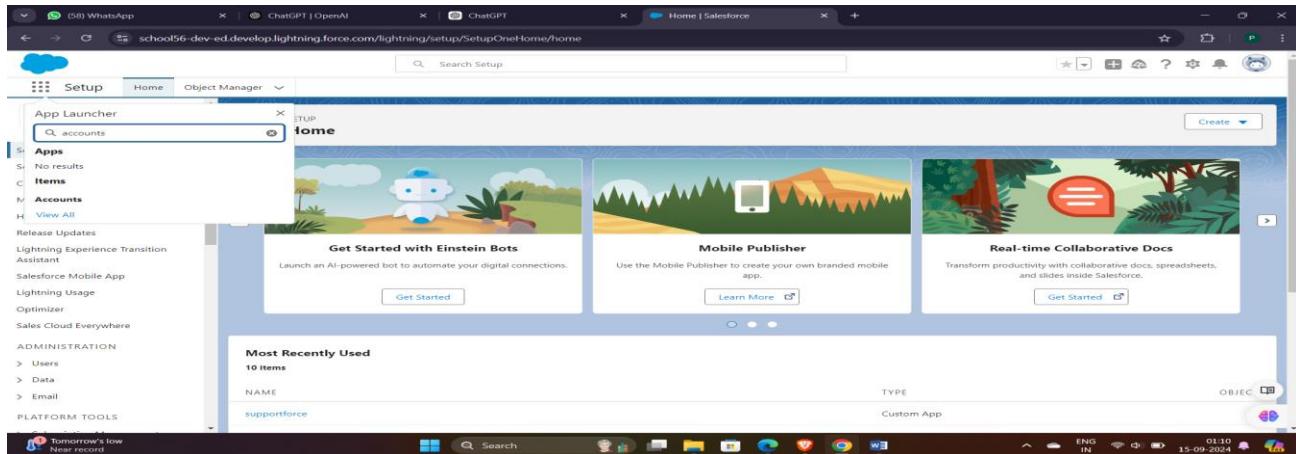
Step 1: Enter Salesforce: Once logged in, you'll be in your Salesforce environment.



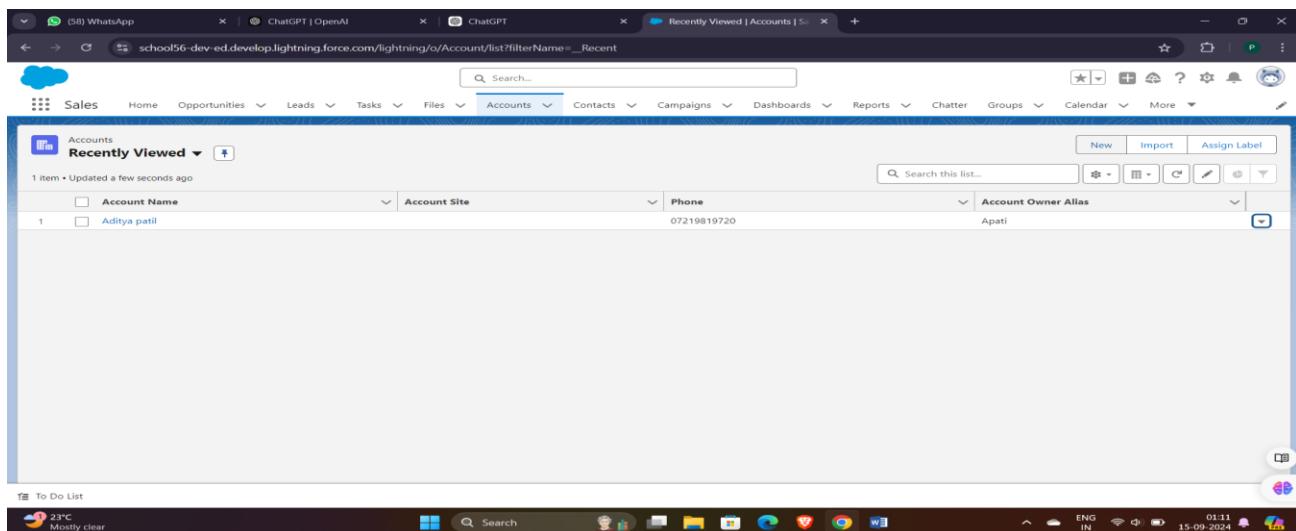
Step 2: Go to the App Launcher: On the top left, you'll see the App Launcher (the icon with 9 dots).



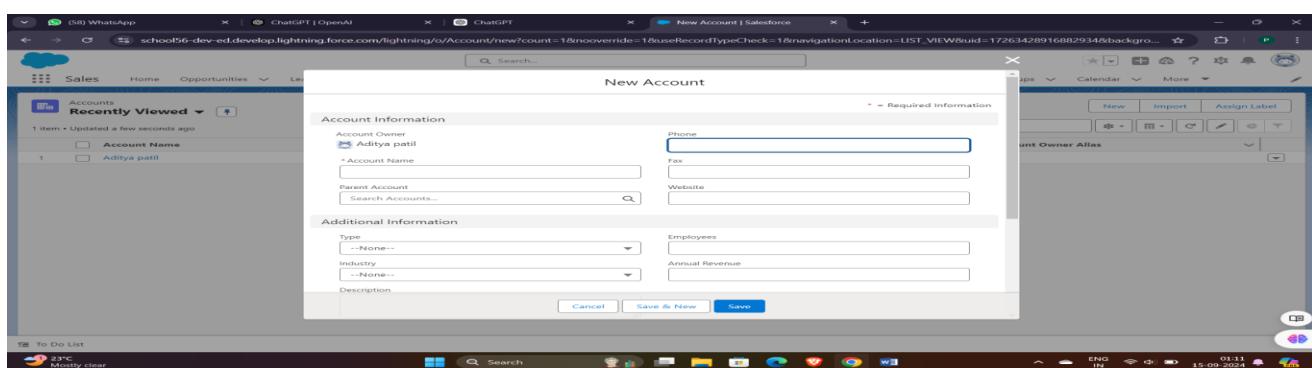
Step 3: Search for "Accounts": In the search bar within the App Launcher, type "Accounts" and select it.



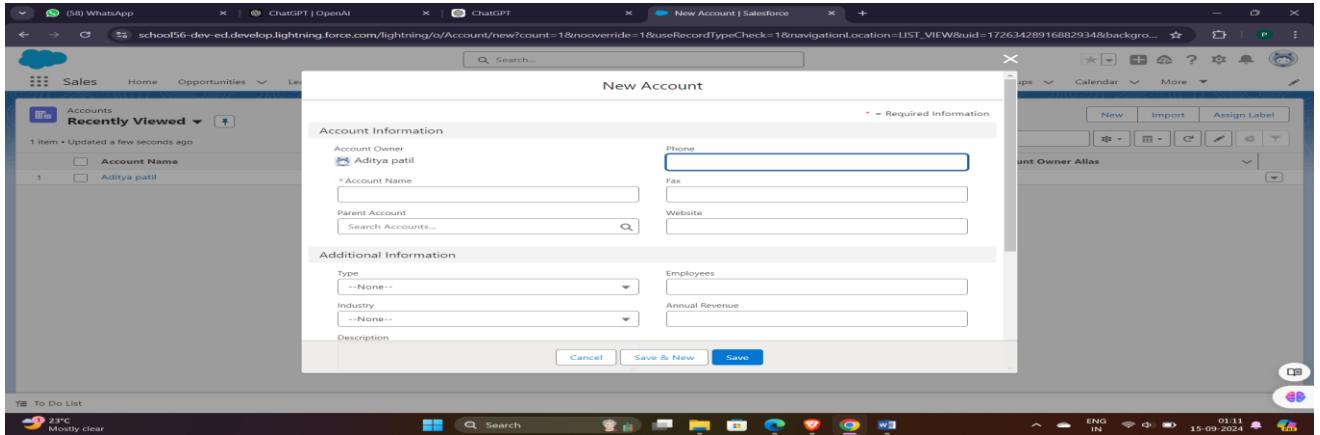
Step 4: Create a New Account: Once you're in the Accounts section, click on the "New" button to create a new account.



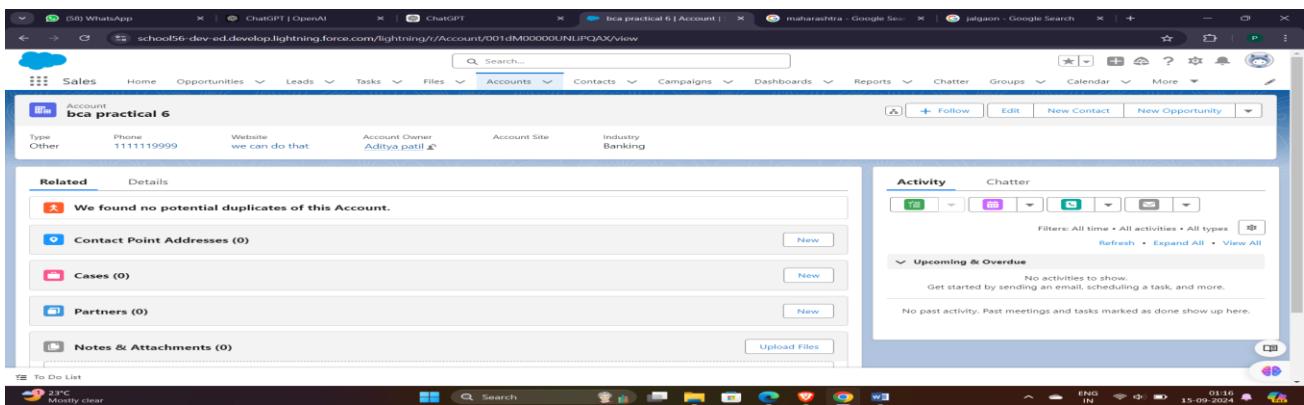
Step 5: Fill in Account Information: Provide the account details



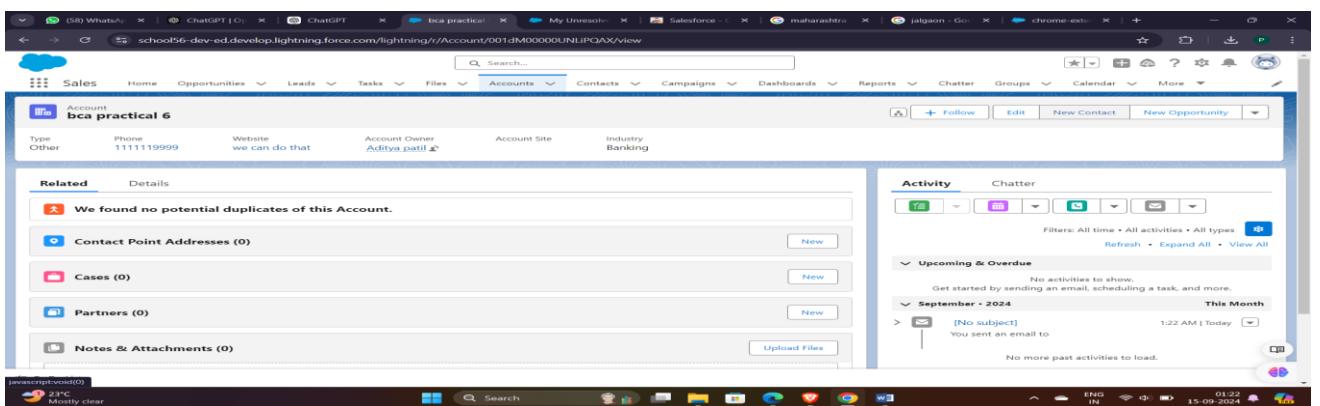
Step 6: Save the New Account: After filling out the account details, click "Save" to create the new account.



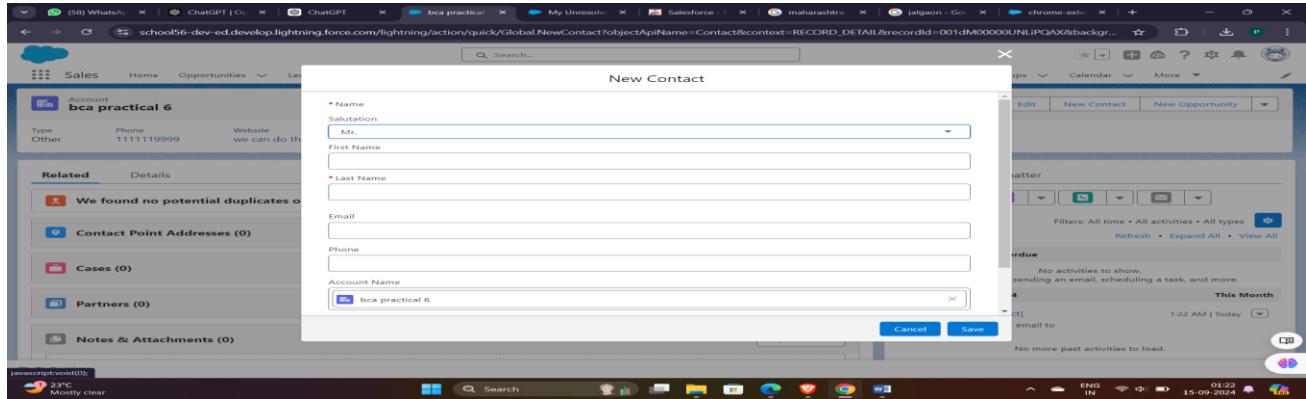
Step 7 :Open the New Account: Once saved, you'll be taken to the new account's page.



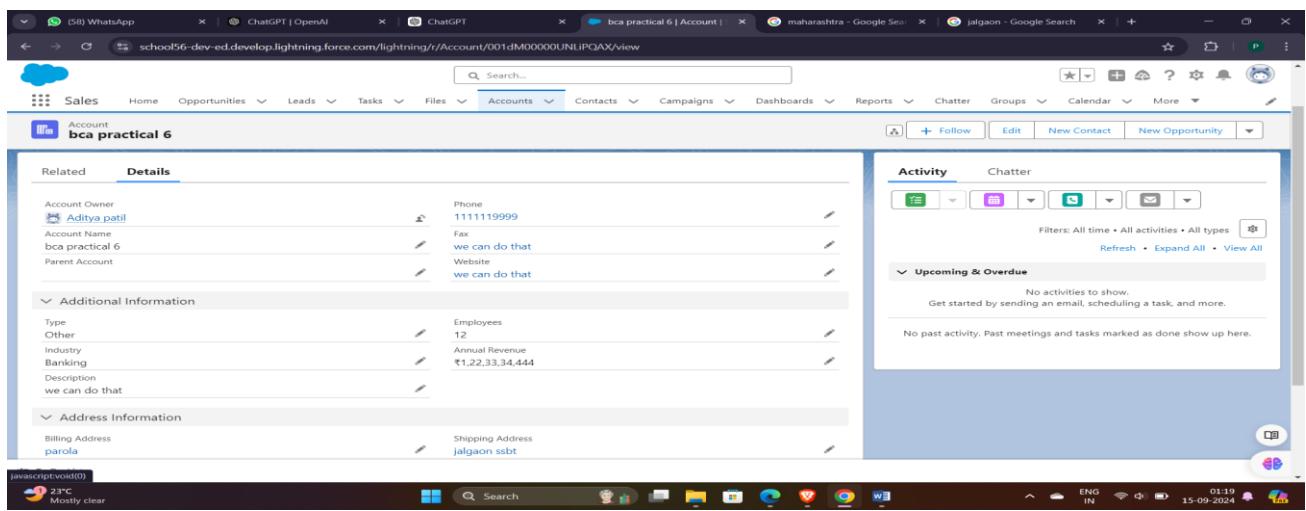
Step 8: Create a New Contact: In the account's details page, look for the "Contacts" section and click "New" to add a new contact.



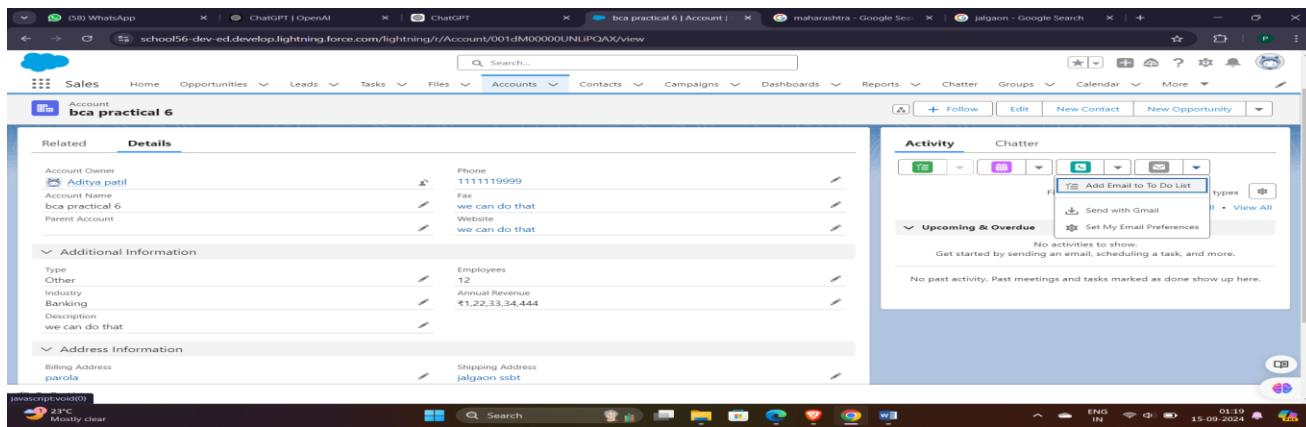
Step 9 :Fill in Contact Information: Enter the contact details, like:



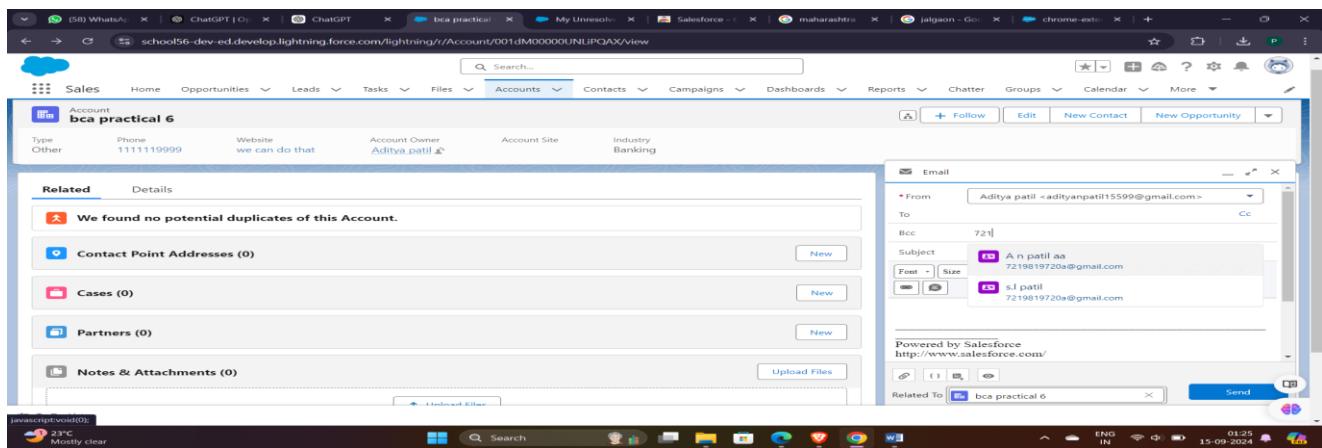
Step 10 : Send an Email: In the new contact's page, go to the "Activity" section on the right side.



Step 11 :Here, you'll see an option to send an email.



Step 12: Here, send an email to Contact.



Conclusion:

By following these steps, you should now have a basic understanding of Salesforce CRM. You learned how to set up a developer account, navigate through the interface, create new apps and objects, and generate reports. Salesforce provides a comprehensive platform to manage customer relationships, ensuring improved customer interactions, data management, and business efficiency.

Submitted By:

Checked By: Aditya Ntin Patil

Sign :

Name :

Roll No :

**Shram Sadhana Bombay Trust Sanchlit
Arts, Commerce & Science, Bambhori, college, Jalgaon
Bachelor Of Computer Application (B.C.A)**

Practical: 07

DOP:

DOC:

Title: Data Analytics on the Cloud (Salesforce):

Objective : The aim of this practical is to introduce students to Salesforce's reporting tools and dashboards, enabling them to analyze and visualize data effectively on the cloud platform.

Requirements :

- 1) A Salesforce account (Sign up for a free Salesforce Developer Edition at <https://developer.salesforce.com/>).
- 2) Basic knowledge of Salesforce navigation and data management.
- 3) A dataset to analyze (can be preloaded in Salesforce or provided by your instructor).
- 4) Internet access.

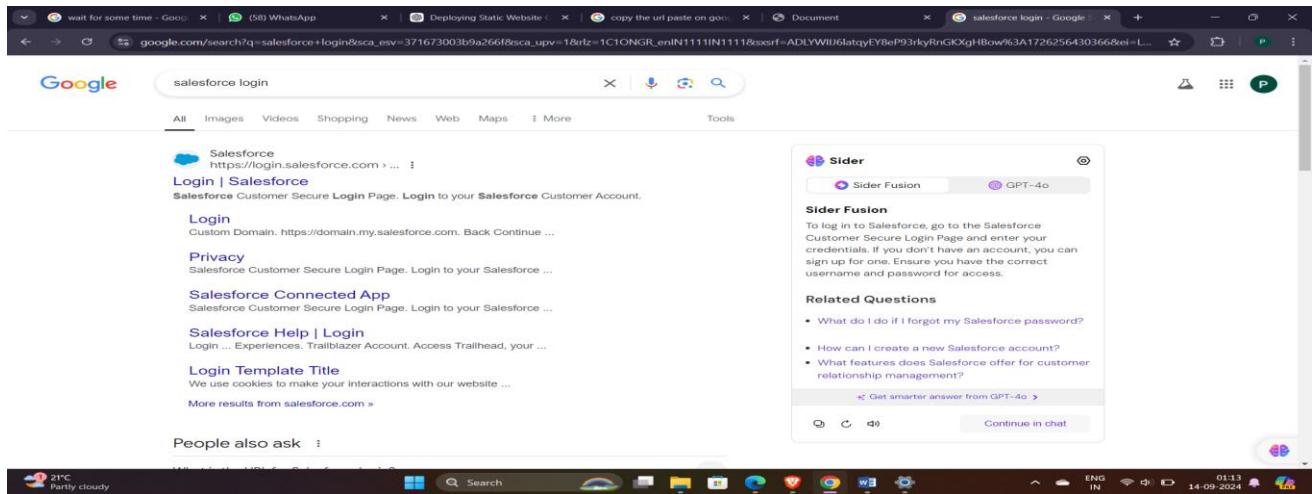
Step-by-Step Instructions:

1. Log in to Salesforce:

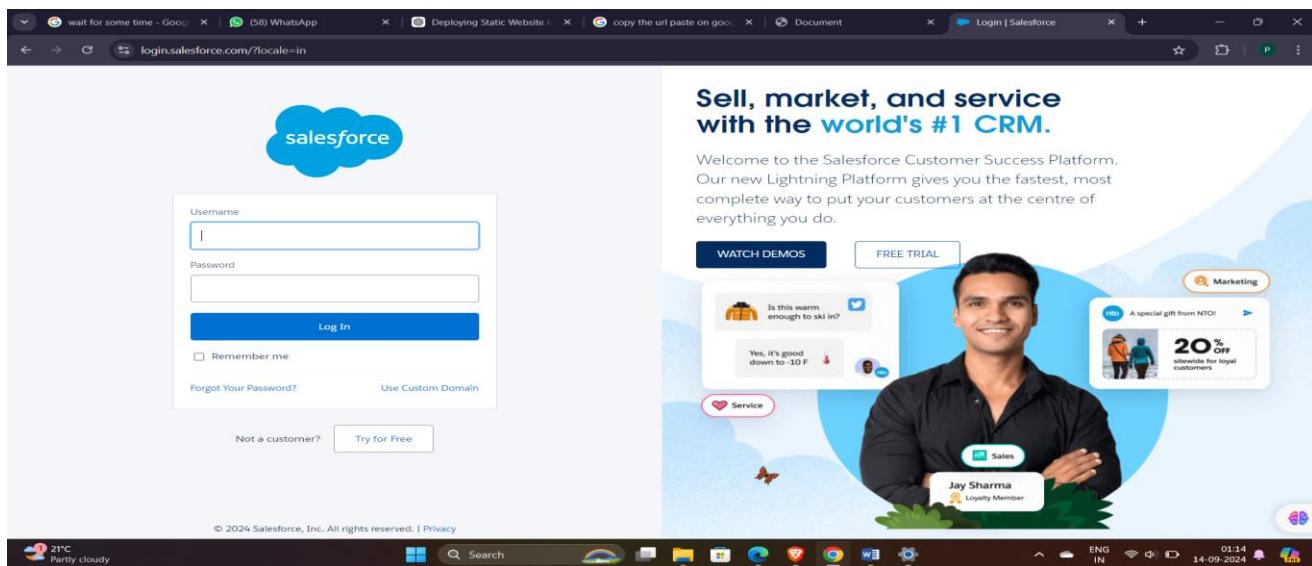
Step 1: Open Google Chrome



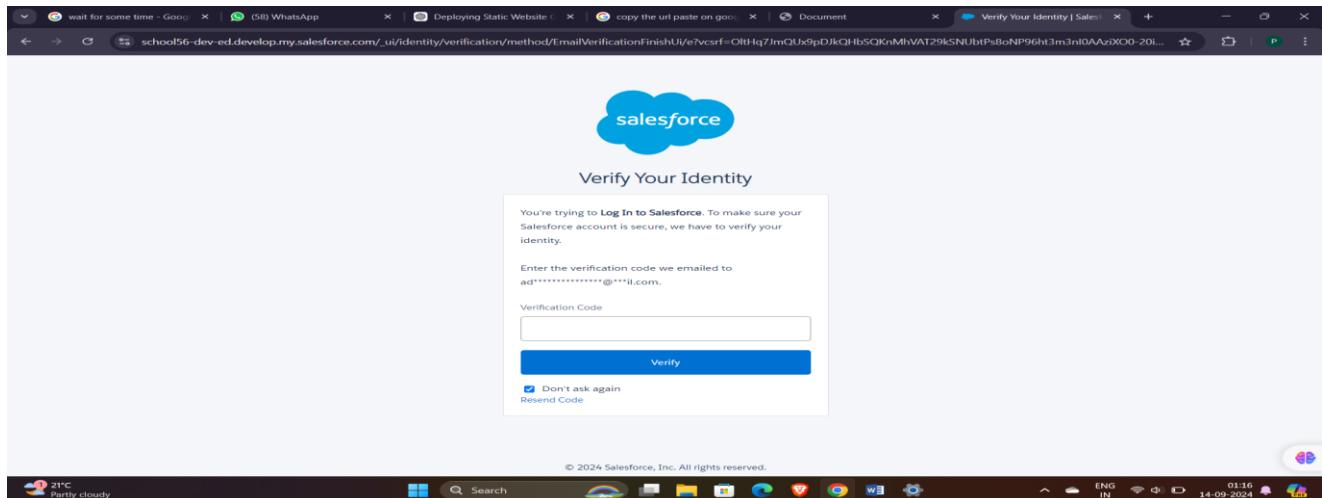
Step 2: search for salesforce login



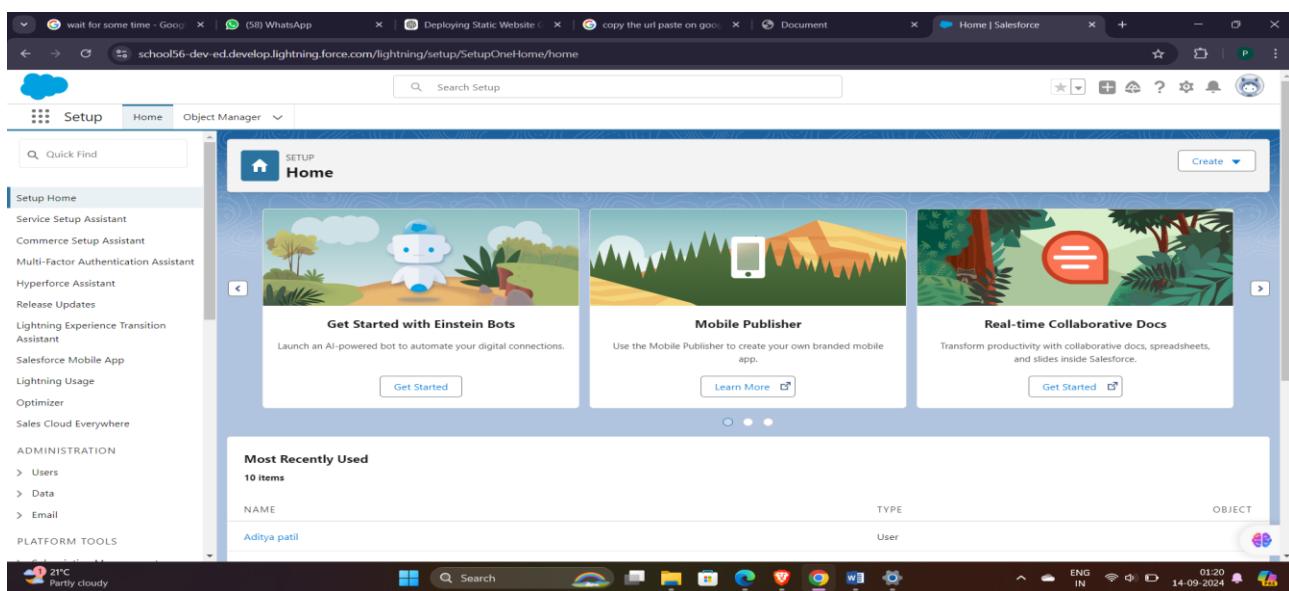
Step 3: Enter your username and password, and click the "Log in" button (top-right side).



Step 4: Verify your identity in Salesforce



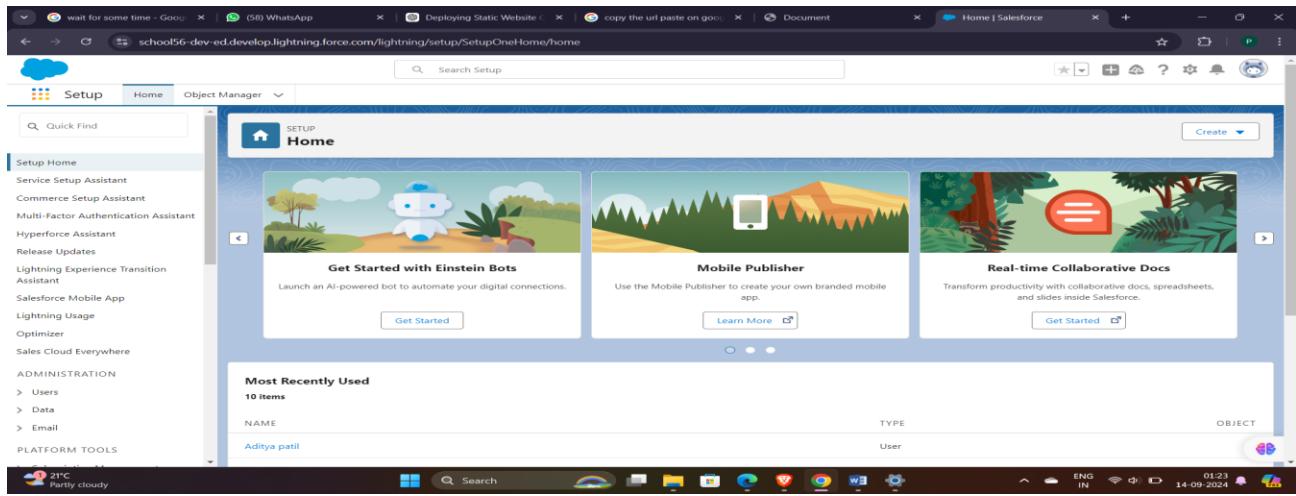
Step 5: Once logged in, you will be on the Salesforce dashboard.



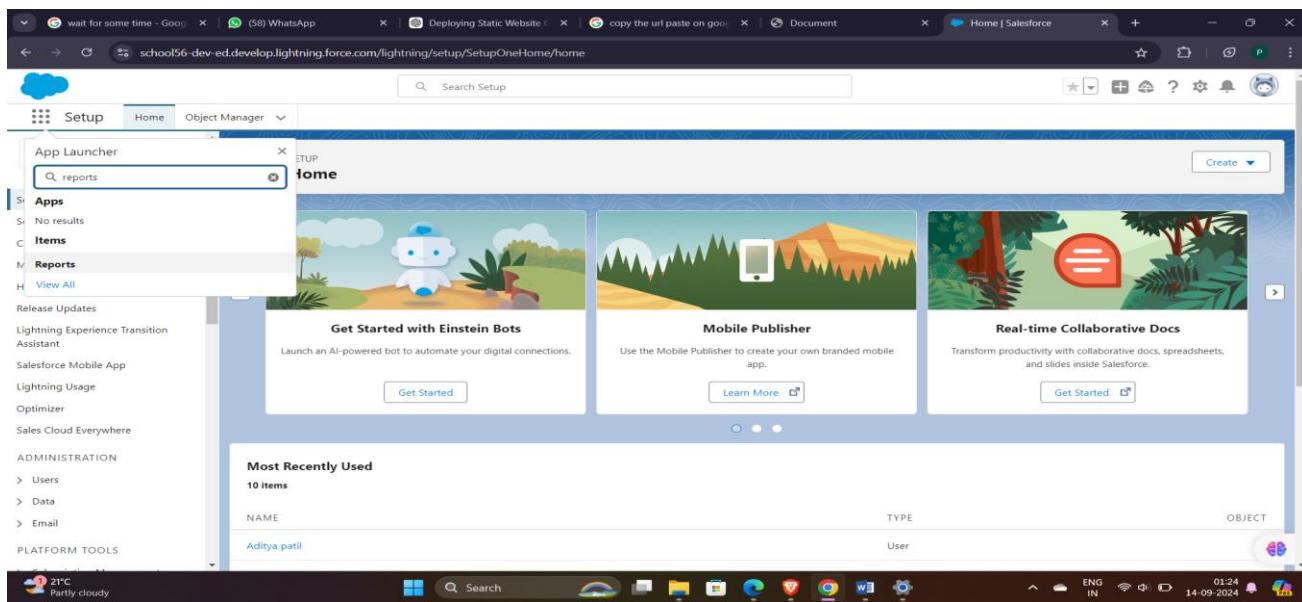
Step 6: Once logged in, you will be on the Salesforce dashboard.

2 .Navigate to the Reports Tab

Step 1: Click the "App Launcher" button (top-left corner, represented by 9 dots).



Step 2: Search for "Reports" in the search bar and click on the "Reports" tab (left-side list).



Step 3: This will take you to the Reports section where you can manage and create reports.

The screenshot shows the Salesforce Reports page. On the left, there's a sidebar with categories like Reports, Recent, Created by Me, Private Reports, Public Reports, All Reports, Folders, All Folders, Created by Me, Shared with Me, Favorites, and All Favorites. The main area displays a table of recent reports with columns: Report Name, Description, Folder, Created By, Created On, and Subscribed. The table contains four rows:

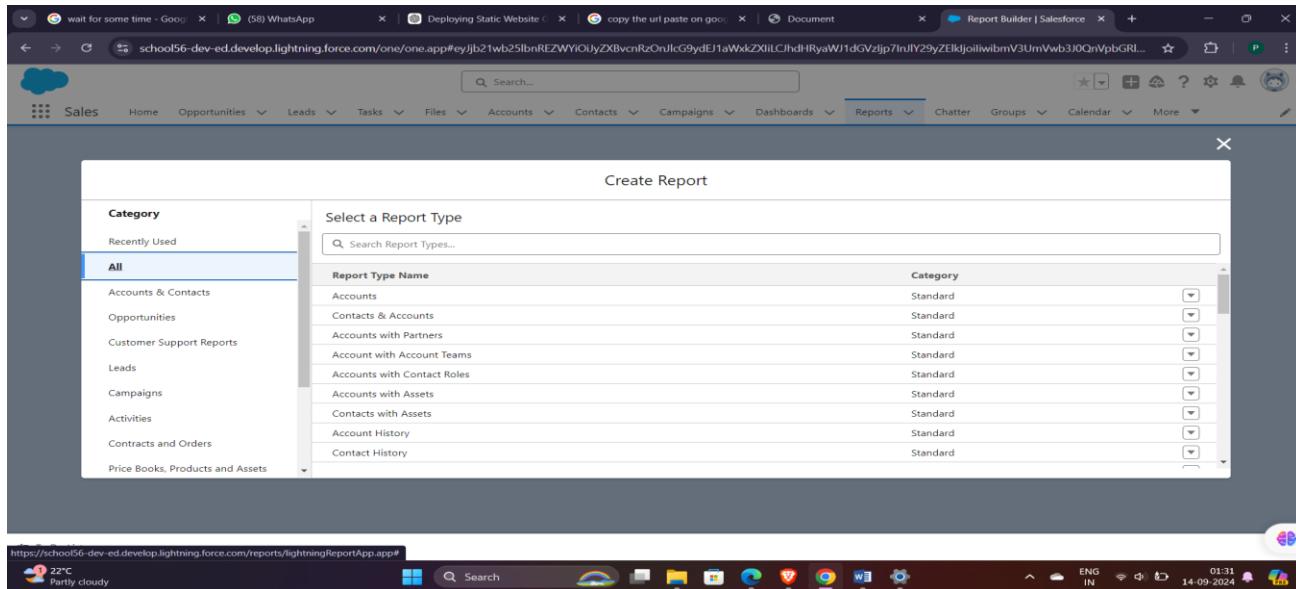
	Report Name	Description	Folder	Created By	Created On	Subscribed
1	asw		bca	Aditya patil	10/9/2024, 1:45 pm	
2	New Contacts & Accounts Report		bca	Aditya patil	3/9/2024, 4:32 pm	
3	aditya new	aaa	bca	Aditya patil	3/9/2024, 1:56 am	
4	Copy of New Accounts Report		bca	Aditya patil	3/9/2024, 2:53 am	

3: Create a New Report

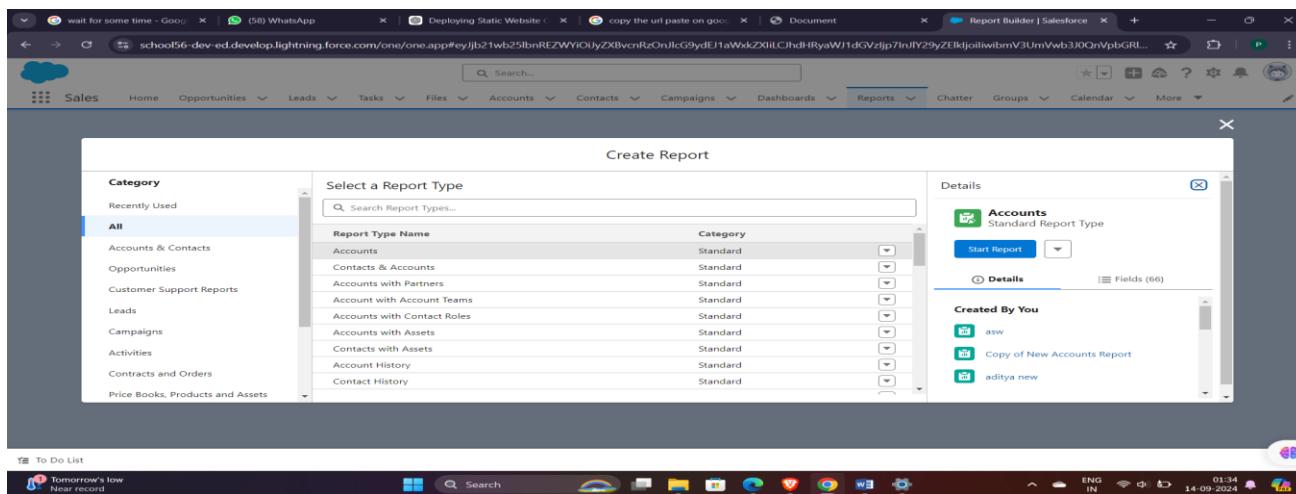
Step 1: On the Reports page, click the "New Report" button (top-right corner).

This screenshot is identical to the one above, showing the Reports page with the 'Recent' section selected. The 'New Report' button is highlighted in blue at the top right of the page.

Step 2: Select All then you select the type of report you want to create (e.g., Accounts, Opportunities, Leads).



Step 3: Click the "Start Report" button (right).



4: Customize Your Report

Step 1: Choose your data filters by clicking on the "Filters" pane (left side).

REPORT ▾
New Accounts Report ▾ Accounts

Fields > Filters Previewing a limited number of records. Run the report to see everything.

Filters Add filter... Show Me My accounts Created Date On or after 07-Sept-2024

Last Activity Account Owner Account Name Billing State/Province Type Rating Last Modified Date

No records returned in preview. Try running the report or editing report filters.

- Show All accounts.
- Set the Created Date filter to All Time.
- Edit other filters in the filter panel.

Update Preview Automatically

To Do List 22°C Partly cloudy Search ENG IN 01:38 14-09-2024

Step 2: Click on the Created Date

REPORT ▾
New Accounts Report ▾ Accounts

Fields > Filters to see everything.

Filters Add filter... Show Me My accounts Created Date On or after 07-Sept-2024

Date Created Date

Range Custom

Start Date 07/09/2024

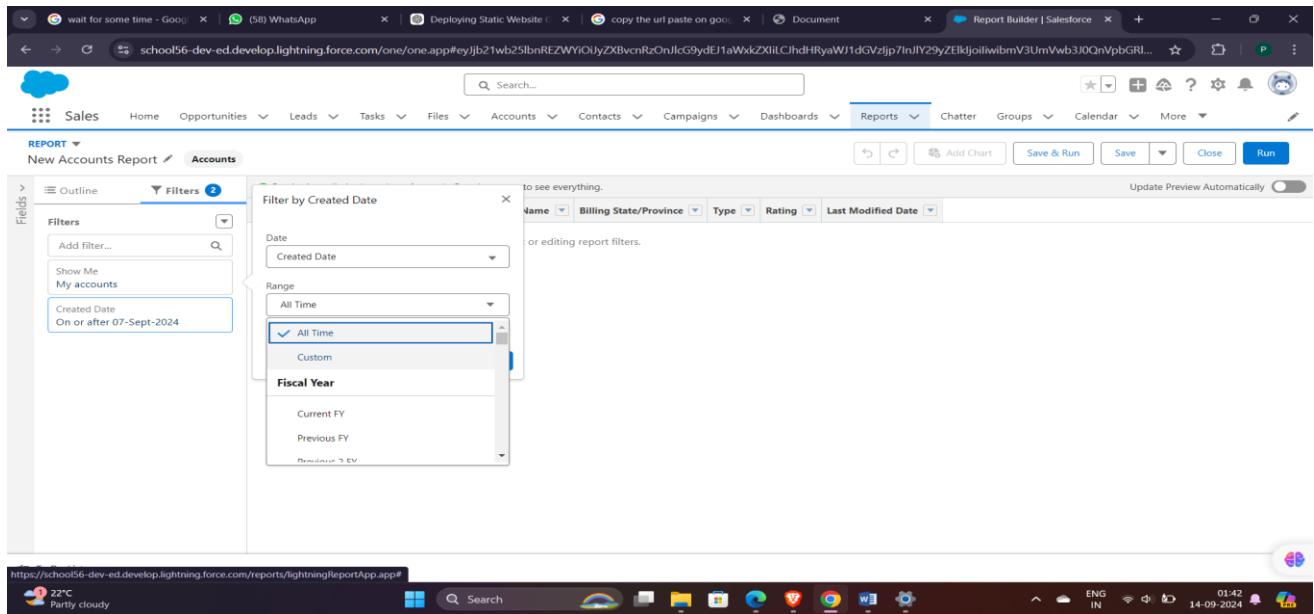
End Date pick a date

Cancel Apply

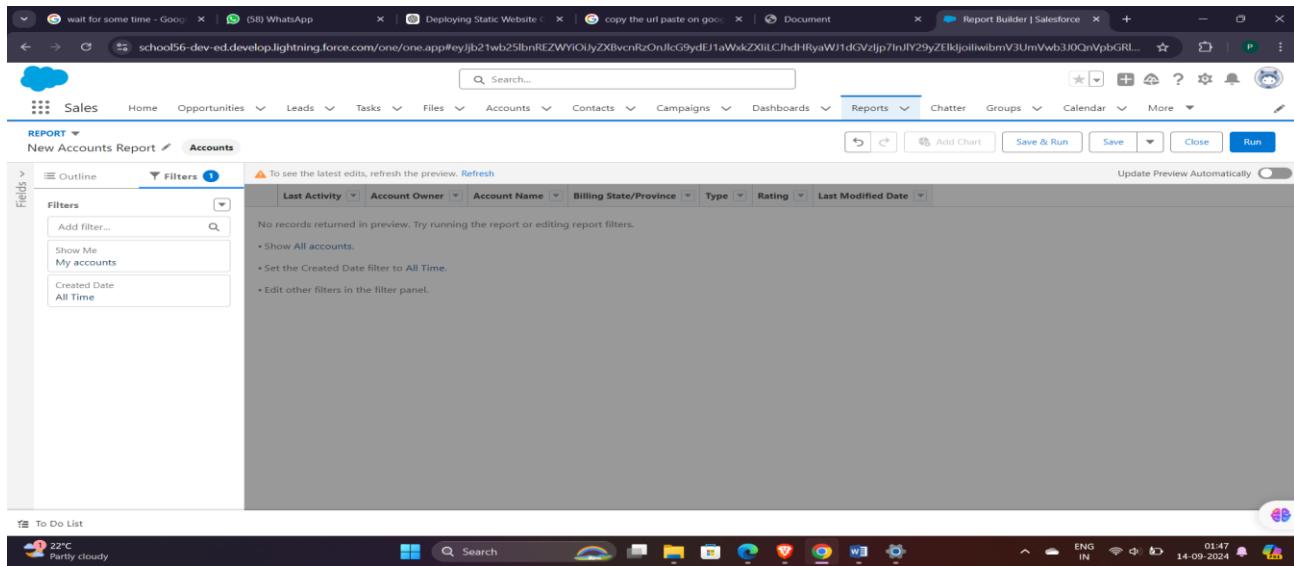
Update Preview Automatically

To Do List 22°C Partly cloudy Search ENG IN 01:41 14-09-2024

Step 3: Click on the Range select All Time and Click on the Apply



Step 4: Click on Update Preview Automatically on the (top-right corner).



Step 5: Add Filter

The screenshot shows the Salesforce Report Builder interface. A report titled "New Accounts Report" is displayed under the "Accounts" tab. The report preview shows a limited number of records. The columns include Last Activity, Account Owner, Account Name, Billing State/Province, Type, Rating, and Last Modified Date. The data table lists 16 rows of account information. On the left, a sidebar shows available fields: Ticker Symbol, Rating, Account Source, Industry, SIC Code, SIC Description, NAICS Code, NAICS Description, and D-U-N-S Number. The "Rating" field is highlighted. The bottom status bar shows weather (22°C, Partly cloudy), system icons, and the date/time (14-09-2024, 01:51).

Step 6: I can select the Rating

The screenshot shows the "Rating" filter being selected in the "Filter By" dialog. The dialog includes fields for Field (Rating), Operator (equals), and Value (dropdown menu). The dropdown menu shows options: All, Cold, Hot, Warm, and "No Selection". The "Hot" option is highlighted. The main report preview area shows the filtered results. The bottom status bar shows weather (22°C, Partly cloudy), system icons, and the date/time (14-09-2024, 01:52).

Step 7: Go to the Value and select any one from the dropdown list

Rating	Account Name	Billing State/Province	Type	Rating	Last Modified Date
Hot	Burlington Textiles Corp of America	NC	Customer - Direct	Warm	30/07/2024
Hot	Pyramid Construction Inc.	-	Customer - Channel	-	30/07/2024
Hot	Dickenson plc	KS	Customer - Direct	Warm	30/07/2024
Hot	Gas & Gas Corp.	IL	Customer - Direct	Warm	30/07/2024
Hot	Gas & Gas Corp.	NY	Customer - Direct	Hot	30/07/2024
Hot	Gas & Gas Corp.	OR	Customer - Channel	Cold	30/07/2024
Hot	Gas & Gas Corp.	AZ	Customer - Direct	Warm	30/07/2024
Hot	Gas & Gas Corp.	UK	Customer - Direct	-	30/07/2024
Hot	Gas & Gas Corp.	Singapore	Customer - Direct	-	30/07/2024
Hot	Gas & Gas Corp.	CA	Customer - Channel	Cold	30/07/2024
Hot	Gas & Gas Corp.	CA	-	-	30/07/2024
Hot	maharashtra	CA	Prospect	Hot	02/08/2024
Hot	MAHARASHTRA	MAHARASHTRA	Prospect	-	03/09/2024
Hot	maharashtra	CA	-	-	05/09/2024
Hot	maharashtra	CA	Prospect	-	05/09/2024

Step 8: the report will be sorted according to the filters you've applied:

Last Activity	Account Owner	Account Name	Billing State/Province	Type	Rating	Last Modified Date
1	Aditya patil	Edge Communications	TX	Customer - Direct	Hot	30/07/2024
2	Aditya patil	United Oil & Gas Corp.	NY	Customer - Direct	Hot	30/07/2024
3	Aditya patil	aditya bca p5	maharashtra	Prospect	Hot	02/08/2024

Step 9: After running the report, click the "Save & Run" button (top-right corner).

The screenshot shows the Salesforce Report Builder interface. At the top, there's a navigation bar with links like Home, Opportunities, Leads, Tasks, Files, Accounts, Contacts, Campaigns, Dashboards, Reports, Chatter, Groups, Calendar, and More. Below the navigation bar is a search bar and a toolbar with buttons for Save & Run, Save, Close, and Run.

The main area is titled "New Accounts Report" under the "Accounts" tab. On the left, there's a sidebar with "Fields" and "Filters". The "Filters" section shows a dropdown menu with "Add filter..." and a list of filters: "Show Me My accounts", "Created Date All Time", and "Rating equals Hot".

In the center, there's a preview message: "Previewing a limited number of records. Run the report to see everything." Below this is a table with the following columns: Last Activity, Account Owner, Account Name, Billing State/Province, Type, Rating, and Last Modified Date. The table contains three rows of data:

Last Activity	Account Owner	Account Name	Billing State/Province	Type	Rating	Last Modified Date
1	- Aditya patil	Edge Communications	TX	Customer - Direct	Hot	30/07/2024
2	- Aditya patil	United Oil & Gas Corp.	NY	Customer - Direct	Hot	30/07/2024
3	- Aditya patil	aditya bca p5	maharastra	Prospect	Hot	02/08/2024

At the bottom right of the preview area, there's a checkbox for "Update Preview Automatically".

The taskbar at the bottom of the browser window shows various application icons and system status indicators like battery level, signal strength, and date/time (14-09-2024, 02:08).

Step 10: Enter a name for your report (e.g., "Sales Performance Report") and choose a folder to save it in.

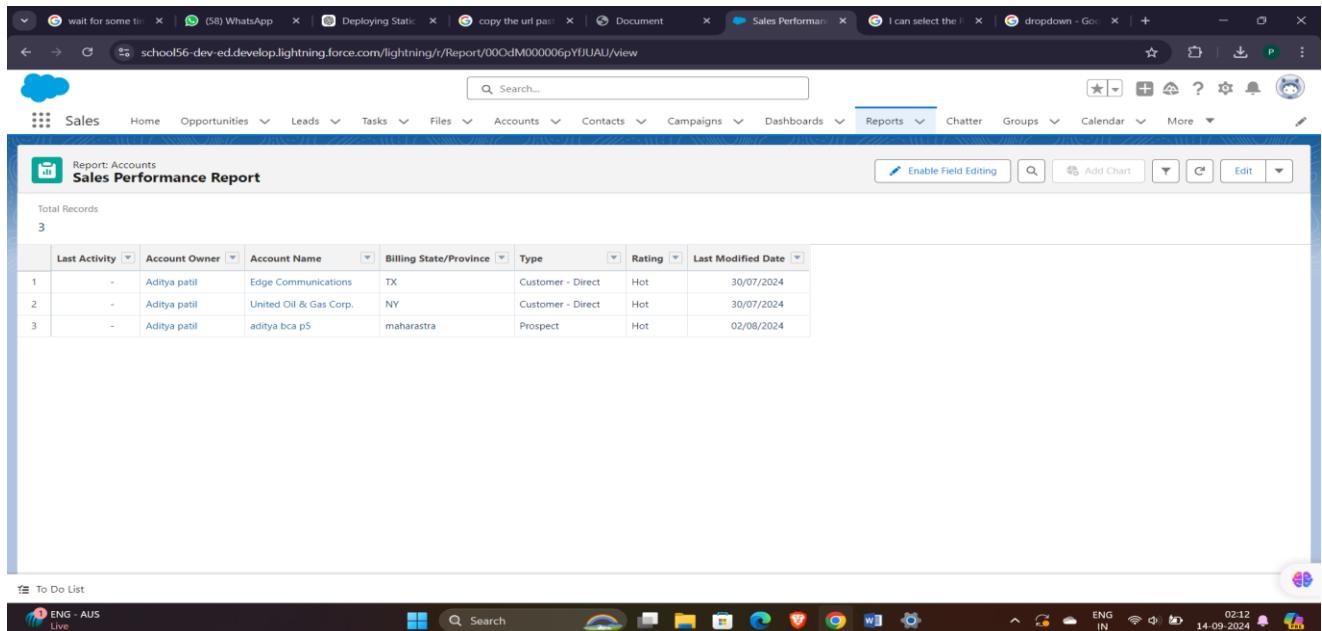
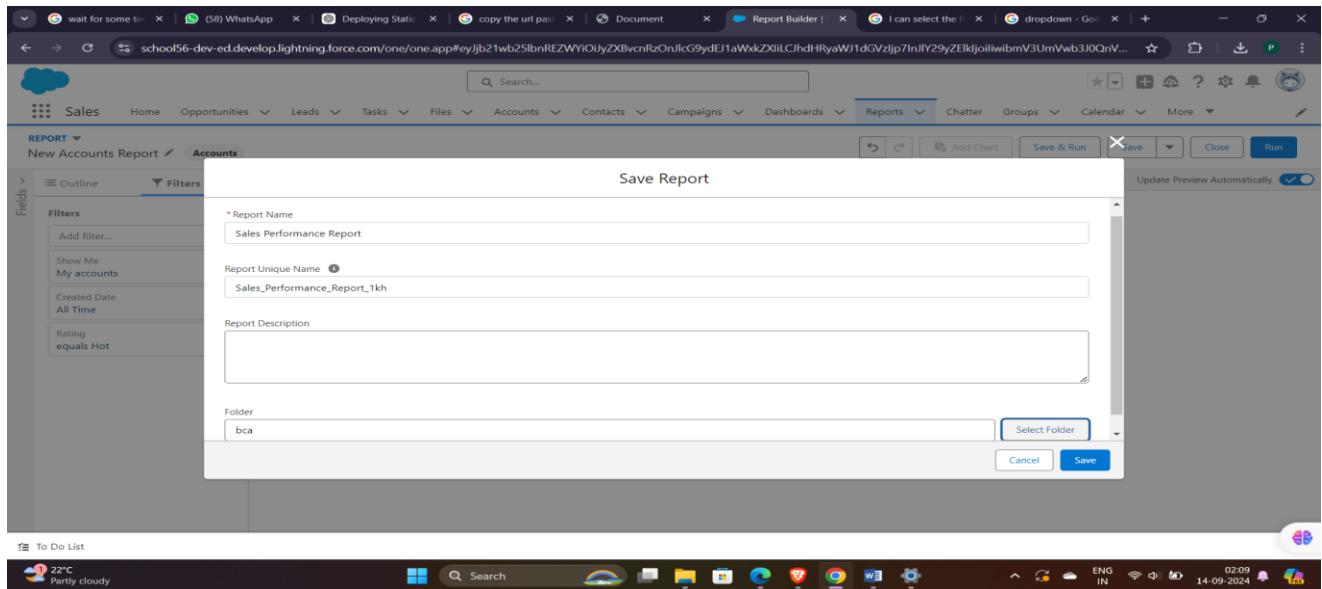
The screenshot shows the same Salesforce Report Builder interface as the previous one, but with a "Save Report" dialog box overlaid. The dialog box has the following fields:

- *Report Name: Sales Performance Report
- Report Unique Name: Sales_Performance_Report_1kh
- Report Description: (empty text area)
- Folder: bca

At the bottom right of the dialog box are "Cancel" and "Save" buttons. The "Save" button is highlighted with a blue border.

The taskbar at the bottom of the browser window shows various application icons and system status indicators like battery level, signal strength, and date/time (14-09-2024, 02:09).

Step 11: Click the "Save" button (bottom-right).



5.Create a Dashboard for Data Visualization

Step 1: Go to the App Launcher button (top-left corner, represented by 9 dots).

The screenshot shows the Salesforce App Launcher interface. The top navigation bar includes links for Home, Opportunities, Leads, Tasks, Files, Accounts, Contacts, Campaigns, Dashboards, Reports, Chatter, Groups, Calendar, and More. Below the navigation bar is a search bar labeled "Search...". On the left, there is a sidebar titled "App Launcher" with a search field "Search apps and items...". Under the "Apps" section, several options are listed: Service, Marketing CRM Classic, Community, Salesforce Chatter, Content, Sales Console, and Service Console. At the bottom of the sidebar, there is a link "View All". The main content area displays a table with columns: Name, Billing State/Province, Type, Rating, and Last Modified Date. The data in the table is as follows:

Name	Billing State/Province	Type	Rating	Last Modified Date
communications	TX	Customer - Direct	Hot	30/07/2024
& Gas Corp.	NY	Customer - Direct	Hot	30/07/2024
p5	maharastra	Prospect	Hot	02/08/2024

Step 2: Search for "Dashboards" and click on it (left-side list).

The screenshot shows the Salesforce App Launcher interface, similar to the previous one but with a different search term. The top navigation bar and sidebar are identical. The main content area now displays a table under the "Items" section, specifically for "Dashboards". The table has the same columns as before. The data is as follows:

Name	Billing State/Province	Type	Rating	Last Modified Date			
communications	TX	Customer - Direct	Hot	30/07/2024			
& Gas Corp.	NY	Customer - Direct	Hot	30/07/2024			
3	-	Aditya patil	aditya bca p5	maharastra	Prospect	Hot	02/08/2024

Step 3: On the Dashboards page, click the "New Dashboard" button (top-right corner).

Dashboard Name	Description	Folder	Created By	Created On	Subscribed
Sales Dashboard	Sales Dashboard	Bca 1	Aditya patil	10/9/2024, 1:45 pm	
Sales Dashboard	Sales Dashboard	Bca 1	Aditya patil	3/9/2024, 3:57 pm	
Sales Dashboard	Sales Dashboard	Bca 1	Aditya patil	3/9/2024, 4:31 pm	
aaaa	aaaa	Bca 1	Aditya patil	3/9/2024, 4:33 pm	
Sales Dashboard	Sales Dashboard	Private Dashboards	Aditya patil	3/9/2024, 4:29 pm	
Sales Dashboard	Sales Dashboard	Bca 1	Aditya patil	3/9/2024, 2:16 am	
Sales Dashboard	Sales Dashboard	Bca 1	Aditya patil	3/9/2024, 2:00 am	
CRM	Practical CRM	Private Dashboards	Aditya patil	3/9/2024, 11:34 am	

Step 4: Enter a dashboard name (e.g., "Sales Overview") and select a folder to save it in.

New Dashboard

*Name: Sales Performance Report Dashboard

Description:

Folder: Private Dashboards

Create

Step 5: Click the "Create" button (bottom-right).

New Dashboard

*Name: Sales Performance Report Dashboard

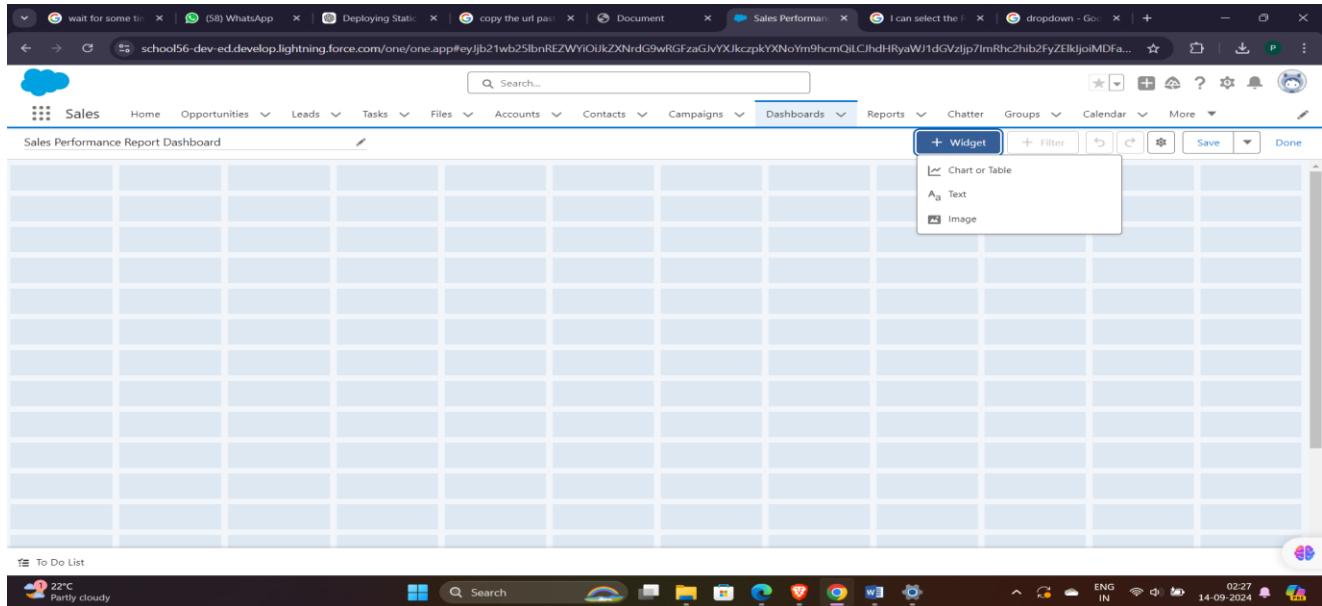
Description:

Folder: Private Dashboards

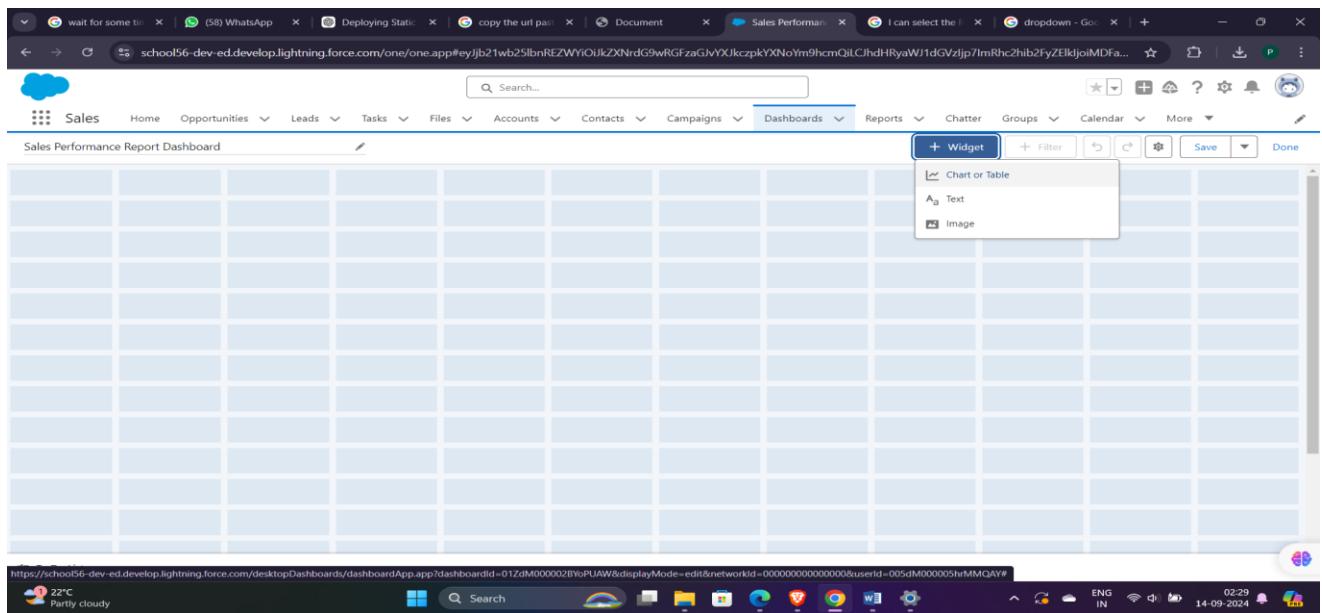
Cancel Create

6: Add Components to the Dashboard

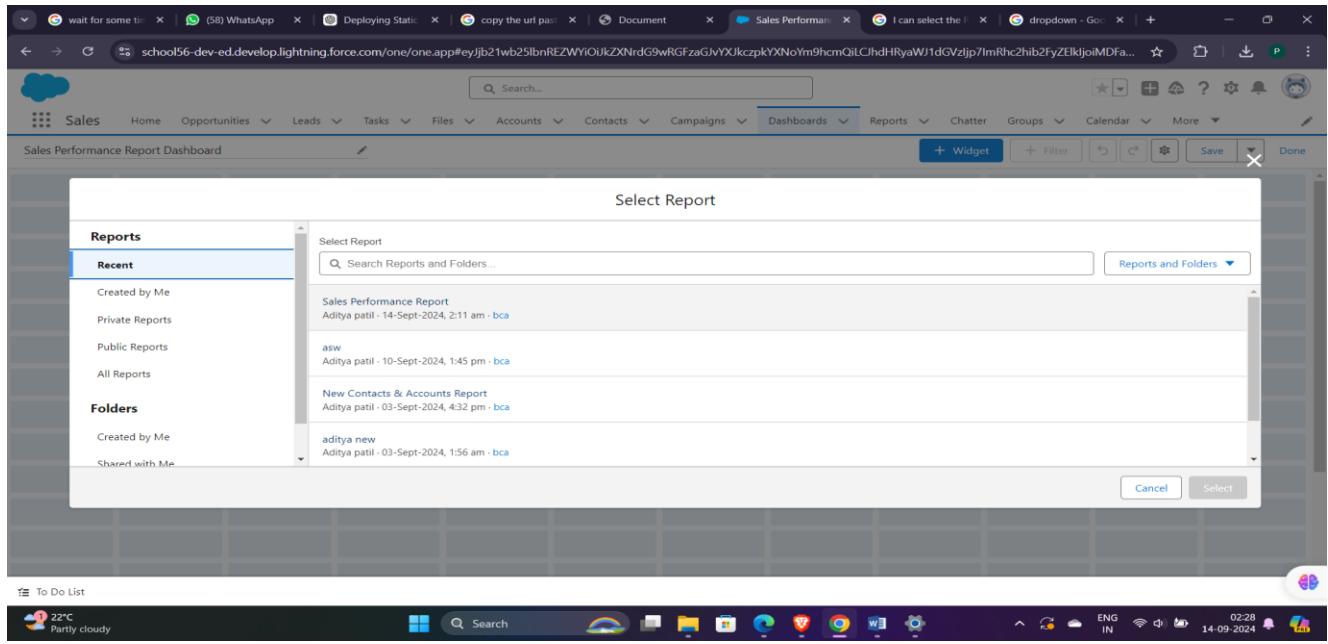
Step 1: Click on "Add Component" (top-right corner).



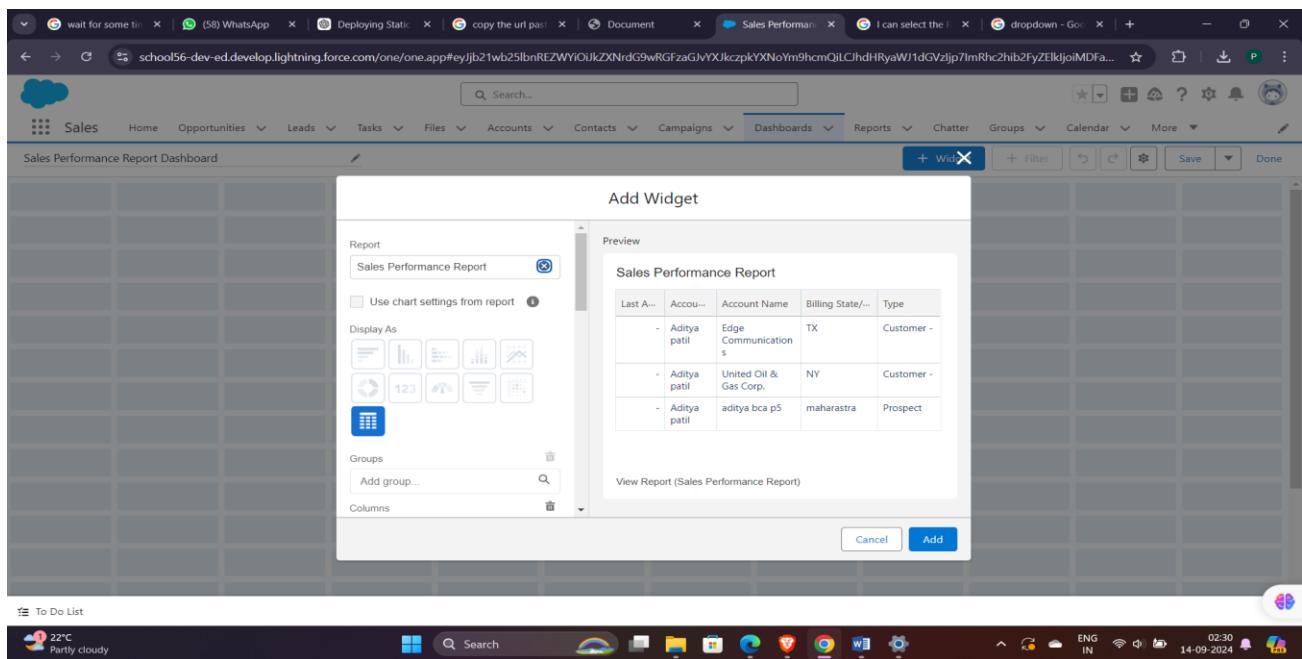
Step 2: Click on the Chart or Table



Step 3: Choose a report from the list (you can use the one you created earlier).



Step 4: Click the "Add" button (bottom-right).



Step 5: You can drag and drop components on the dashboard to arrange them.

Sales Performance Report Dashboard

Sales Performance Report

Last Activ...	Account ...	Account Name	Billing State/Pro...	Type
- Aditya patil	Edge Communications	TX	Customer - Dir	
- Aditya patil	United Oil & Gas Corp.	NY	Customer - Dir	
- Aditya patil	aditya bca p5	maharashtra	Prospect	

View Report (Sales Performance Report)

+ Widget + Filter Save Done

To Do List

22°C Partly cloudy

Step 6: You can also add an image to your dashboard by clicking on the “Widget” dropdown and clicking on “Image” button:

Sales Performance Report Dashboard

Sales Performance Report

Last Activ...	Account ...	Account Name	Billing State/Pro...	Type
- Aditya patil	Edge Communications	TX	Customer - Dir	
- Aditya patil	United Oil & Gas Corp.	NY	Customer - Dir	
- Aditya patil	aditya bca p5	maharashtra	Prospect	

View Report (Sales Performance Report)

+ Widget + Filter Save Done

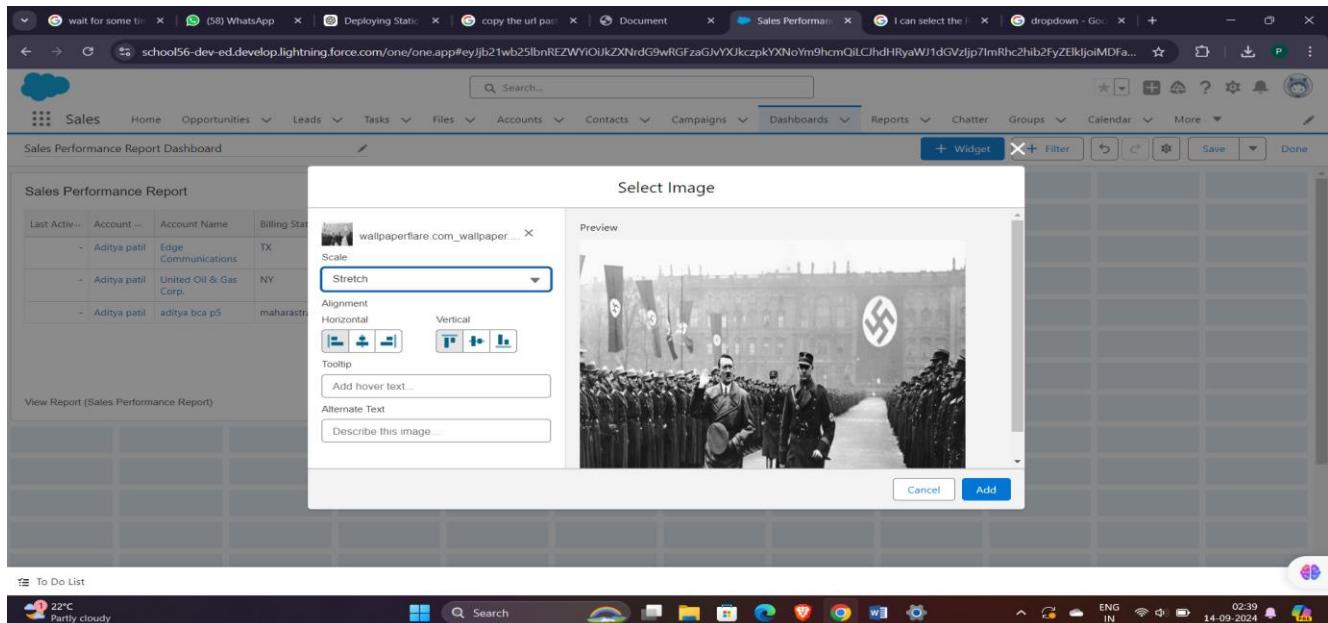
Chart or Table

Text

Image

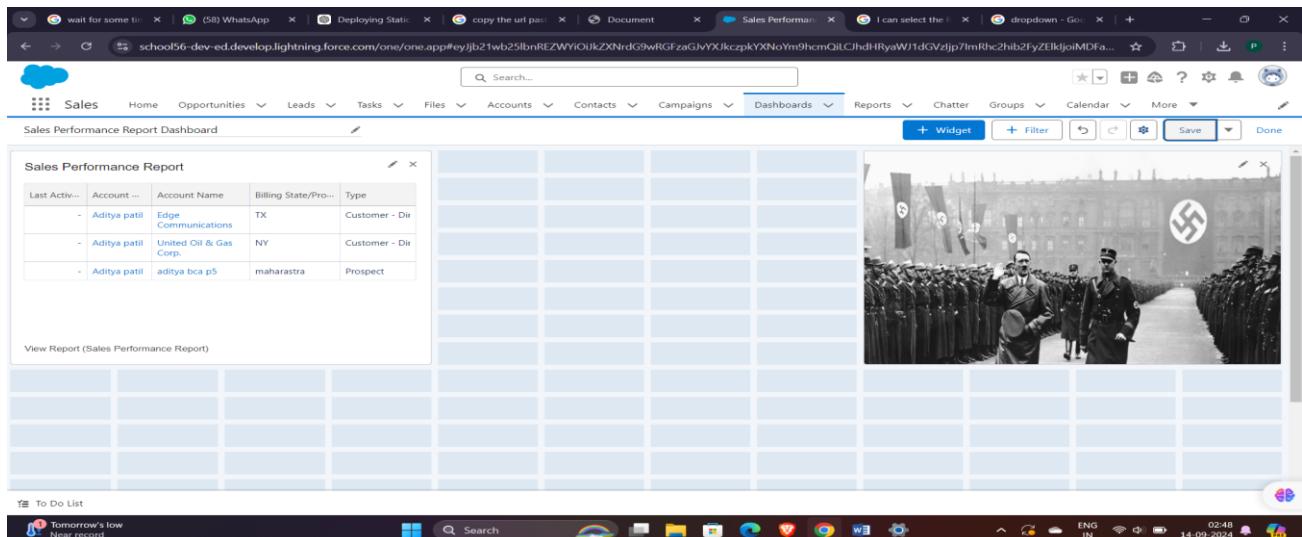
https://school56-dev-ed.lightning.force.com/desktopDashboards/dashboardApp.app?dashboardId=01ZdM000002ByoPUAW&displayMode=edit&networkId=0000000000000000&userId=005dM000005hrMMQAY#

Step 7: You can now browse and select an image you would like to add to your dashboard scale(stretch) click on add



7: Save and View the Dashboard

Step 1: After adding all necessary components, click the "Save" button (top-right corner)



Step 2: Click the "Done" button (bottom-right) to view your completed dashboard.

The screenshot shows a Salesforce Sales Performance Report Dashboard. The top navigation bar includes links for Sales, Home, Opportunities, Leads, Tasks, Files, Accounts, Contacts, Campaigns, Dashboards, Reports, Chatter, Groups, Calendar, and More. A search bar is at the top right. The main content area displays a table titled "Sales Performance Report" with columns for Last Activity, Account Owner, Account Name, Billing State/Pro..., and Type. The table contains three rows of data. To the right of the table is a historical black and white photograph of a Nazi military parade. At the bottom of the dashboard, there is a "View Report (Sales Performance Report)" button. The status bar at the bottom of the screen shows various system icons and the date 14-09-2024.

Conclusion:

By completing this practical, you have gained hands-on experience with Salesforce's powerful reporting tools and dashboards. You can now analyze data, generate reports, and visualize key metrics using Salesforce, which is a critical skill in cloud-based data analytics.

Submitted By:

Checked By:Aditya Nitin Patil

Sign :

Name :

Roll No :

**Shram Sadhana Bombay Trust Sanchlit
Arts, Commerce & Science, Bambhori, college, Jalgaon
Bachelor Of Computer Application (B.C.A)**

Practical: 08

DOP:

DOC:

Title: Introduction to Amazon AWS S3:

Objective :

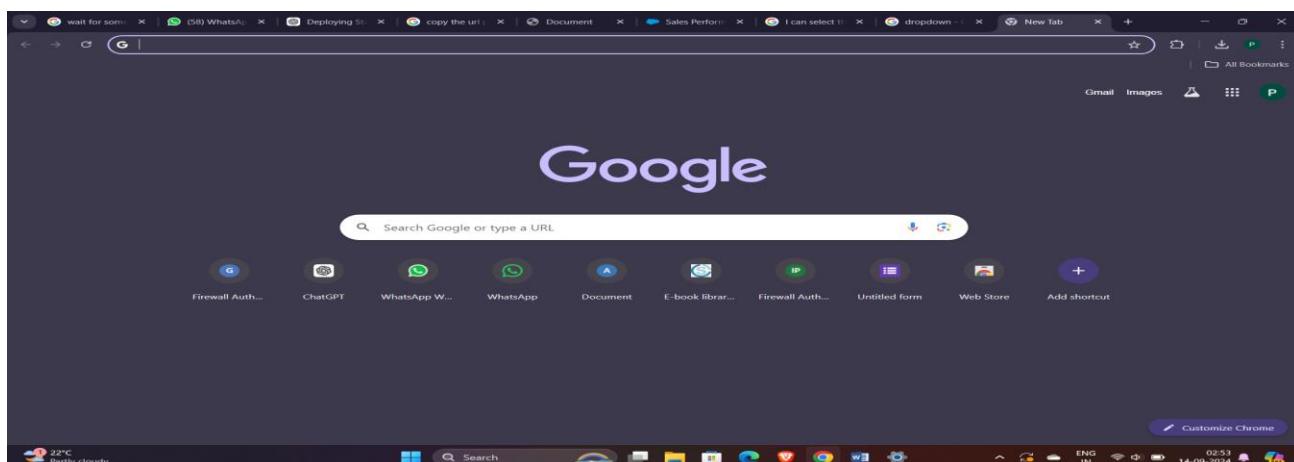
To learn how to host a simple static website using Amazon AWS Simple Storage Service (S3).

Requirements:

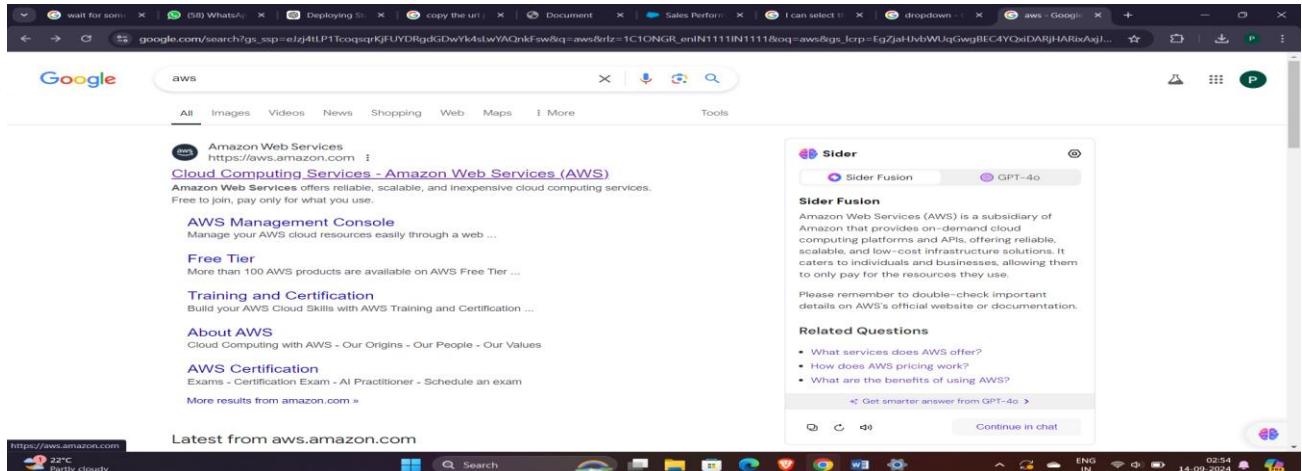
- 1) An Amazon Web Services (AWS) account
- 2) A simple static website (HTML, CSS, JS files)
- 3) Basic understanding of AWS Management Console

Step-by-Step Instructions:

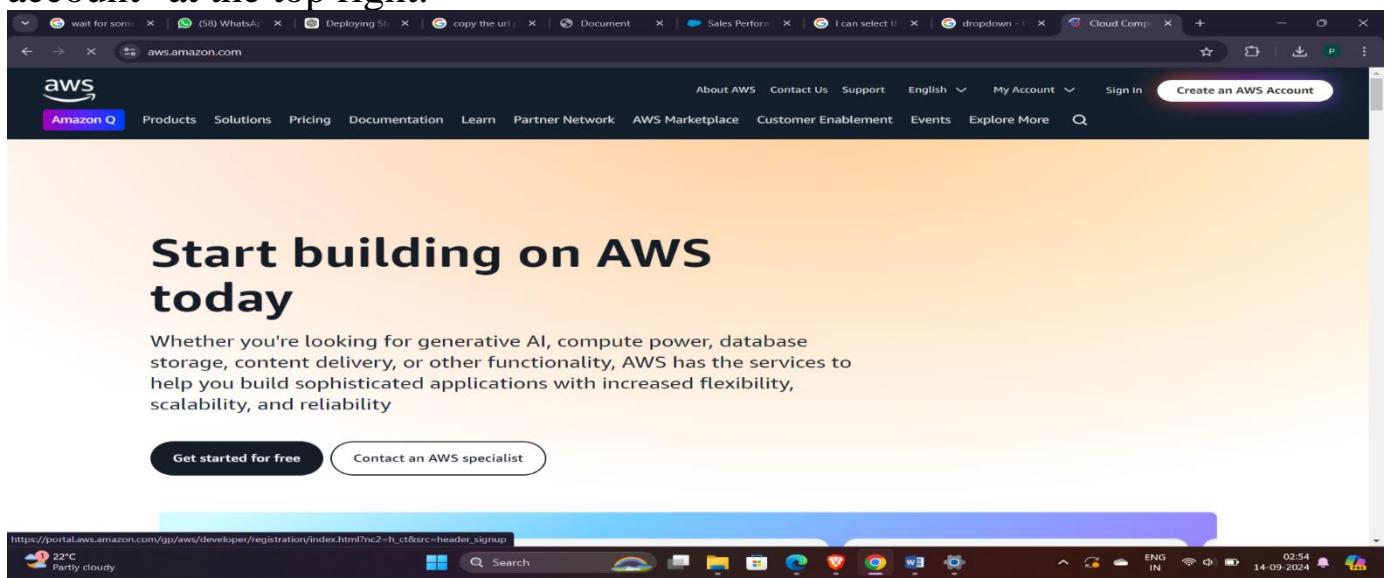
Step 1: Go to Google.



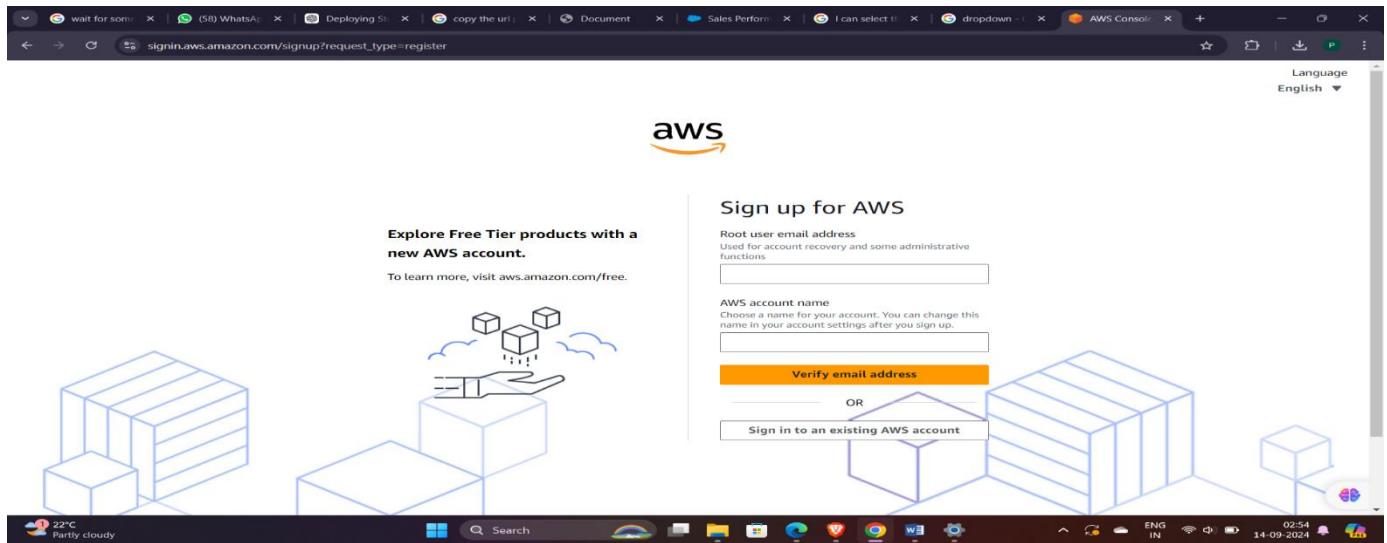
Step 2: Search for the official AWS website (or directly go to aws.amazon.com).



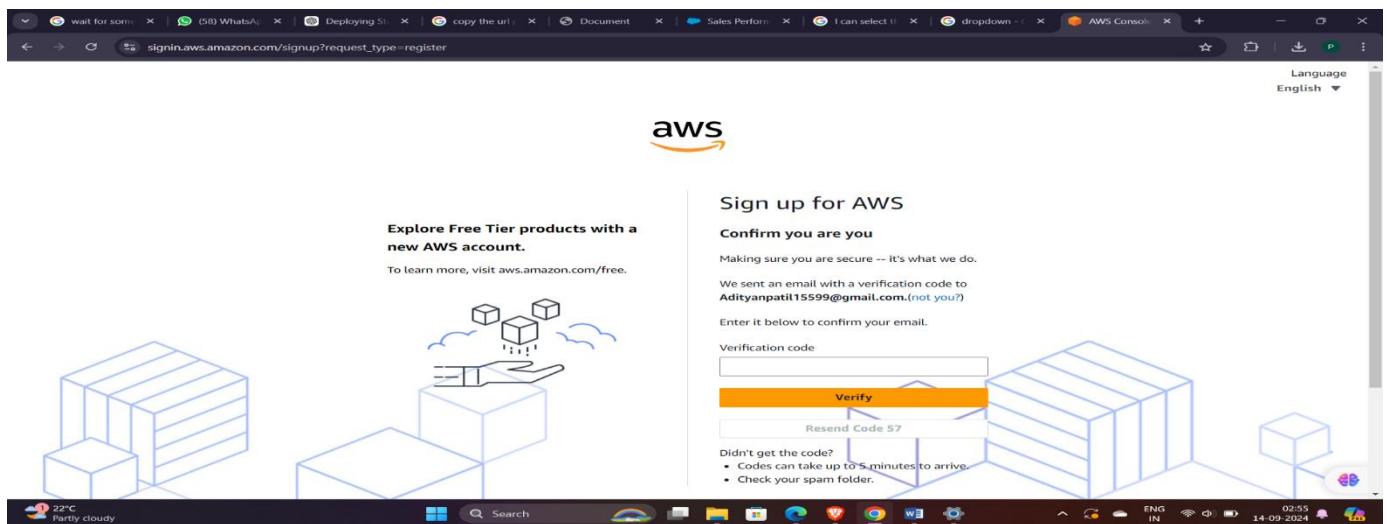
Step 3: Once you're on the official AWS website, click on "Create an AWS account" at the top right.



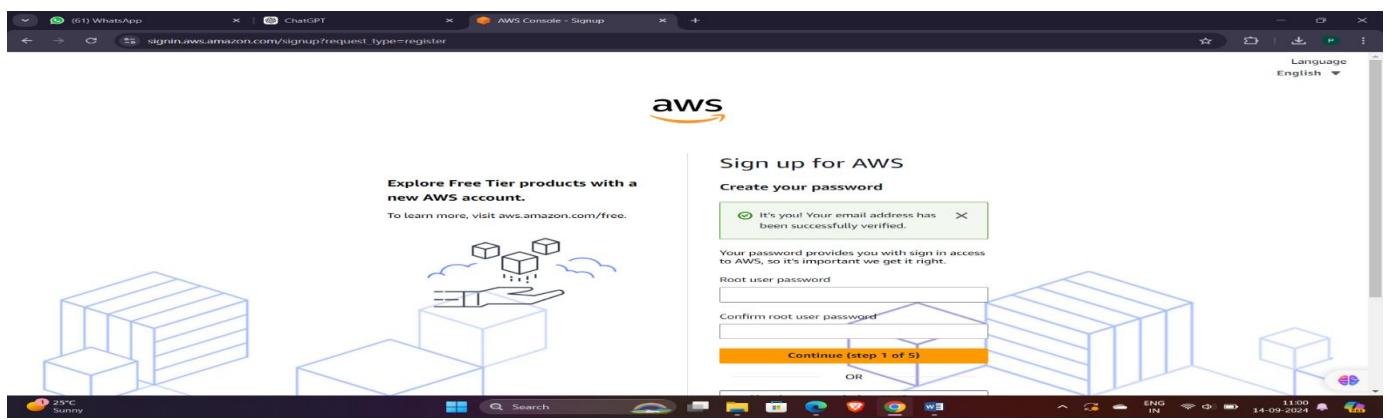
Step 4: Enter your root user email address and AWS account name, then click on "Verify email address".



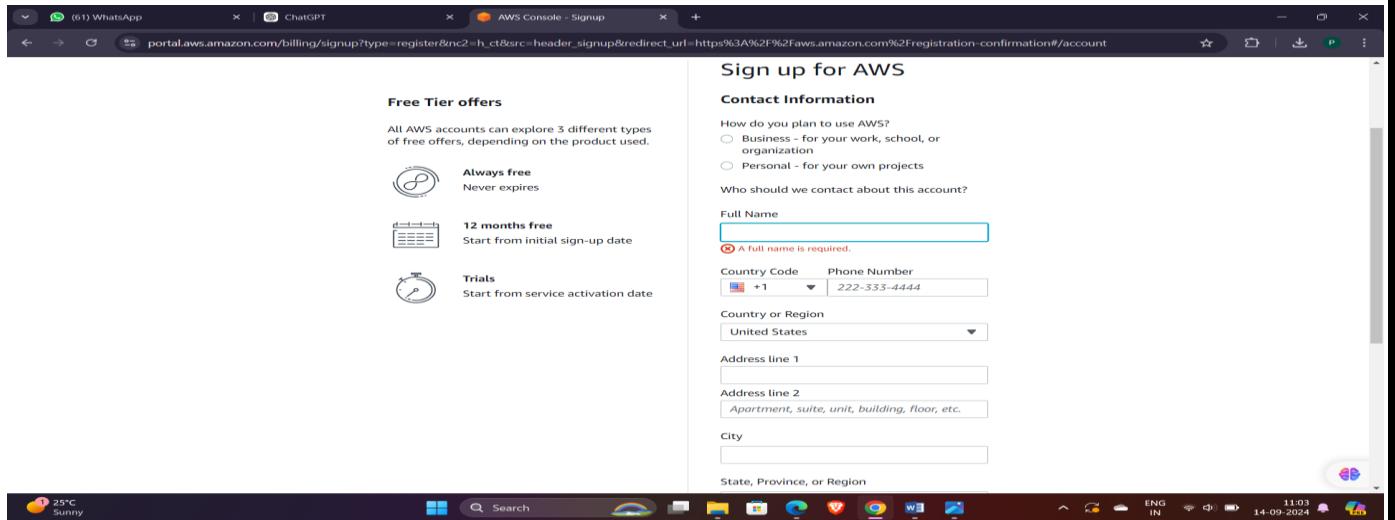
Step 5: Enter the verification code that you received in your email.



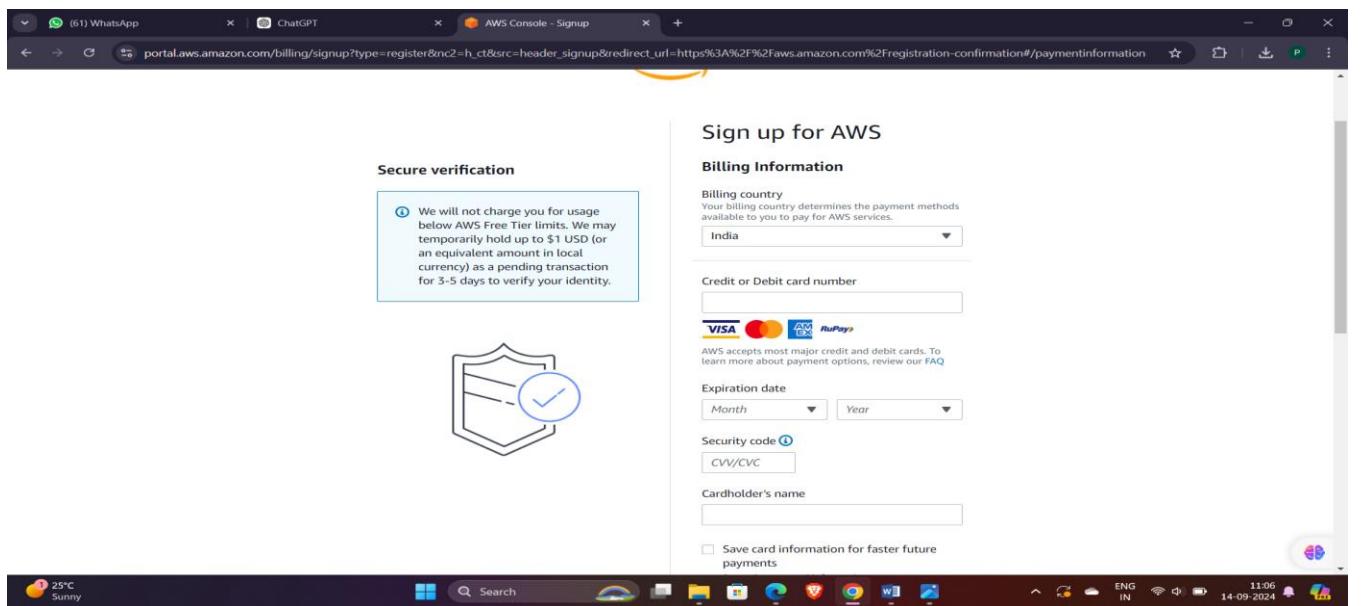
Step 6 : Set a password for your AWS account and confirm it by entering it again.



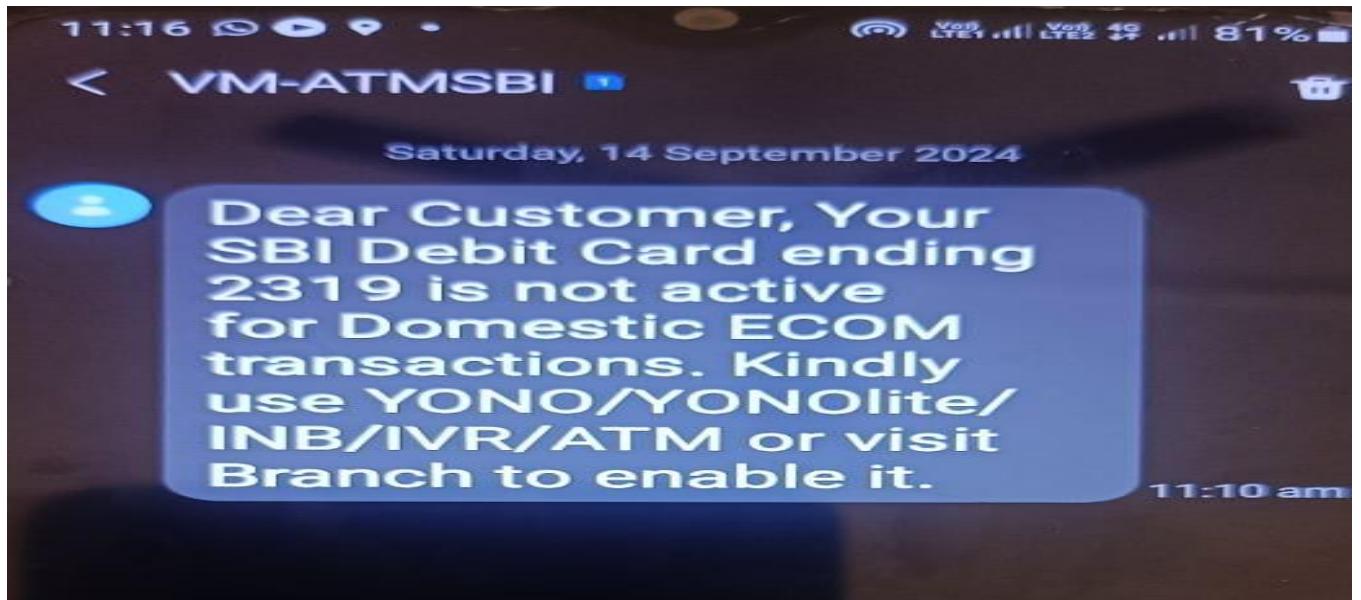
Step 7 : Fill in your contact information (full name, phone number, address, etc.).



Step 8: Enter your billing information (credit/debit card number, etc.).



Step 9: Ensure your card has domestic e-commerce transactions activated. If it's not activated, you won't be able to complete the signup process.



(If you can enter the AWS cloud)

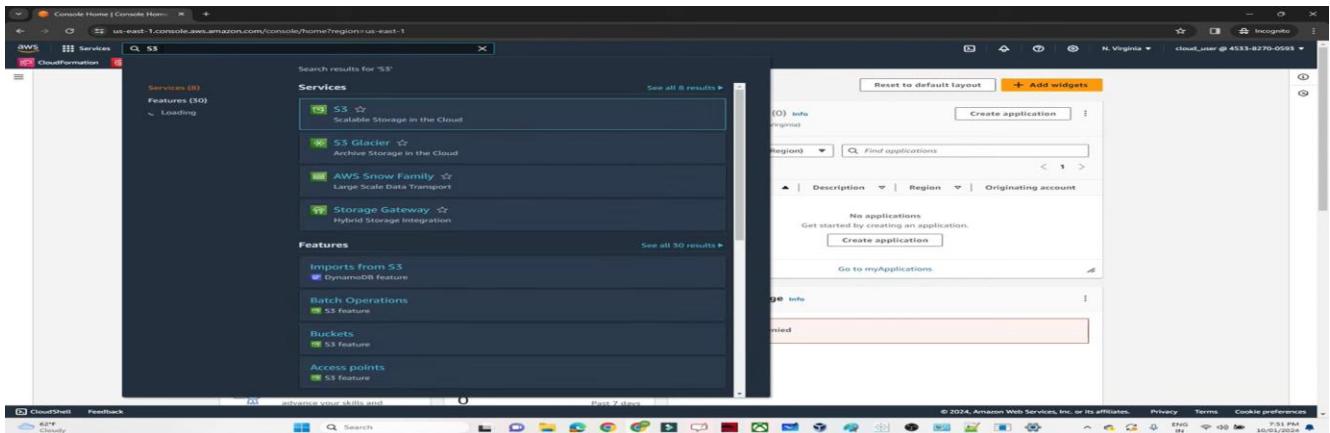
Once domestic e-commerce transactions are activated, you can successfully enter the AWS cloud platform.

Step 1: Now you are in the AWS Management Console (Dashboard).

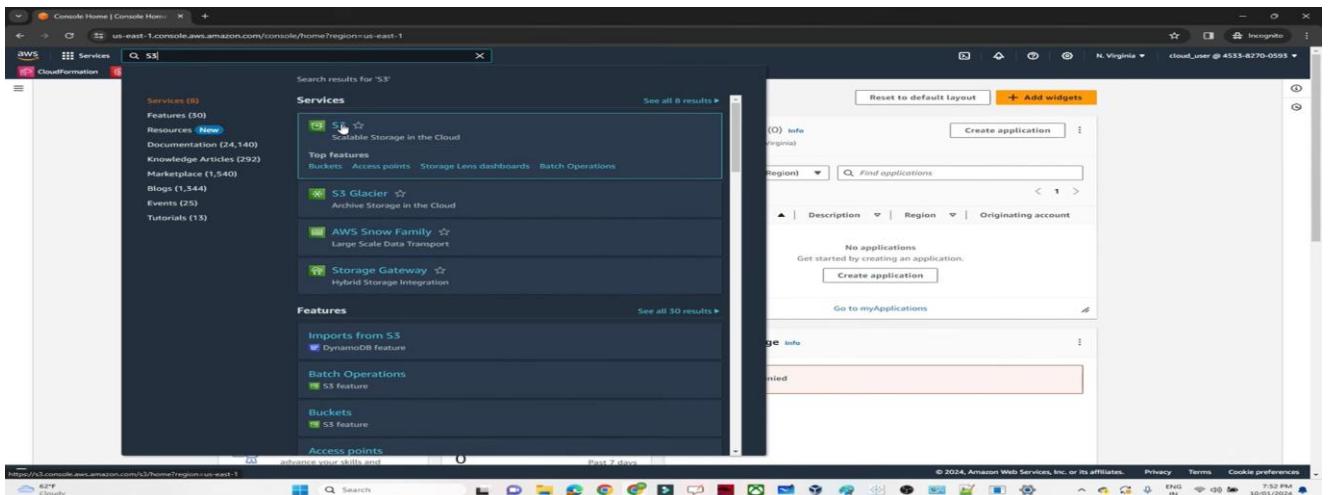
The screenshot shows the AWS Management Console Dashboard for the us-east-1 region. The top navigation bar includes links for CloudFormation, Secrets Manager, IAM, API Gateway, CloudFront, and Route 53. The main content area is divided into several sections:

- Recently visited:** A list of services including S3, EC2, EC2 Image Builder, IAM, Amazon Redshift, Secrets Manager, and Systems Manager.
- Applications:** A section for creating applications, currently showing "No applications". It includes a "Create application" button and a note: "Get started by creating an application."
- Welcome to AWS:** Includes links for "Getting started with AWS" (with a rocket icon) and "Training and certification" (with a graduation cap icon).
- AWS Health:** Displays "Open issues" (0), "Scheduled changes" (0), and "Other notifications" (0).
- Cost and usage:** Shows a "Access denied" message in a red box.

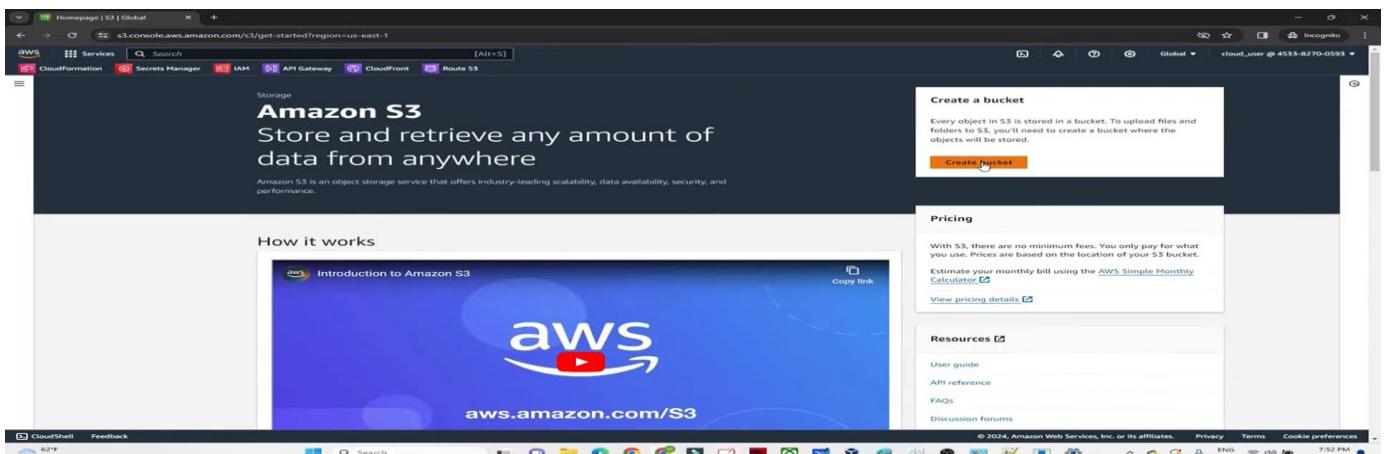
Step 2: In the search bar at the top left, type S3



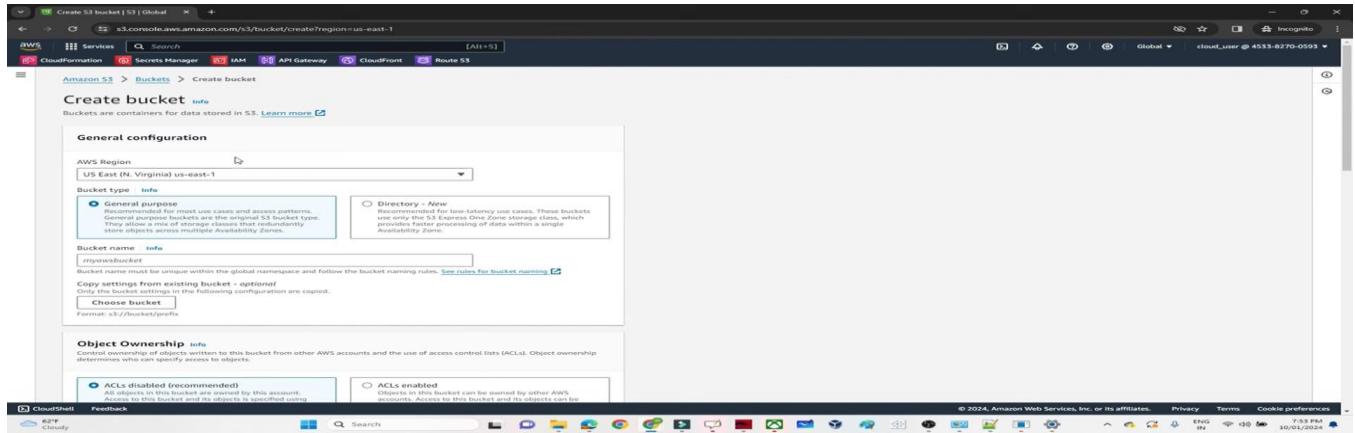
Step 3: select S3 from the dropdown.



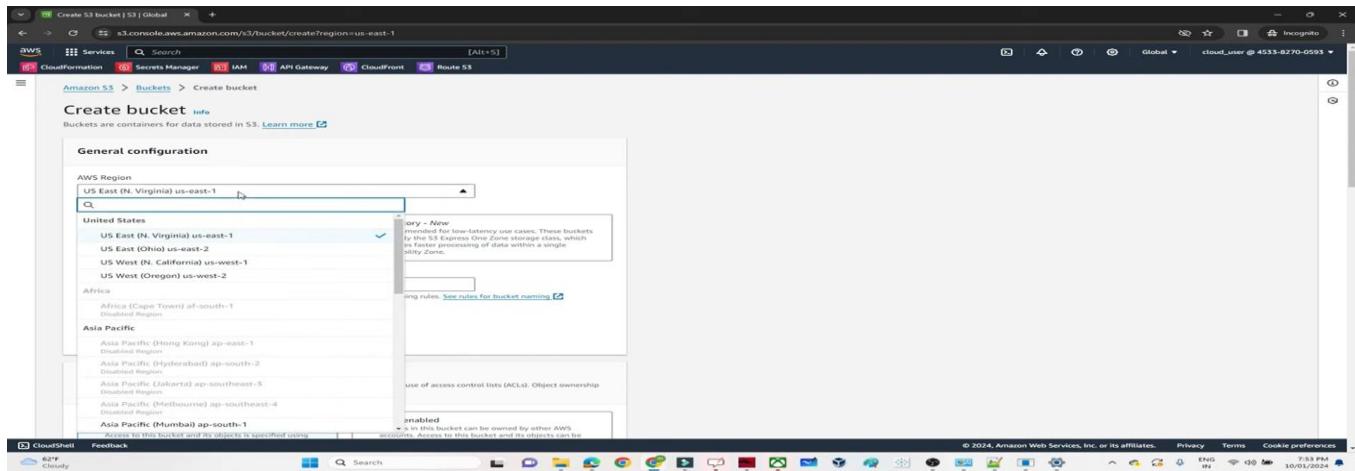
Step 4: On the Amazon S3 page, click on "Create bucket".



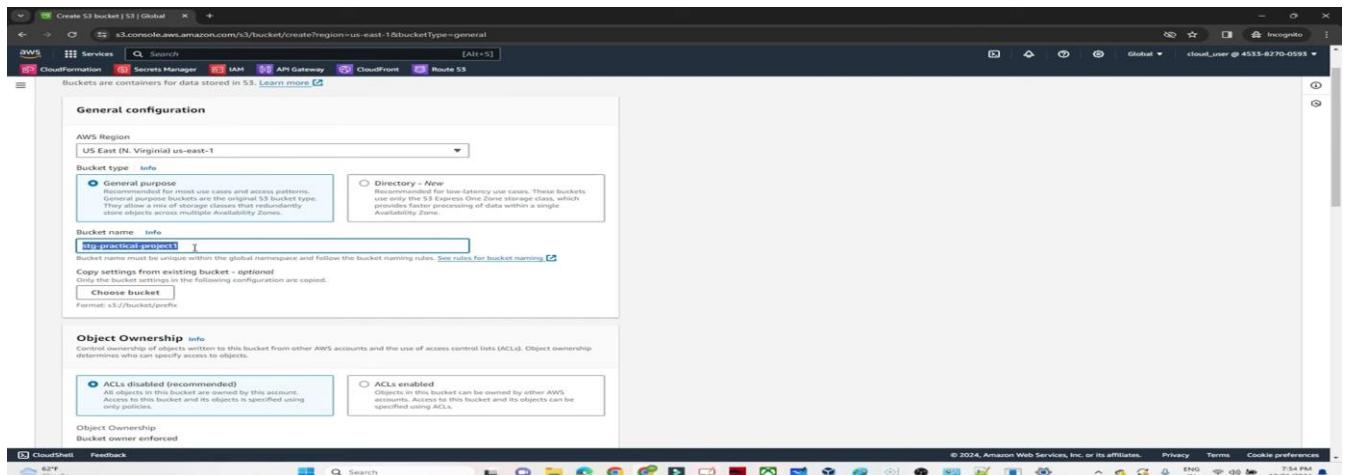
Step 5: In the Create bucket page,



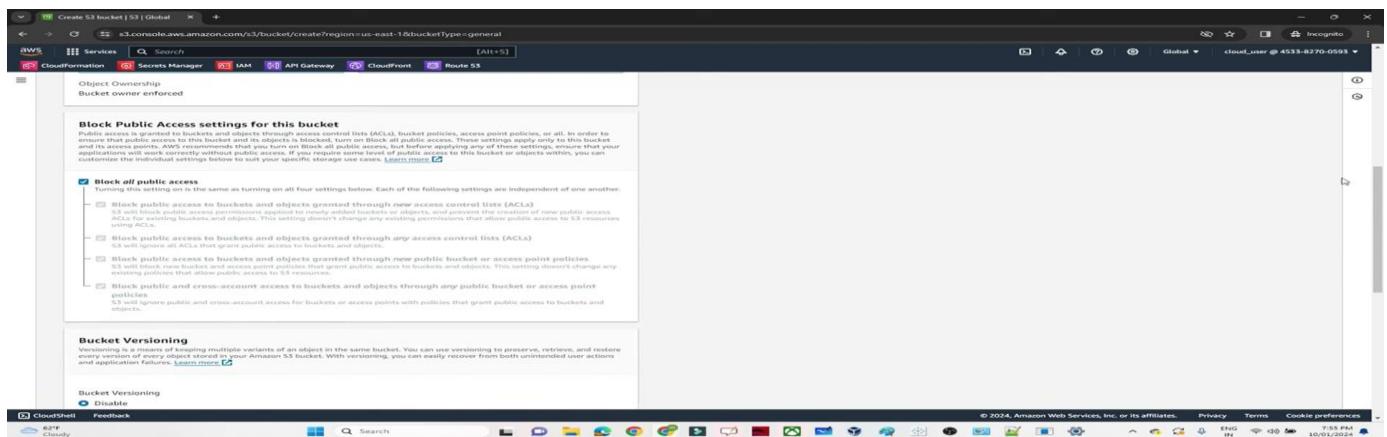
Step 6: choose an AWS Region (select the region closest to you),



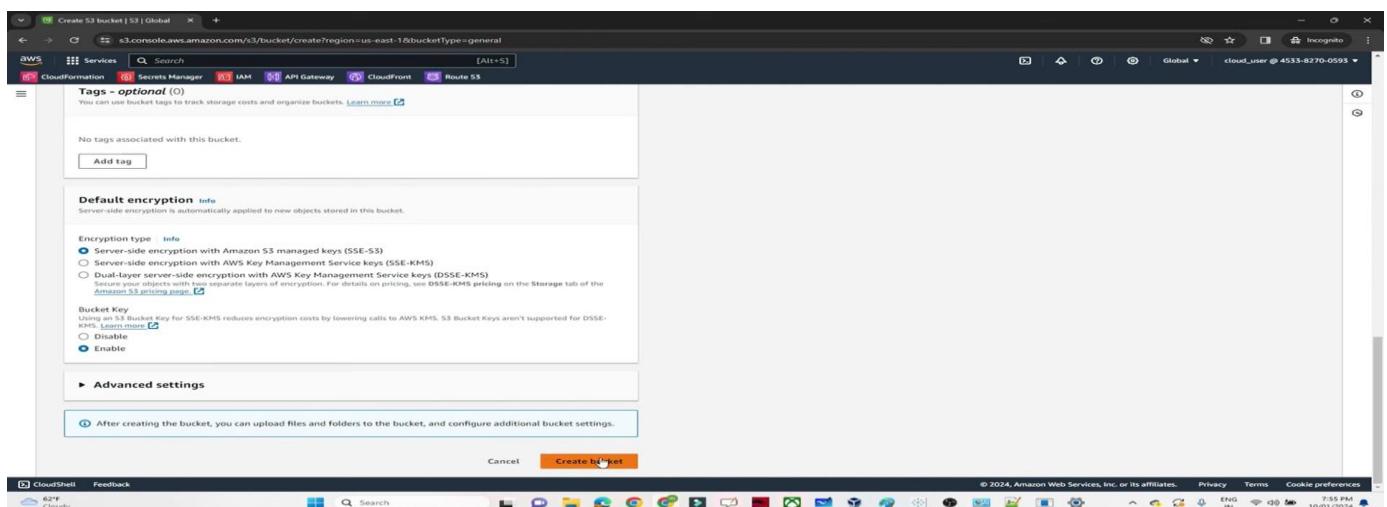
Step 7: Enter a name for your bucket (make sure it is globally unique).



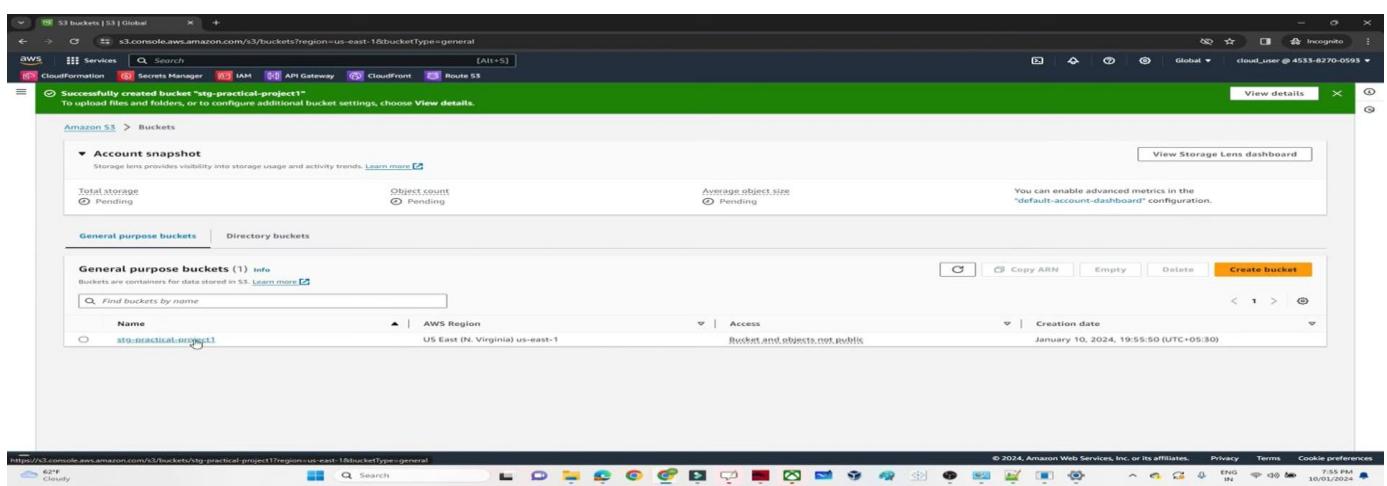
Step 8: Scroll down to the Block Public Access section. Uncheck the box to allow public access (if you want your site to be publicly accessible).



Step 9: Scroll down and click on "Create bucket".



Step 10: You will see a message indicating that the bucket was successfully created.



Step 11: Click on the name of the newly created bucket.

The screenshot shows the AWS S3 console under the 'General purpose buckets' tab. There is one bucket listed:

Name	AWS Region	Access	Creation date
s3-practical-project1	US East (N. Virginia) us-east-1	Bucket and objects not public	January 10, 2024, 19:55:50 (UTC+05:30)

Step 12: In the bucket, click on "Upload" to upload your website files (HTML, CSS, etc.)..

The screenshot shows the 'Objects' page for the 's3-practical-project1' bucket. The 'Upload' button is highlighted with a red box and a mouse cursor.

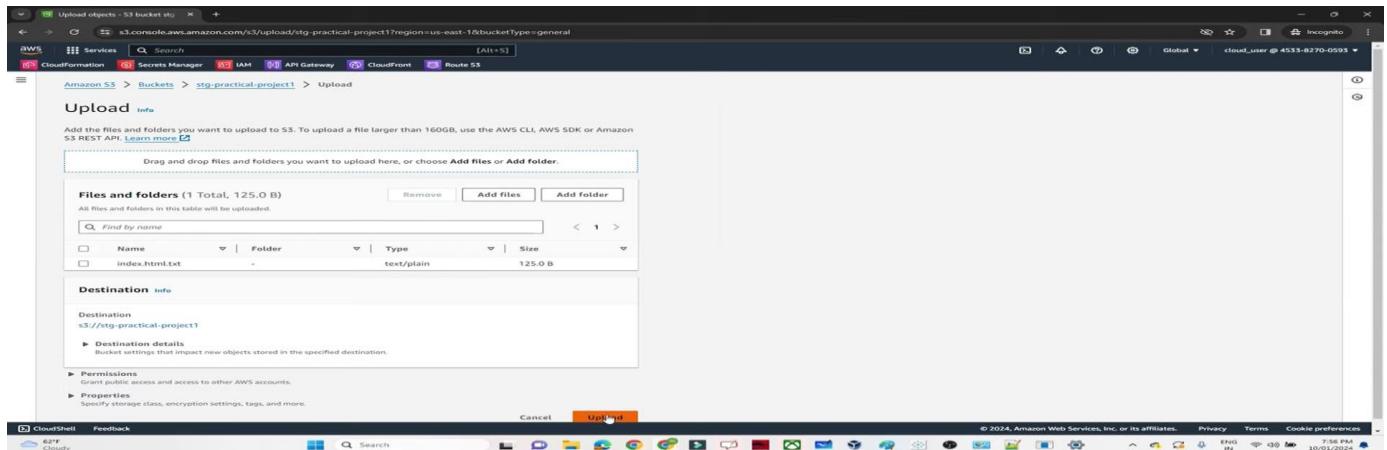
Step 13: Click on "Add files" to upload your files.

The screenshot shows the 'Add files' step in the AWS S3 console. The 'Add files' button is highlighted with a red box and a mouse cursor.

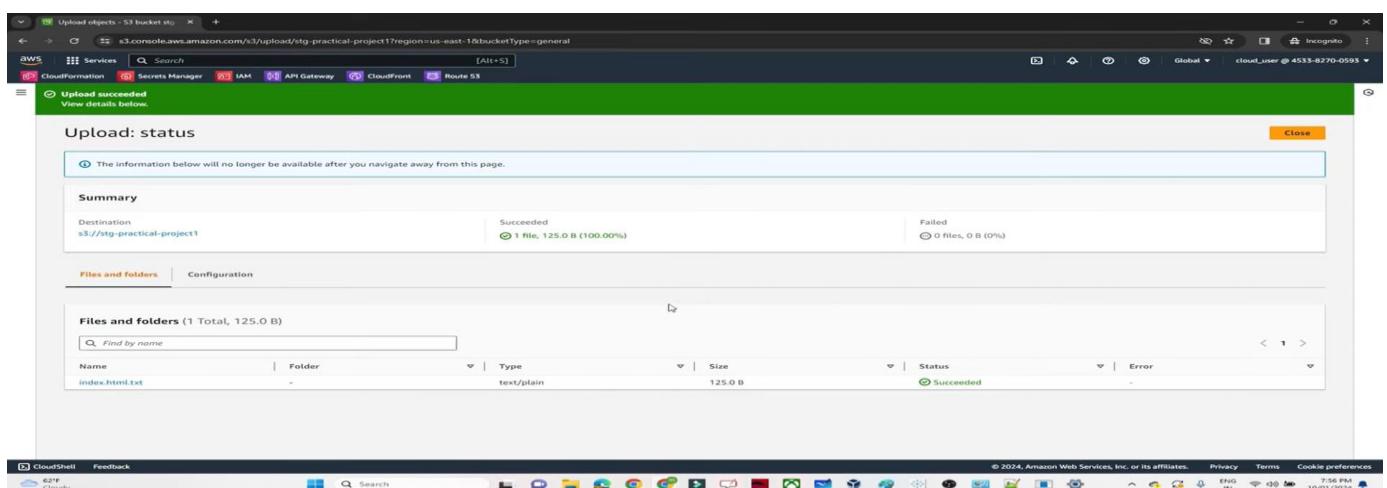
Step 14: Select your HTML and CSS files and click "Open".

The screenshot shows a Windows file explorer window with 'index.html' selected for upload. This window is overlaid on the AWS S3 'Add files' interface, which also has the 'Open' button highlighted with a red box and a mouse cursor.

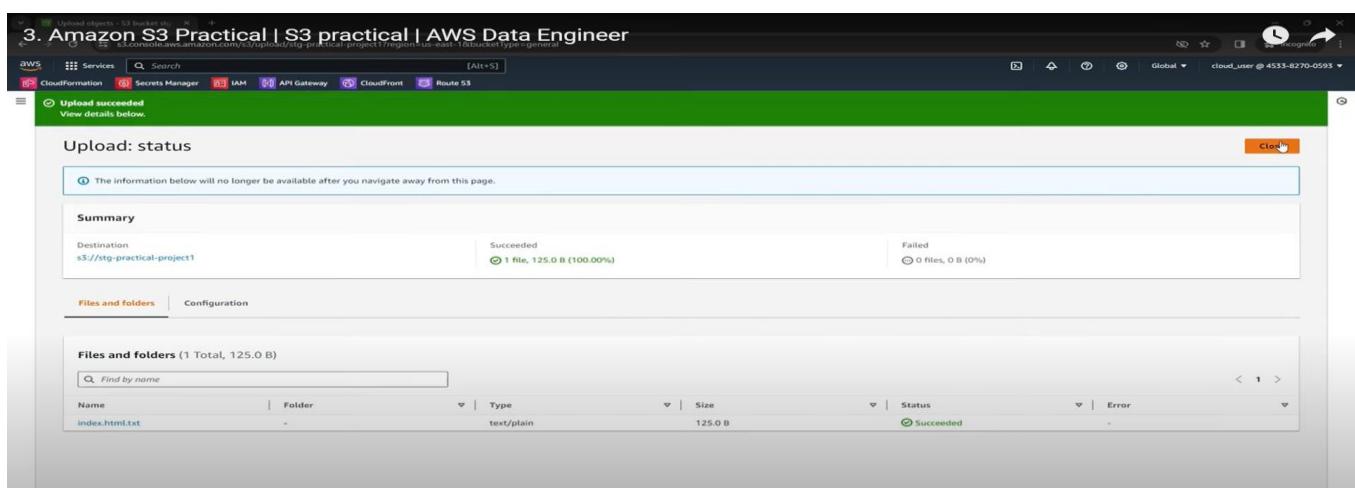
Step 15: Click "Upload" to upload the files to your bucket.



Step 16: A pop-up will appear, showing that the upload was successful.



Step 17: Click "Close" to return to the bucket page.



Step 18: Back in the bucket page

The screenshot shows the AWS S3 console with the bucket 'stg-practical-project1'. The 'Objects' tab is selected, displaying one object: 'index.html.txt'. The object was last modified on January 10, 2024, at 19:56:37 (UTC+05:30) and has a size of 125.0 B. The storage class is Standard.

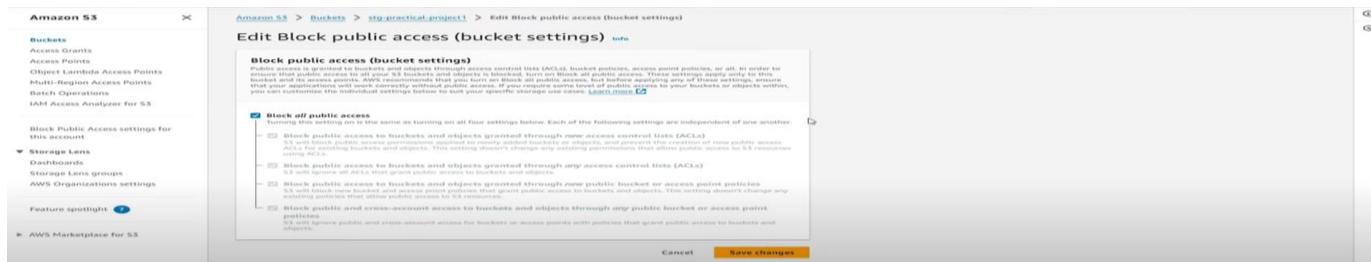
Step 19: Go to the "Permissions" tab in your bucket settings.

The screenshot shows the AWS S3 console with the bucket 'stg-practical-project1'. The 'Permissions' tab is selected, and the status is shown as 'Publicly accessible'. The 'Objects' tab is also visible below it.

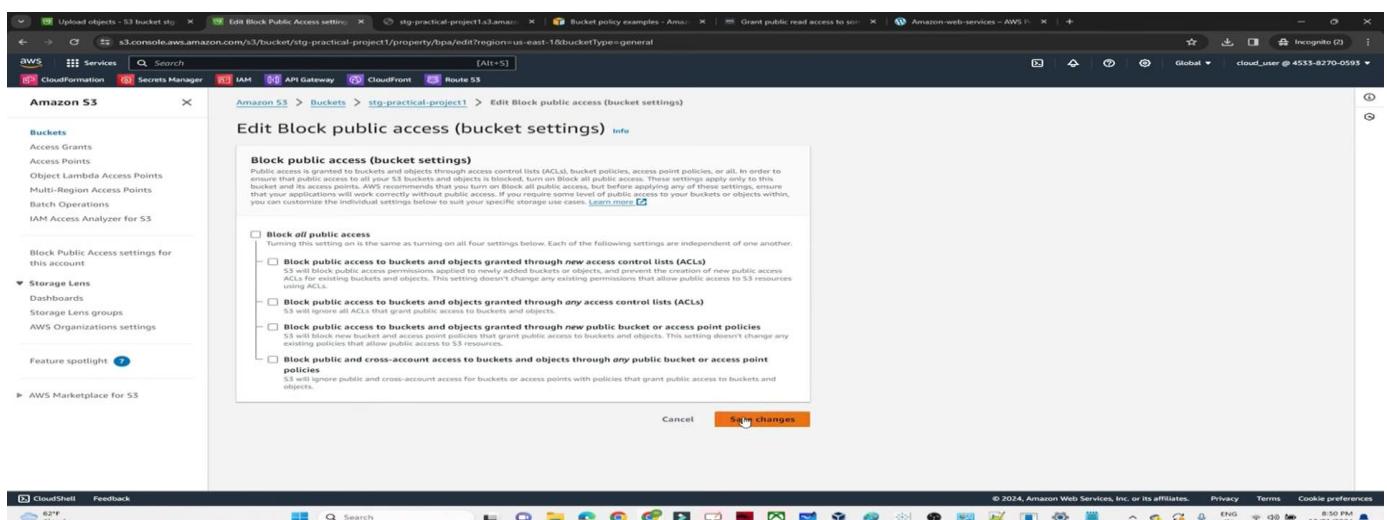
Step 20: Scroll down to the Bucket Policy section and click "Edit".

The screenshot shows the 'Bucket Policy Examples' page for the bucket 'stg-practical-project1'. The 'Block public access (bucket settings)' section is expanded, showing the 'Block all public access' setting which is currently 'On'. There is a link to 'Individual Block Public Access settings for this bucket'.

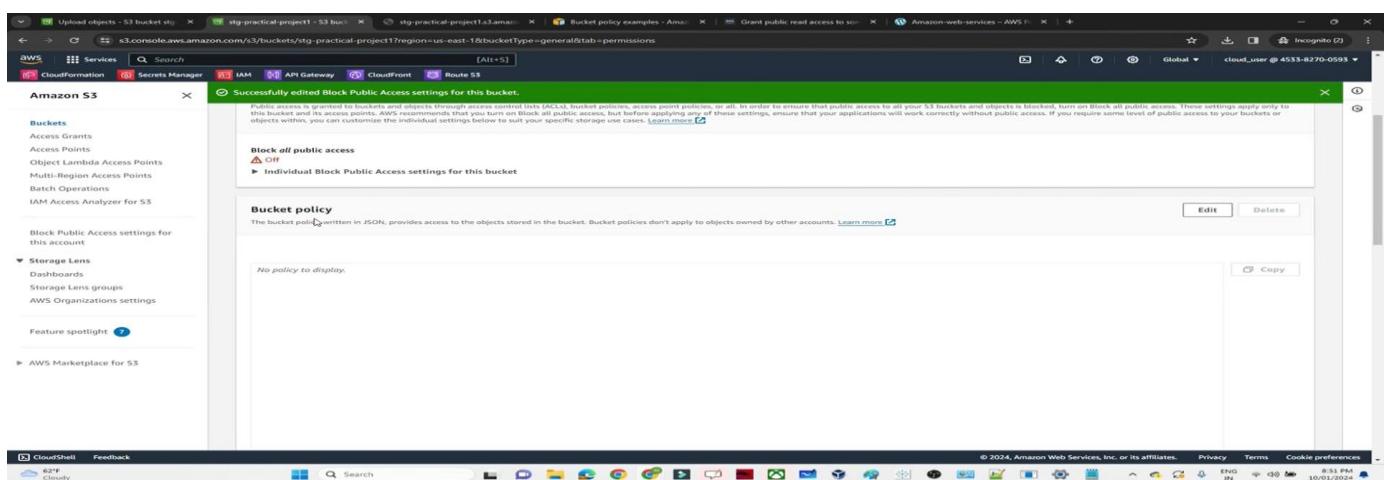
Step 21: By default, access is private. You need to add a bucket policy to make the files public



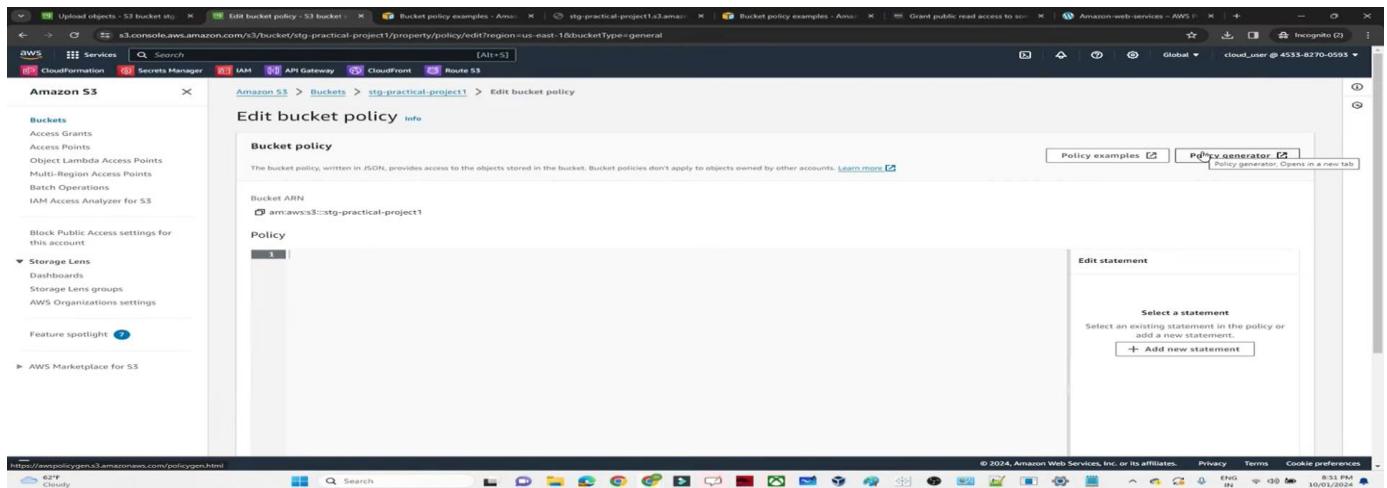
Step 22: Click on the save Changes



Step 23: Bucket policy



Step 24: Click on Edit



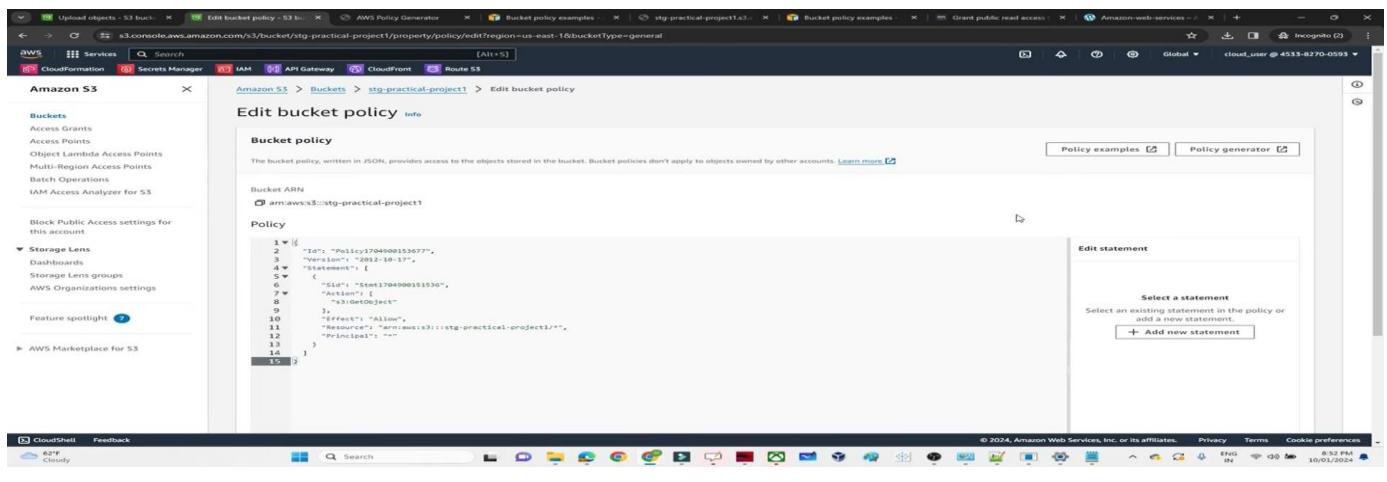
The screenshot shows the 'Edit bucket policy' page for the 'stg-practical-project1' bucket. The left sidebar includes links for Buckets, Access Grants, Access Points, Object Lambda Access Points, Multi-Region Access Points, Batch Operations, IAM Access Analyzer for S3, Storage Lens, Dashboards, Storage Lens groups, and AWS Organizations settings. The main area displays the 'Bucket policy' section with a 'Policy' tab selected. The policy JSON is shown as:

```
1 | {
2 |     "Version": "2012-10-17",
3 |     "Statement": [
4 |         {
5 |             "Effect": "Allow",
6 |             "Principal": "*",
7 |             "Action": "s3:GetObject",
8 |             "Resource": "arn:aws:s3:::your-bucket-name/*"
9 |         }
10 |     ]
11 | }
```

On the right, there's a 'Select a statement' dropdown and a 'Policy generator' button.

Step 25: Generate the policy: Paste the following code into the Bucket Policy editor:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Principal": "*",
      "Action": "s3:GetObject",
      "Resource": "arn:aws:s3:::your-bucket-name/*"
    }
  ]
}
```

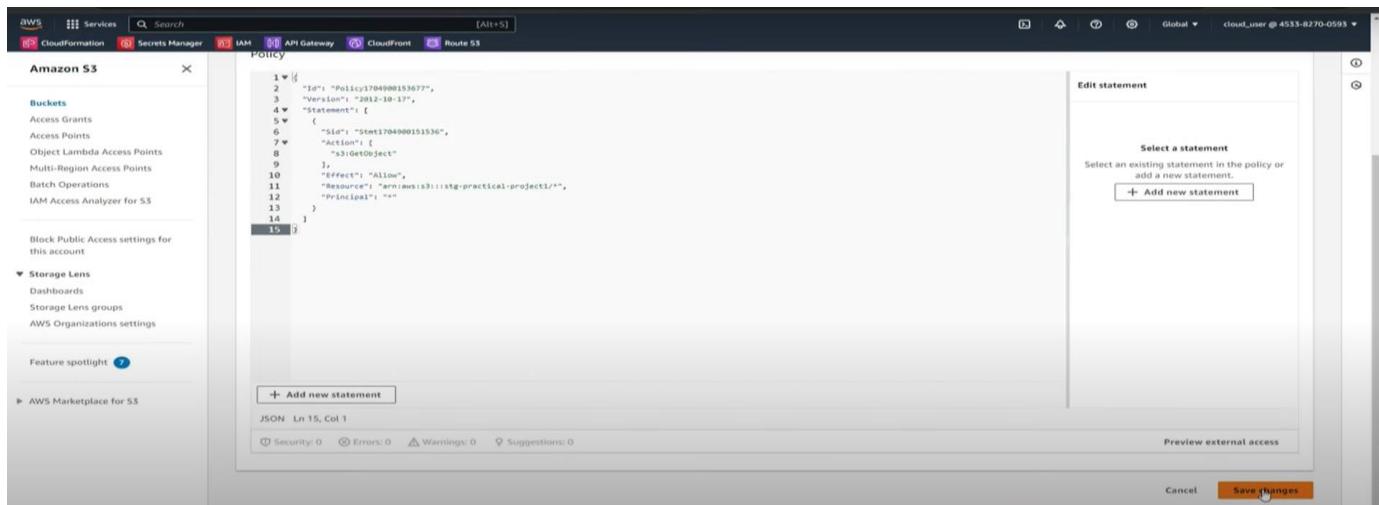


The screenshot shows the 'Edit bucket policy' page for the 'stg-practical-project1' bucket. The left sidebar includes links for Buckets, Access Grants, Access Points, Object Lambda Access Points, Multi-Region Access Points, Batch Operations, IAM Access Analyzer for S3, Storage Lens, Dashboards, Storage Lens groups, and AWS Organizations settings. The main area displays the 'Bucket policy' section with a 'Policy' tab selected. The policy JSON is now correctly populated with the pasted code:

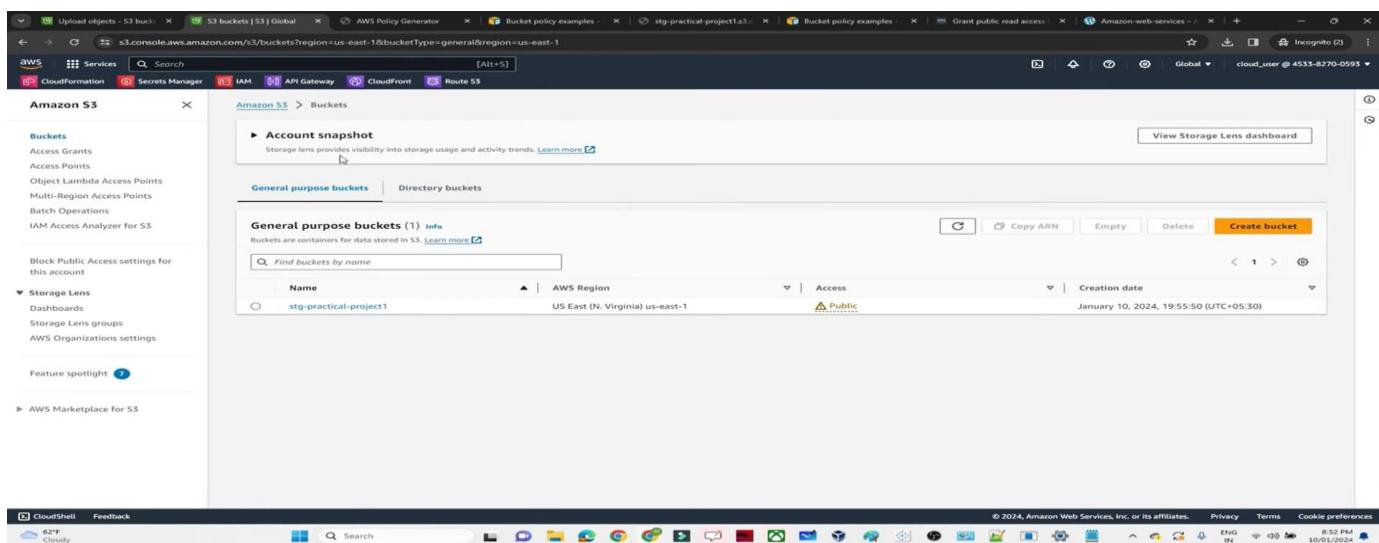
```
1 | {
2 |     "Version": "2012-10-17",
3 |     "Statement": [
4 |         {
5 |             "Effect": "Allow",
6 |             "Principal": "*",
7 |             "Action": "s3:GetObject",
8 |             "Resource": "arn:aws:s3:::stg-practical-project1/*"
9 |         }
10 |     ]
11 | }
```

On the right, there's a 'Select a statement' dropdown and a 'Policy generator' button.

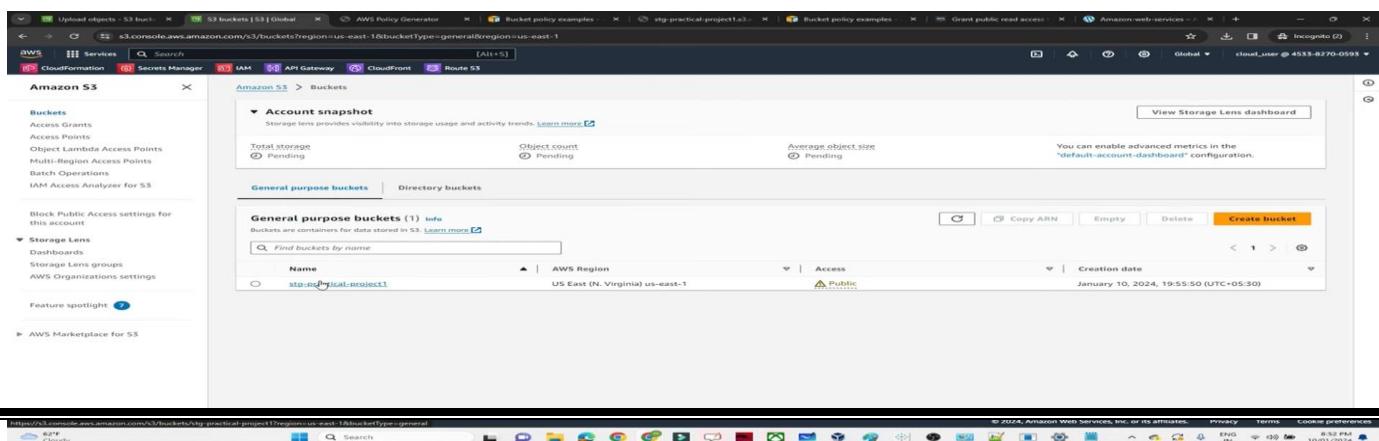
Step 26: Click on the Save Changes



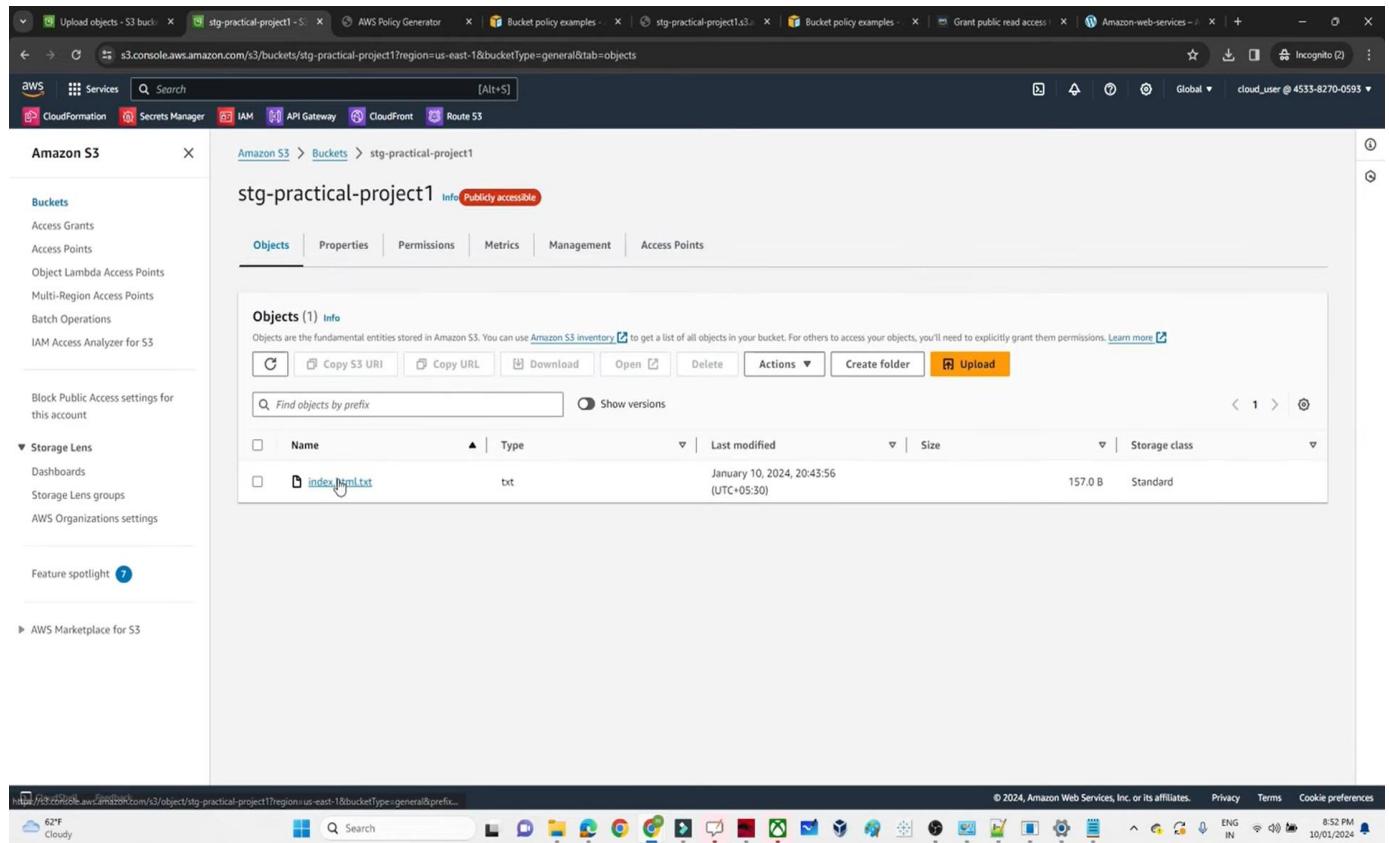
Step 27: Back in the bucket page



Step 28: Click on the name of the newly created bucket.

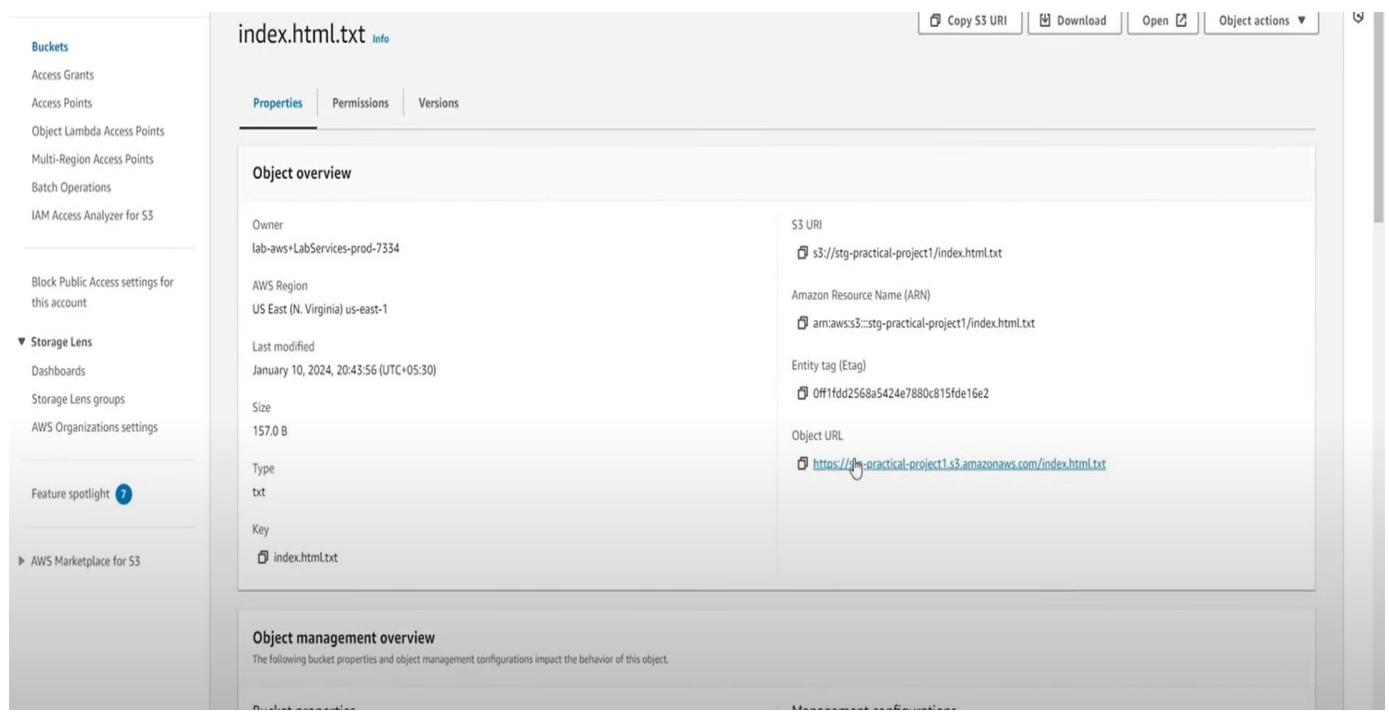


Step 29: Click on the upload the files on your bucket.



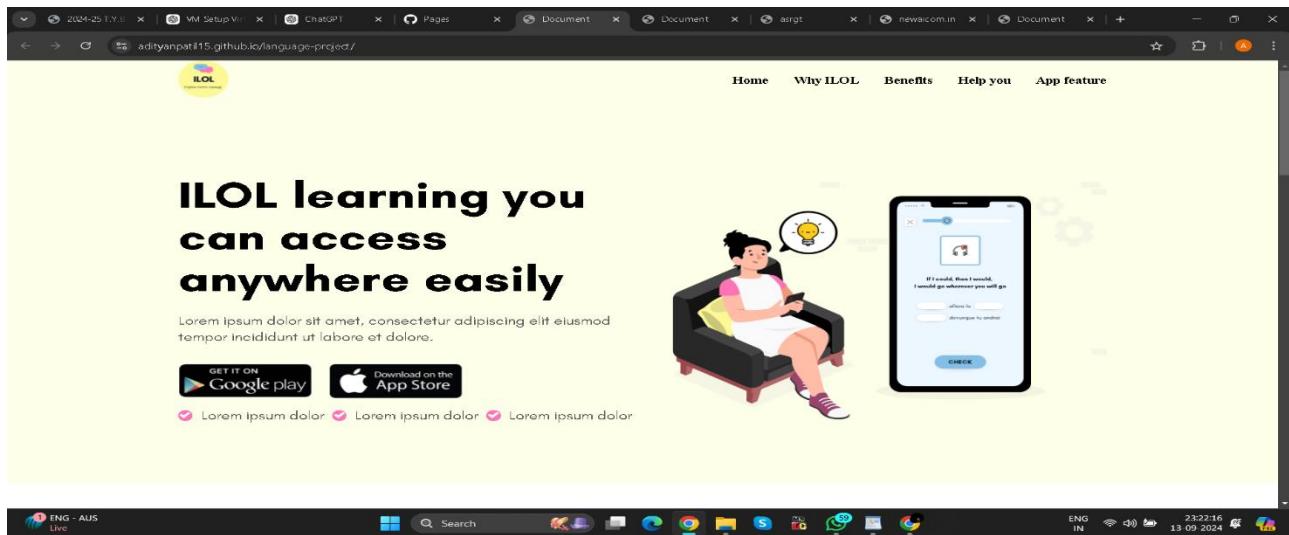
The screenshot shows the AWS S3 console interface. On the left, there's a sidebar with various AWS services like CloudFormation, Secrets Manager, IAM, API Gateway, CloudFront, and Route 53. The main area shows a bucket named 'stg-practical-project1' which is 'Publicly accessible'. Under the 'Objects' tab, there is one item listed: 'index.html.txt' (Type: txt). The file was last modified on January 10, 2024, at 20:43:56 (UTC+05:30) and has a size of 157.0 B, stored in the Standard storage class. At the top of the objects list, there are several buttons: Copy S3 URI, Copy URL, Download, Open, Delete, Actions, Create folder, and Upload (which is highlighted with a yellow box).

Step 30: Object url is there click on that



The screenshot shows the AWS S3 object properties page for 'index.html.txt'. The left sidebar is identical to the previous screenshot. The main area shows the 'Properties' tab selected. In the 'Object overview' section, there are details about the object: Owner (lab-aws+LabServices-prod-7334), AWS Region (US East (N. Virginia) us-east-1), Last modified (January 10, 2024, 20:43:56 (UTC+05:30)), Size (157.0 B), Type (txt), and Key (index.html.txt). To the right, there are fields for S3 URI (s3://stg-practical-project1/index.html.txt), Amazon Resource Name (ARN) (am:aws:s3:::stg-practical-project1/index.html.txt), Entity tag (Etag) (0ff1fd2568a5424e7880c815fde16e2), and Object URL (https://stg-practical-project1.s3.amazonaws.com/index.html.txt). Below this, there's an 'Object management overview' section with a note: 'The following bucket properties and object management configurations impact the behavior of this object.'

Step 31: You can access your file



Conclusion:

You have successfully hosted a static website using Amazon S3. This practical demonstration showed how to set up an S3 bucket, configure it for static hosting, upload files, and make them publicly accessible. AWS S3 is a powerful and cost-effective way to host static sites for various use cases.

https://www.youtube.com/watch?v=x36pLG_FJ6M&t=610s

Submitted By:

Checked By: Aditya Nitin Patil

Sign:

Name:

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