

**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: Ms.Swati.S.Badhe**

**Academic Year: 2025 - 2026**

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

**Practical: 01**

**DOP:**

**DOC:**

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**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

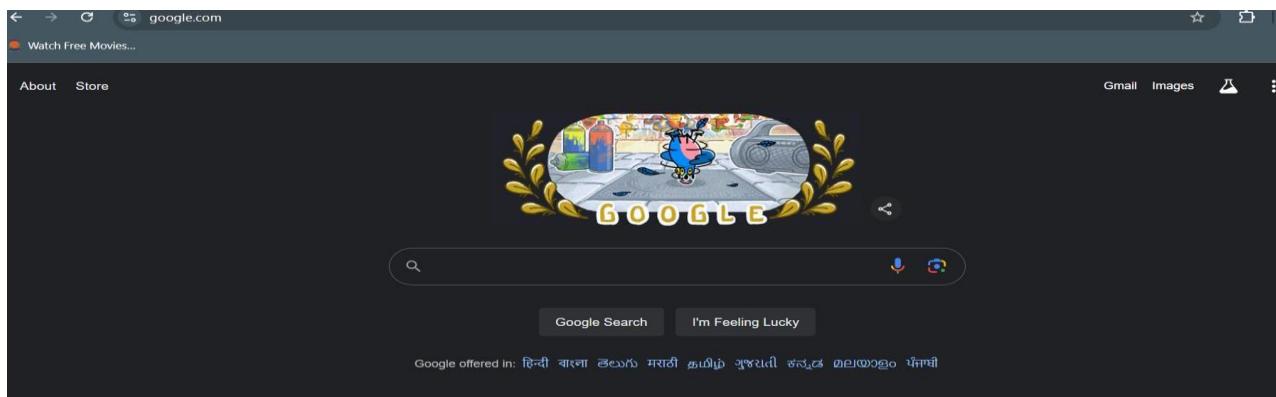
A web browser (e.g., Chrome, Firefox).

Step-by-Step Instructions:

**1. Creating a Google Account:**

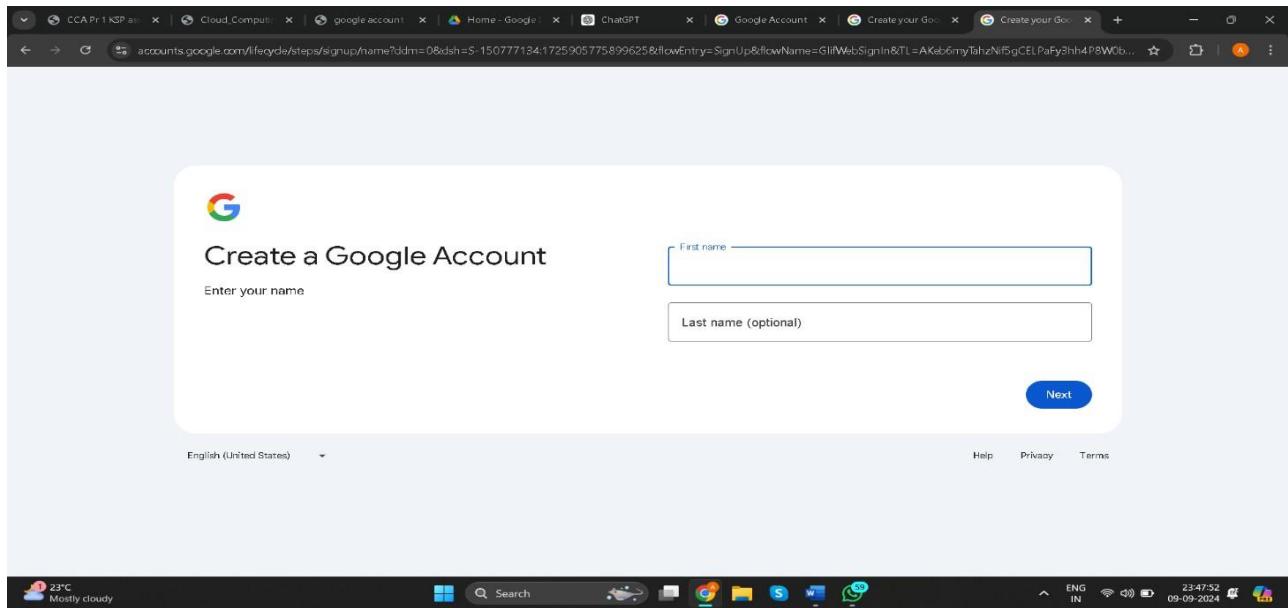
If you don't already have a Google account, follow these steps to create one:

Step 1: Open Google Chrome

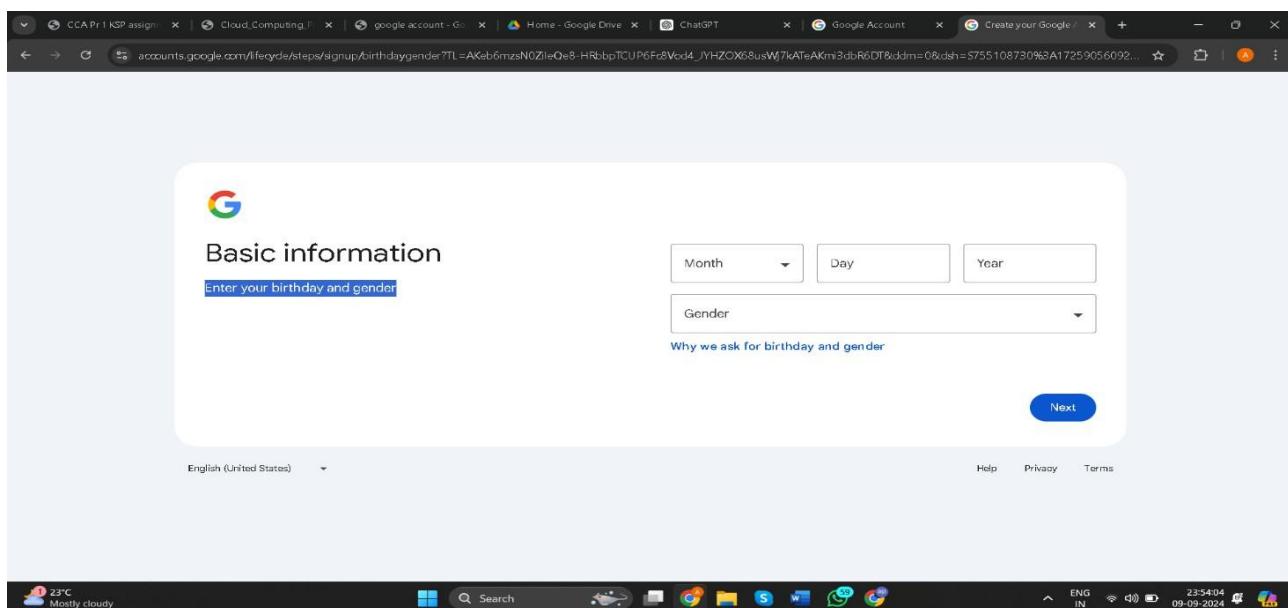


Step 2 : go to the [Google Account Creation Page](<https://accounts.google.com/signup>).

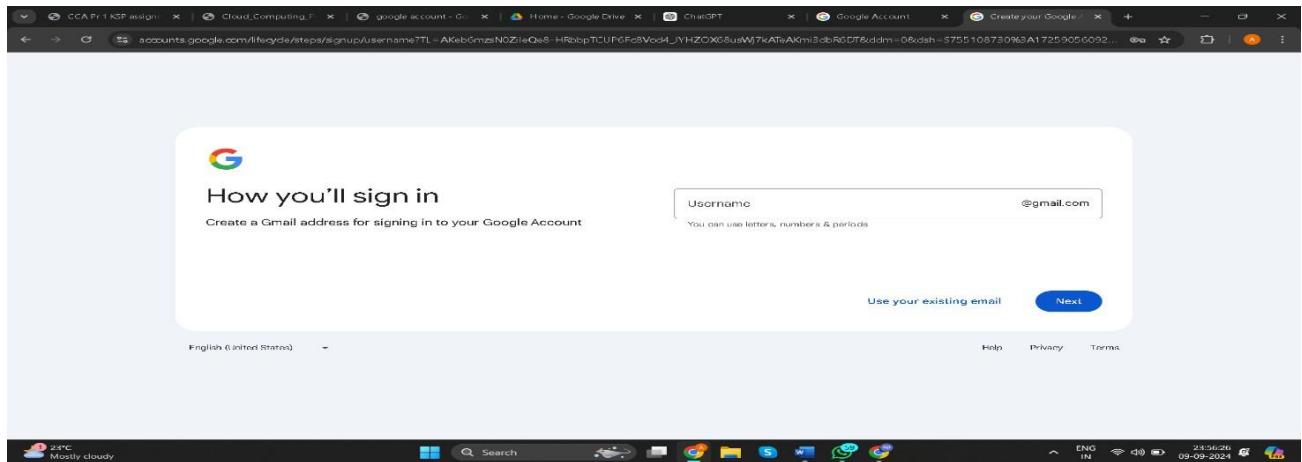
Step 3: Enter your name



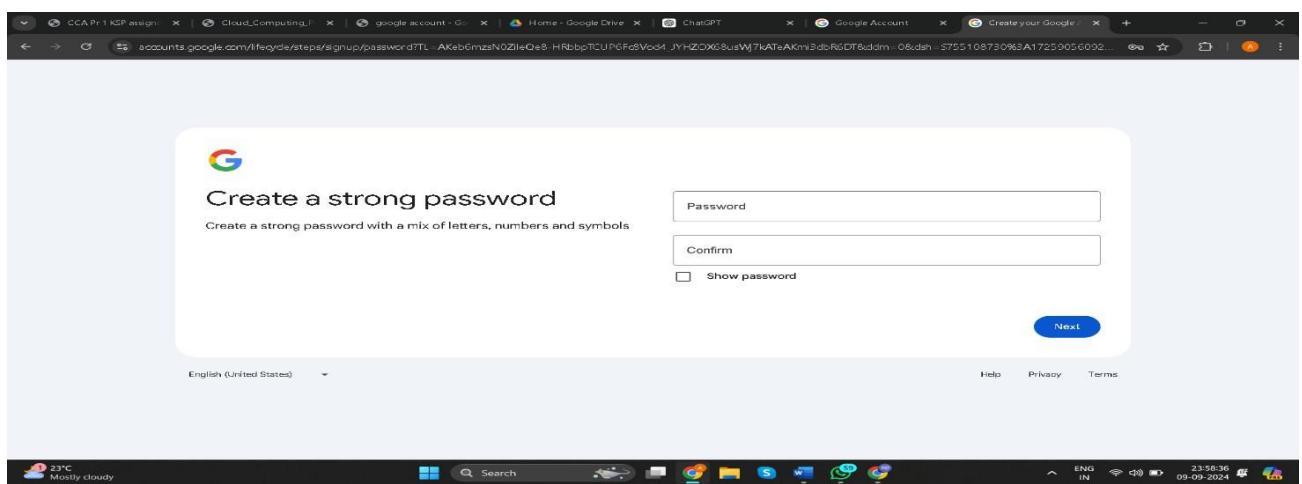
Step 4: Enter your birthday and gender



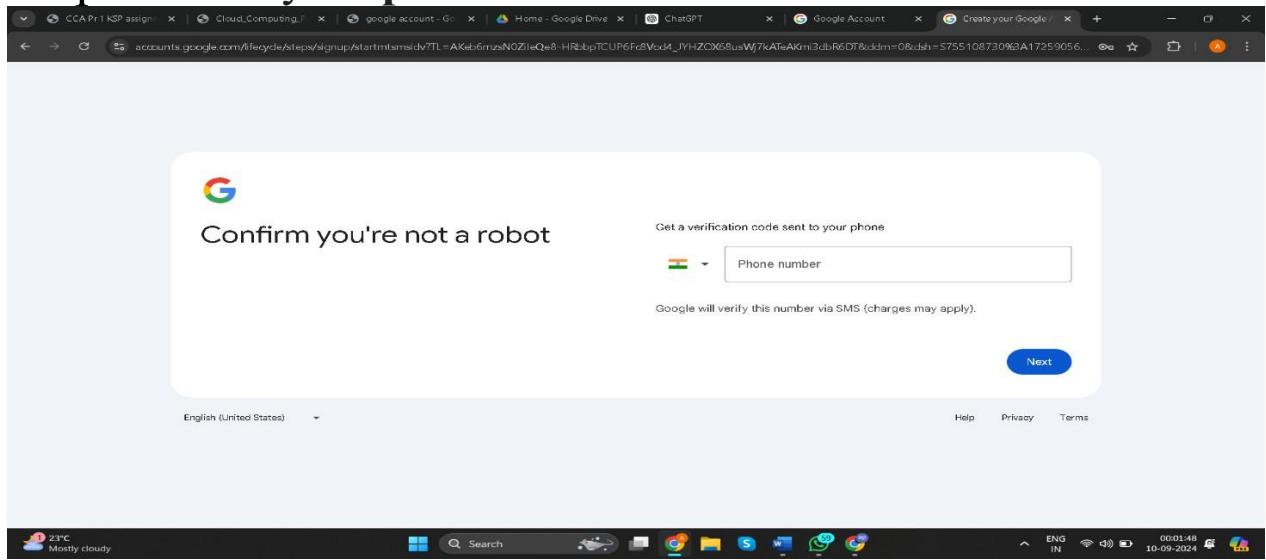
Step 5: Create a Gmail address for signing in to your Google Account



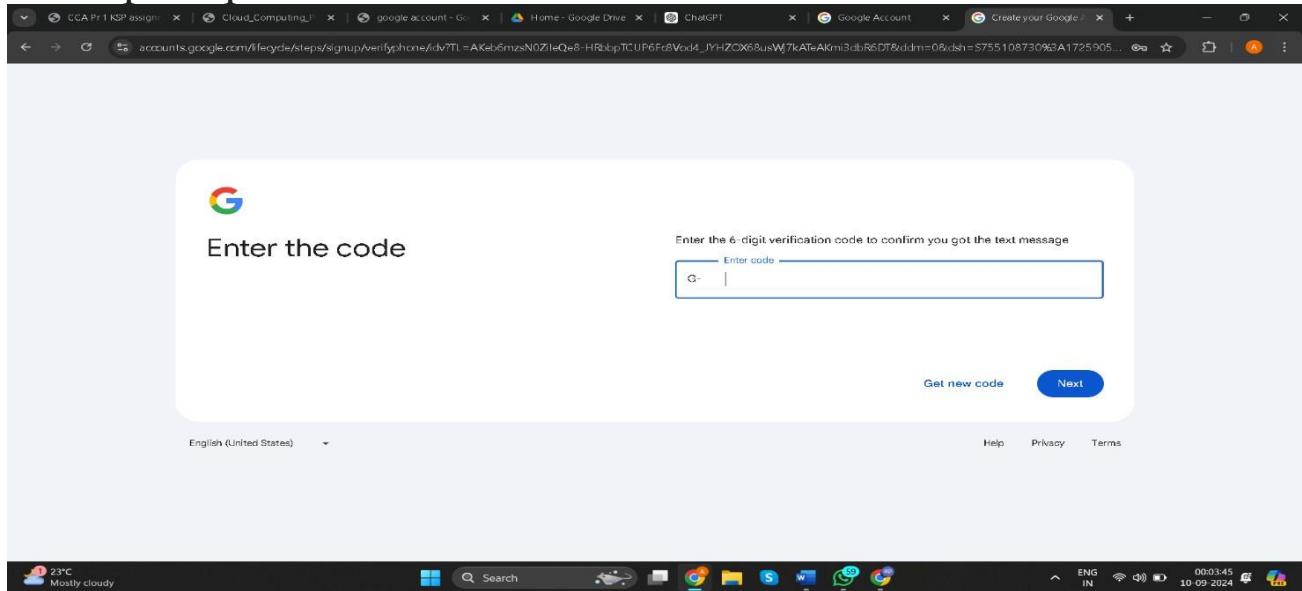
## Step 6: Create a strong password



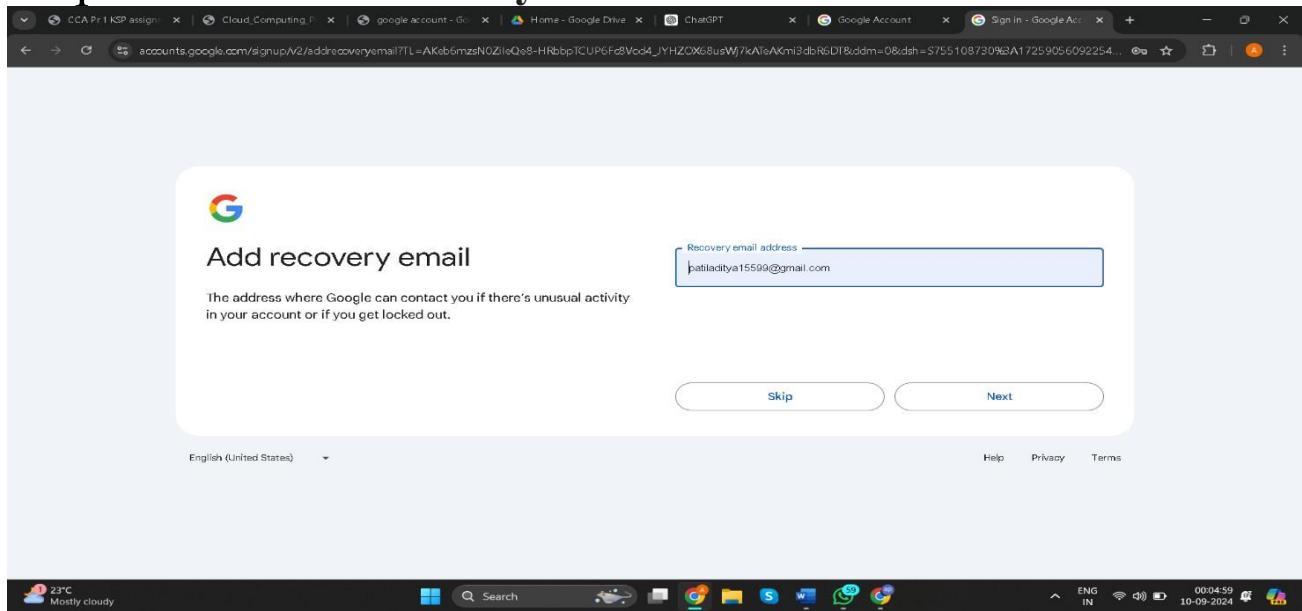
## Step 7: Enter your phone number for verification.



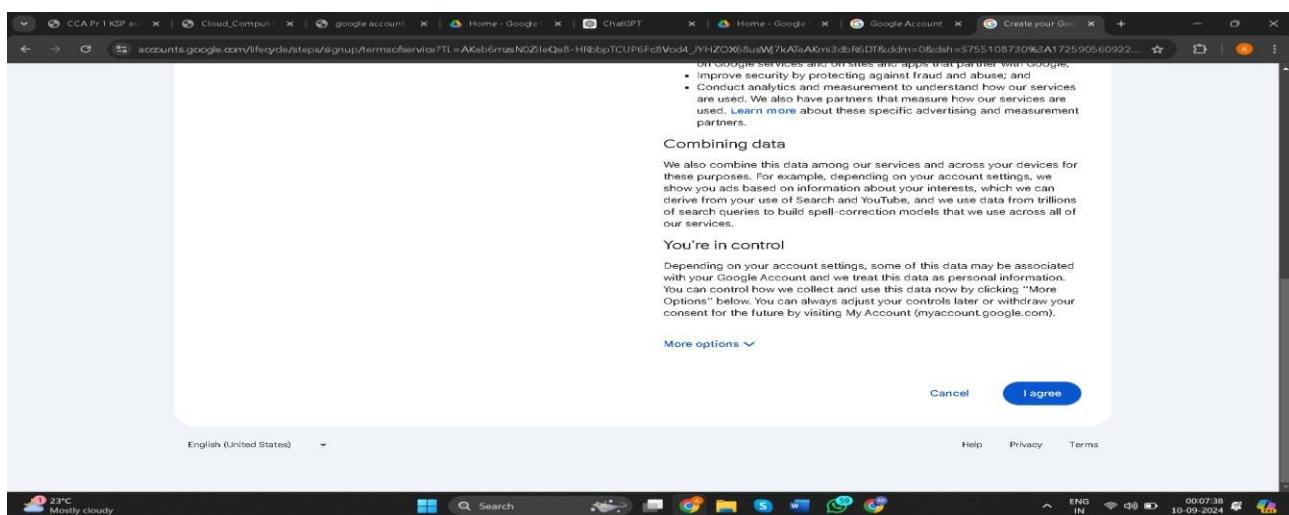
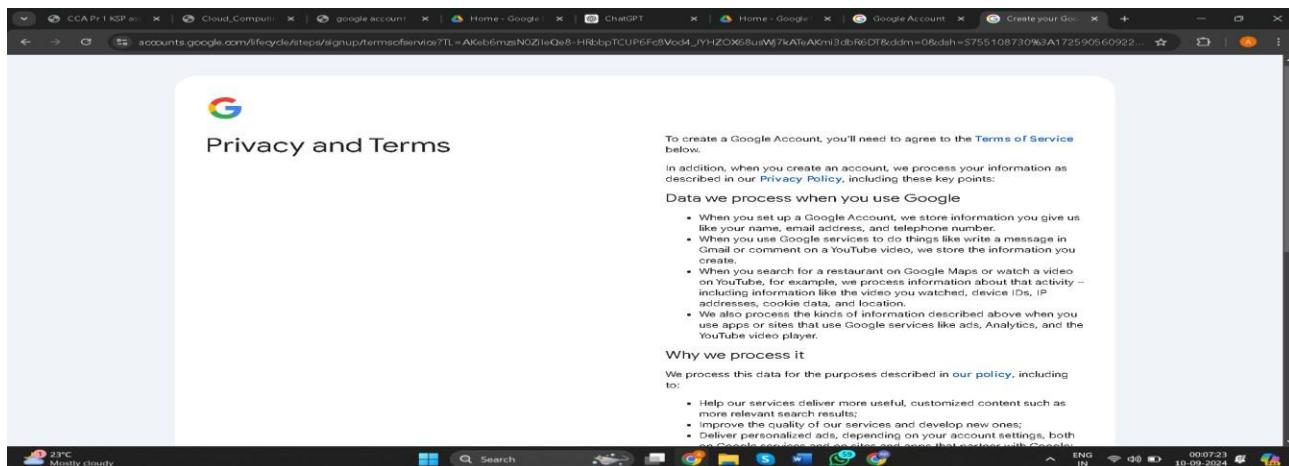
**Step 8:** Google will send a **verification code** via SMS. Enter the code when prompted



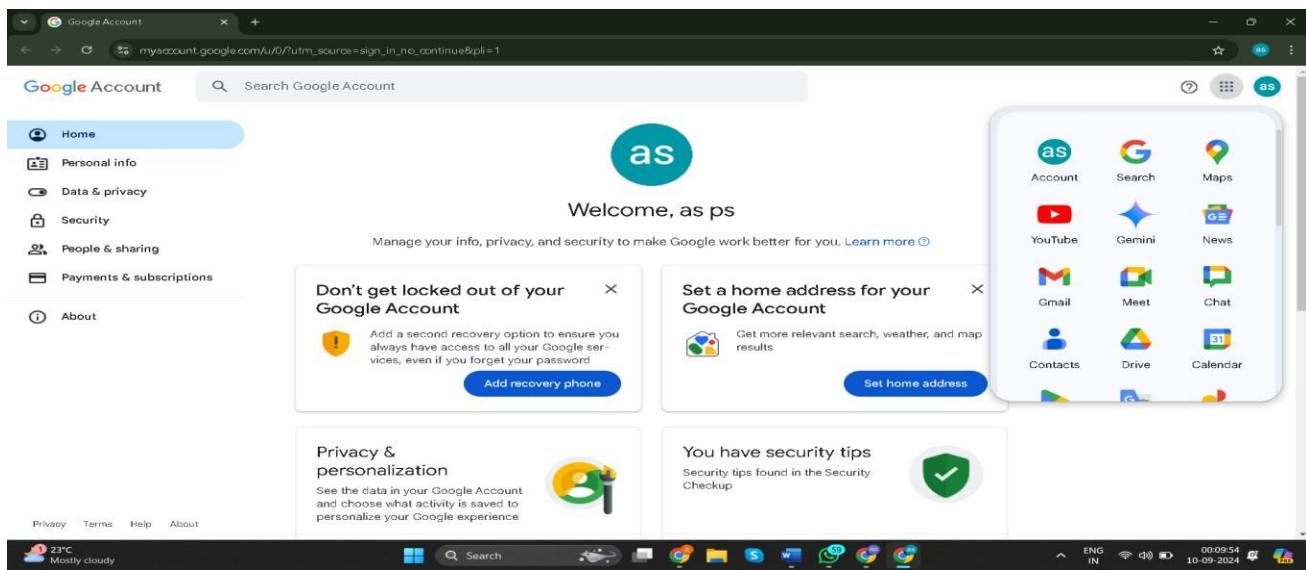
**Step 9:** Provide a **recovery email**



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

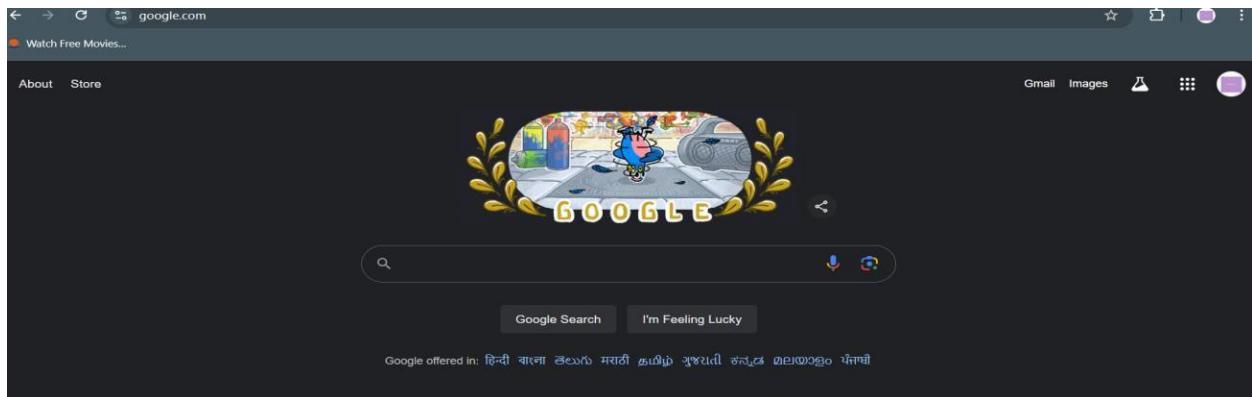


## Step 11: Your Google account will be created, and you'll be redirected to your Google dashboard

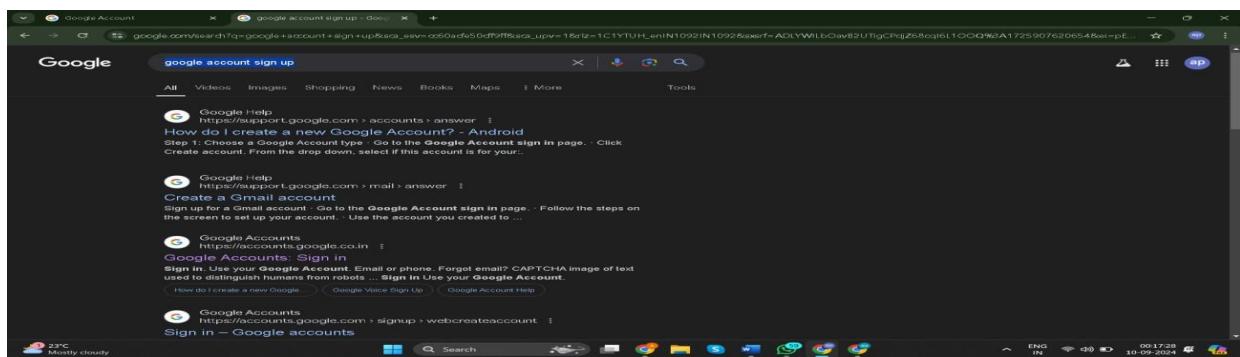


## A)For Google Sheets:

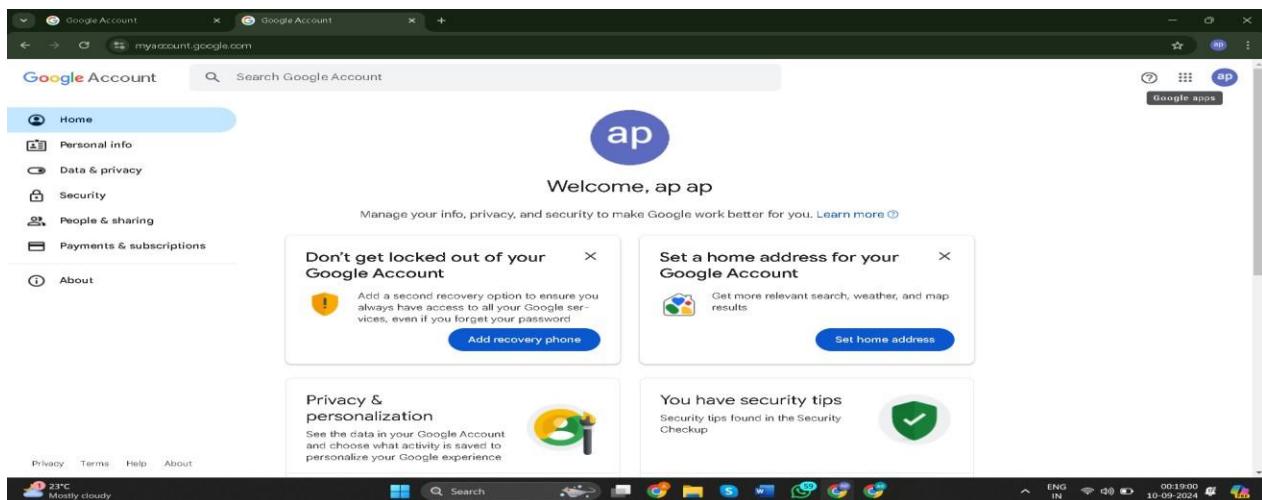
Step 1: Open Google Chrome



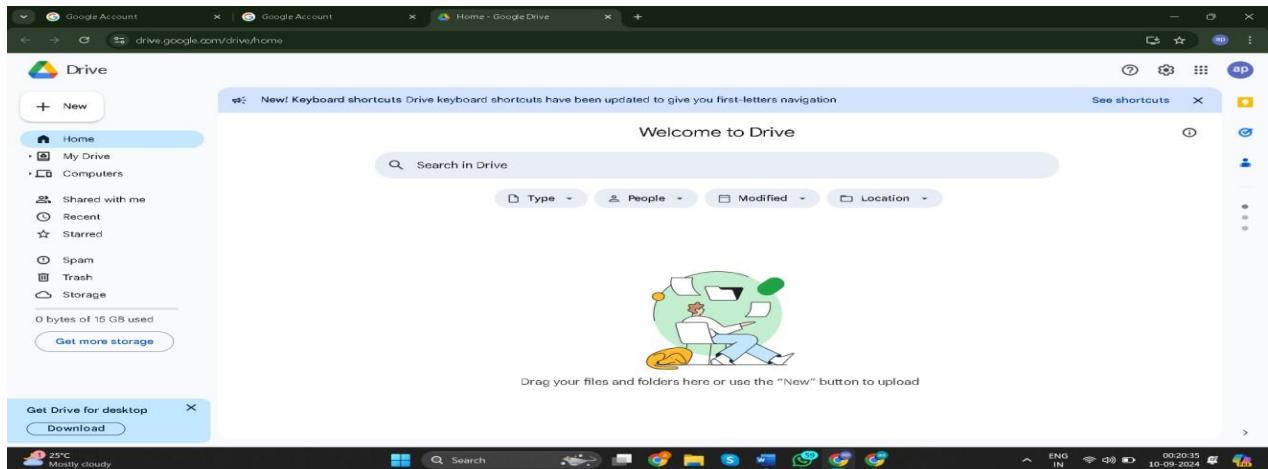
Step 2: search for google account sign in



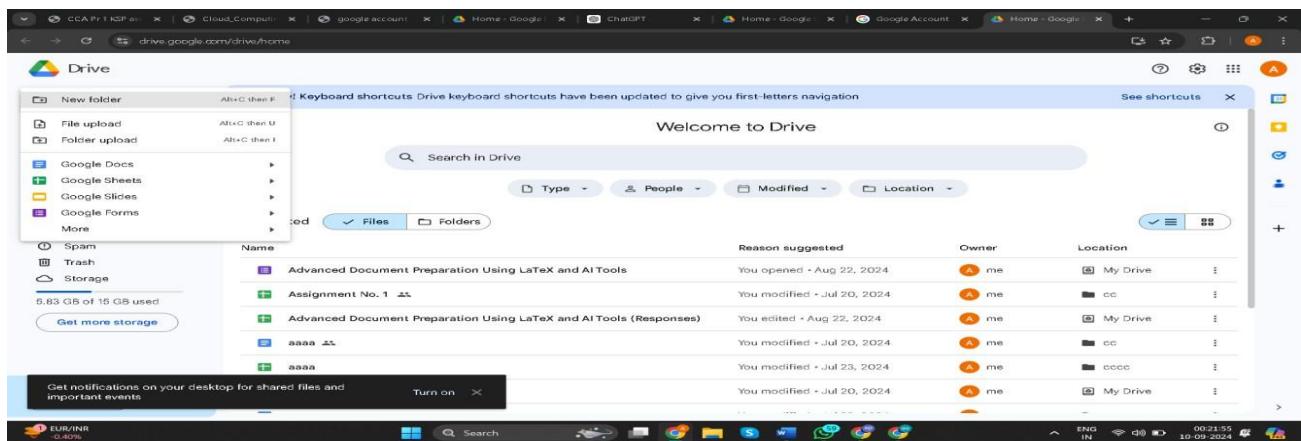
Step 3: click on the google apps



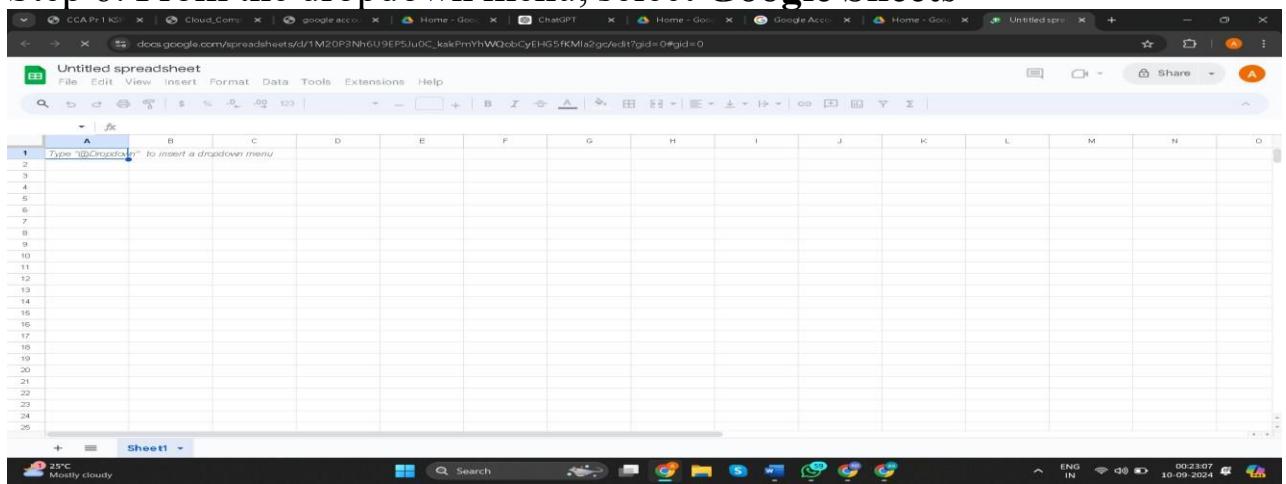
## Step 4: click on the google drive



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 it are other search results: "Google Sheets: Sign-in", "Google Sheets - Apps on Google Play", "Google Sheets - Apps on the App Store", and "Google Sheets Help". The right side of the screen displays the official Google Sheets landing page, showing its logo and a brief description.

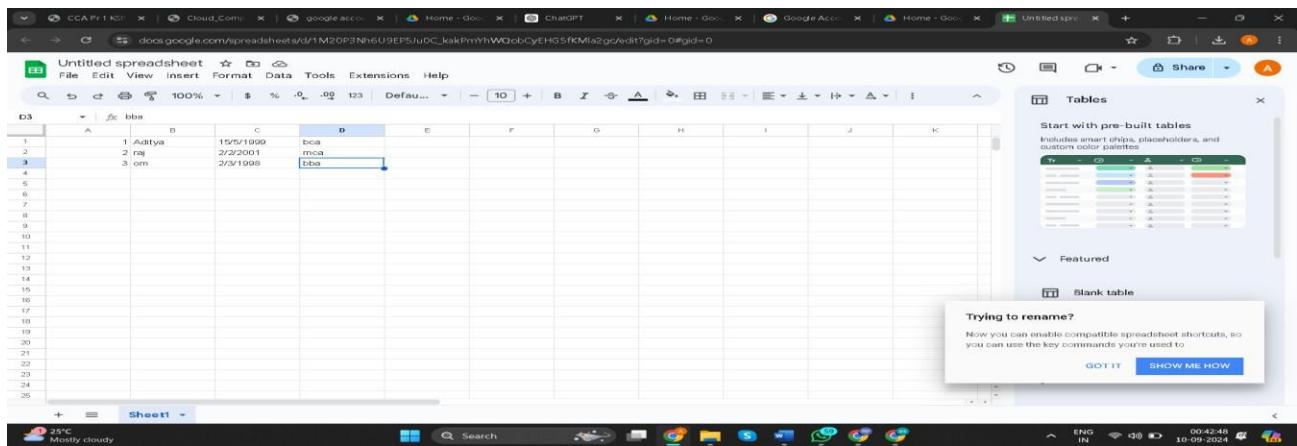
Step 7: Sign in to Google Sheets and select a blank document.

The screenshot shows the Google Sheets interface. At the top, there's a navigation bar with icons for Sheets, Search, and other tools. Below it is a section titled "Start a new spreadsheet" with options like "Blank spreadsheet", "To-do list", "Annual budget", "Monthly budget", "Google Finance invest...", and "Annual Calendar". Underneath this, there's a "Earlier" section showing a recent document named "2024-Accounts.xlsx" with details like "Owned by anyone" and "Last opened by me".

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 Google Sheets spreadsheet titled "Untitled spreadsheet". The spreadsheet has a single row of data. Column A contains "Raju Rastogi", column B contains "8600076769", and column C contains "TYBCA". The other columns (D through O) are empty. The top menu bar includes File, Edit, View, Insert, Format, Data, Tools, Extensions, and Help. The toolbar below the menu includes various spreadsheet functions like Sort, Filter, and Conditional Formatting.

Step 9: Make a random table.

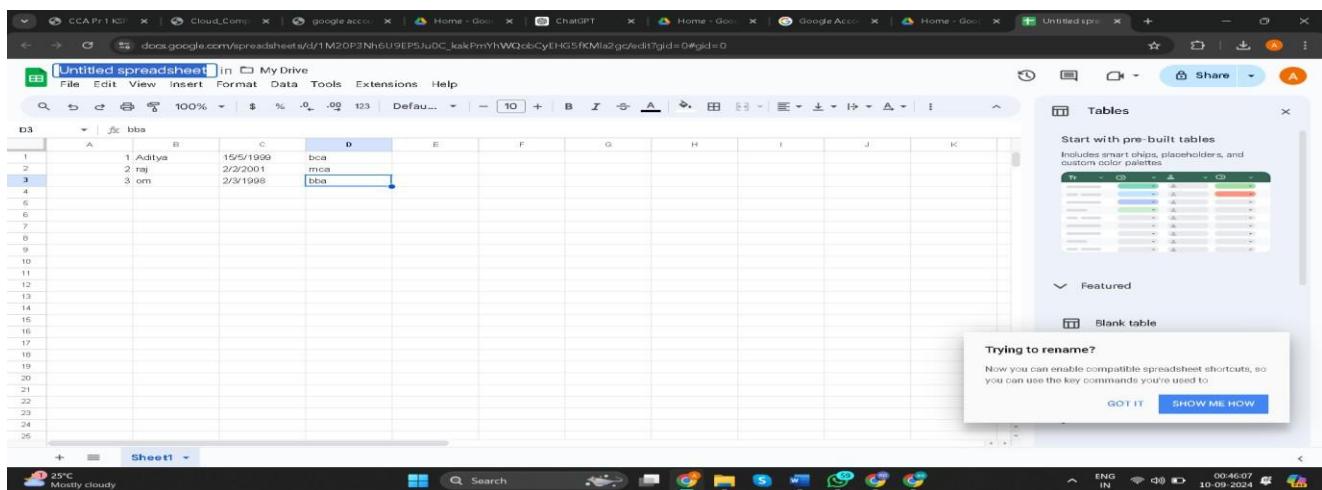


A screenshot of a Google Sheets document titled "Untitled spreadsheet". The sheet contains a table with three rows of data:

	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							

The "Tables" sidebar is open on the right, showing options to "Start with pre-built tables" and "Blank table". A tooltip "Trying to rename?" is visible, explaining how to enable compatible spreadsheet shortcuts. The system tray at the bottom shows weather information (25°C, Mostly cloudy) and system status (ENG IN, 10-09-2024).

Step 10: Rename the document as needed.

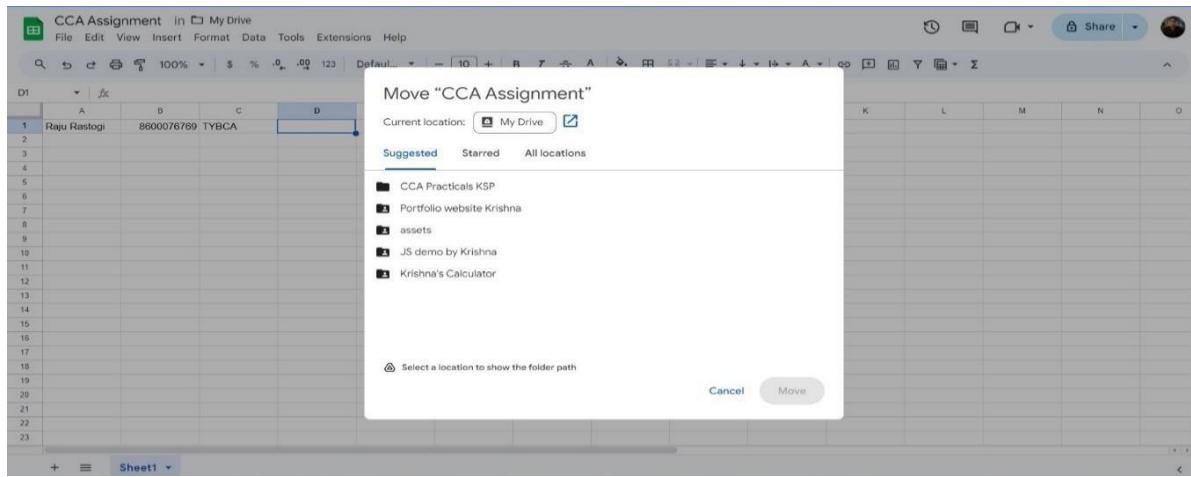


A screenshot of a Google Sheets document titled "[untitled].ods" (My Drive). The table structure is identical to Step 9, with three rows of data:

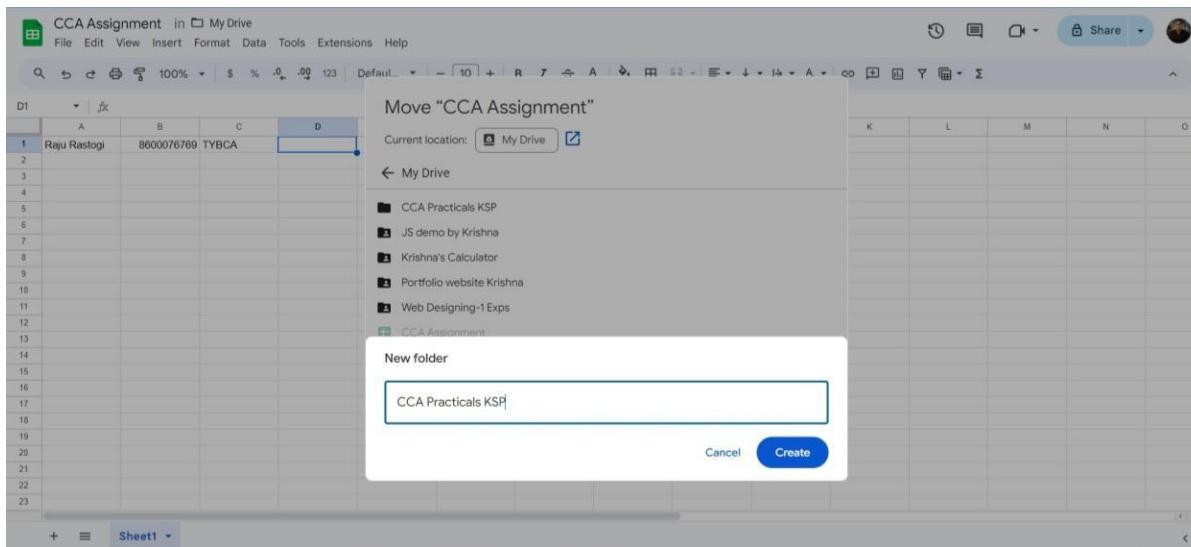
	A	B	C	D	E	F	G	H	I	J	K
1	1	Aditya	15/5/1999	bca							
2	2	raj	2/2/2001	mca							
3	3	om	2/3/1998	bba							

The "Tables" sidebar and the "Trying to rename?" tooltip are also present. The system tray at the bottom shows weather information (25°C, Mostly cloudy) and system status (ENG IN, 10-09-2024).

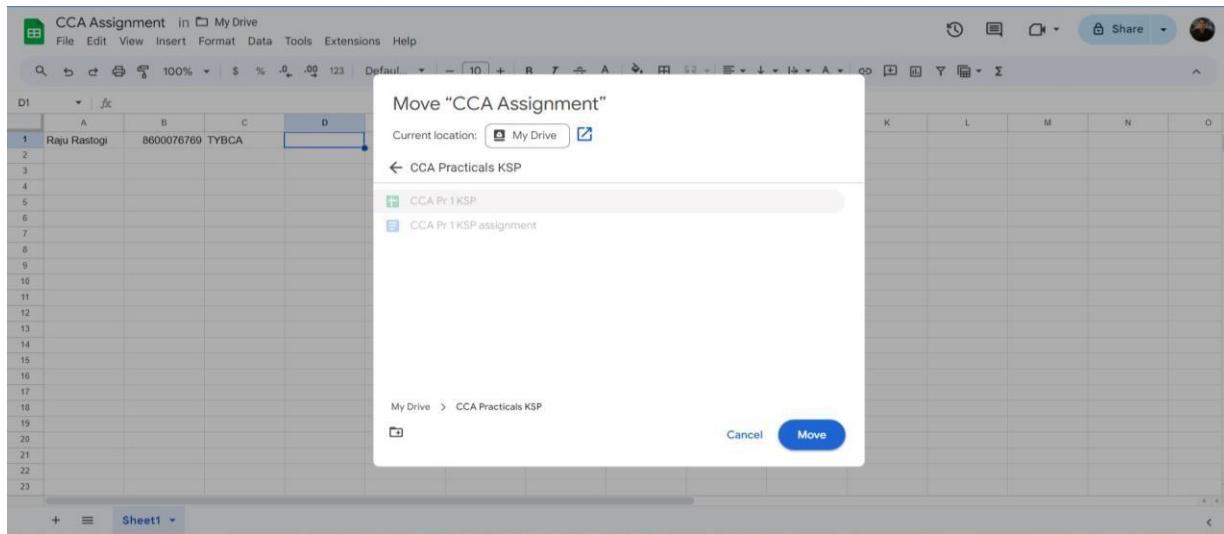
Step 11: click on “in my Drive” option.



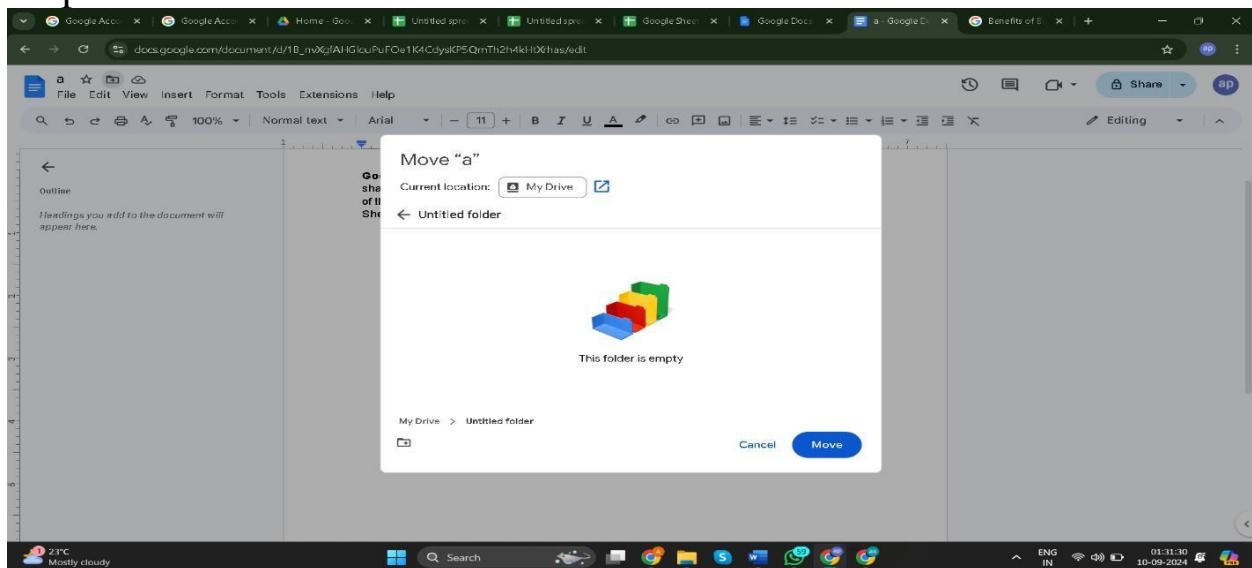
Step 12: Now create a folder by clicking on the button on bottom left of dialog box



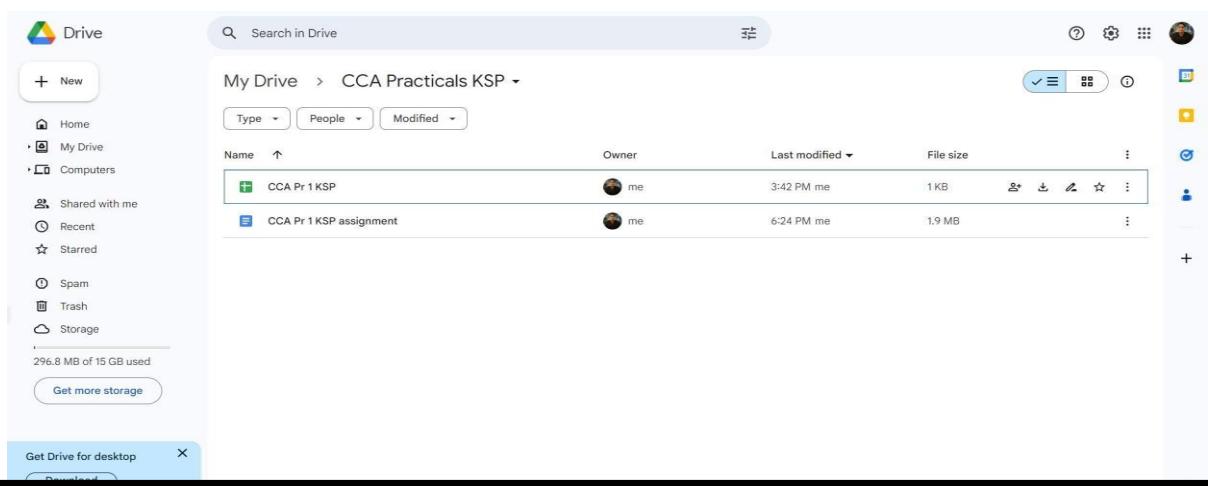
Step 13: Open the folder and click on “Move” button:



### Step 14: Click on move :

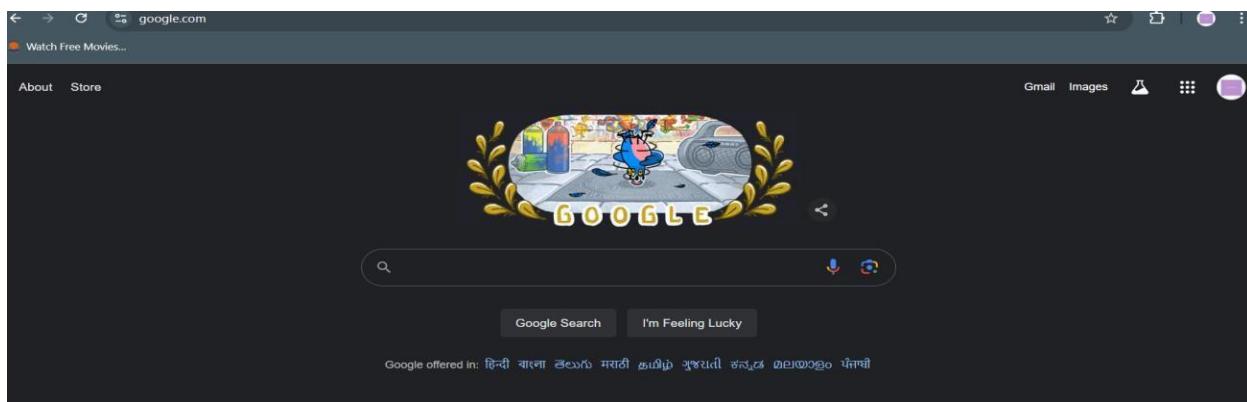


Step 15: Practical has finished, now you can see the folder with the file created in your respective Google Drive account

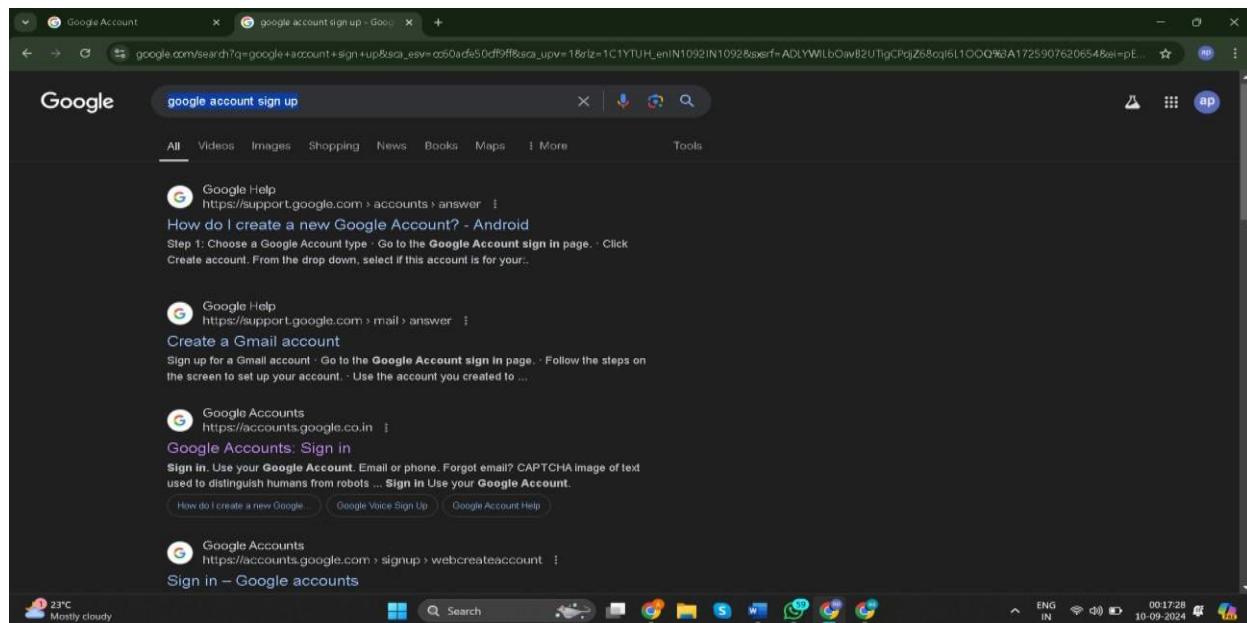


## b)For Google Docs :

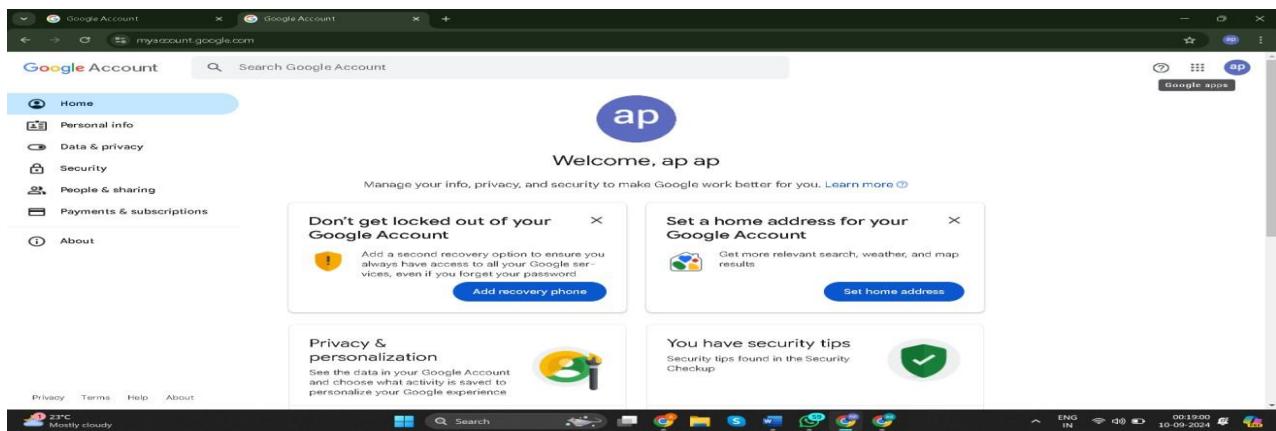
Step 1: Open Google Chrome



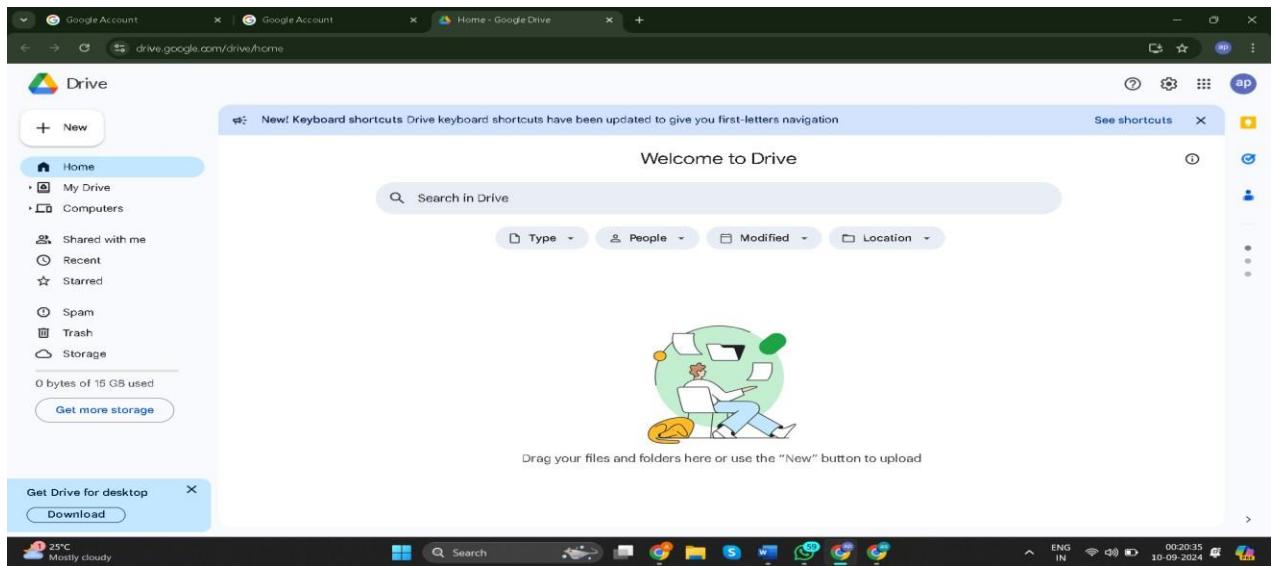
Step 2: search for google account sign in



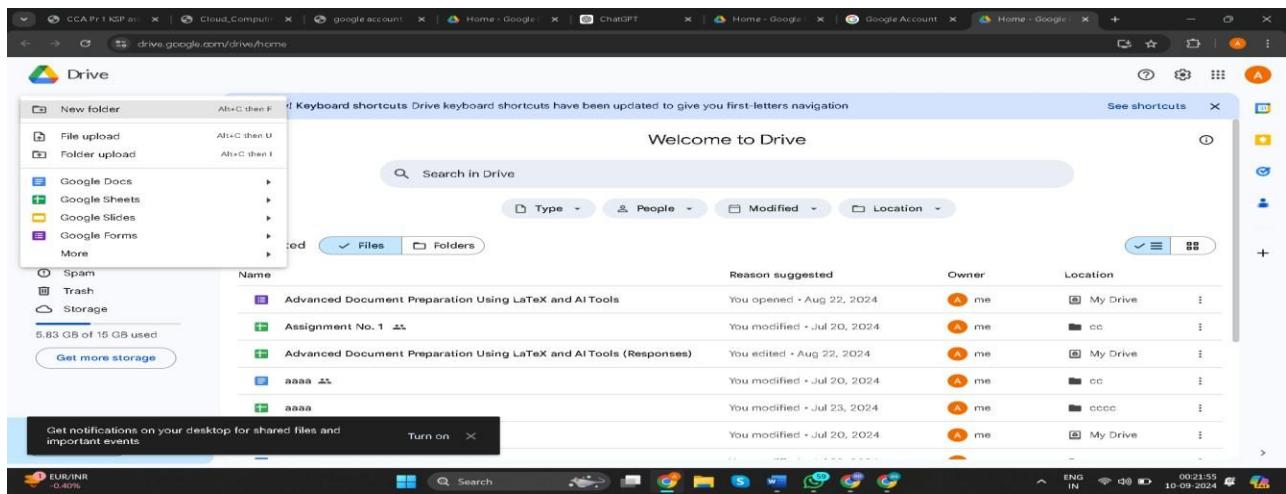
### Step 3: click on the google apps



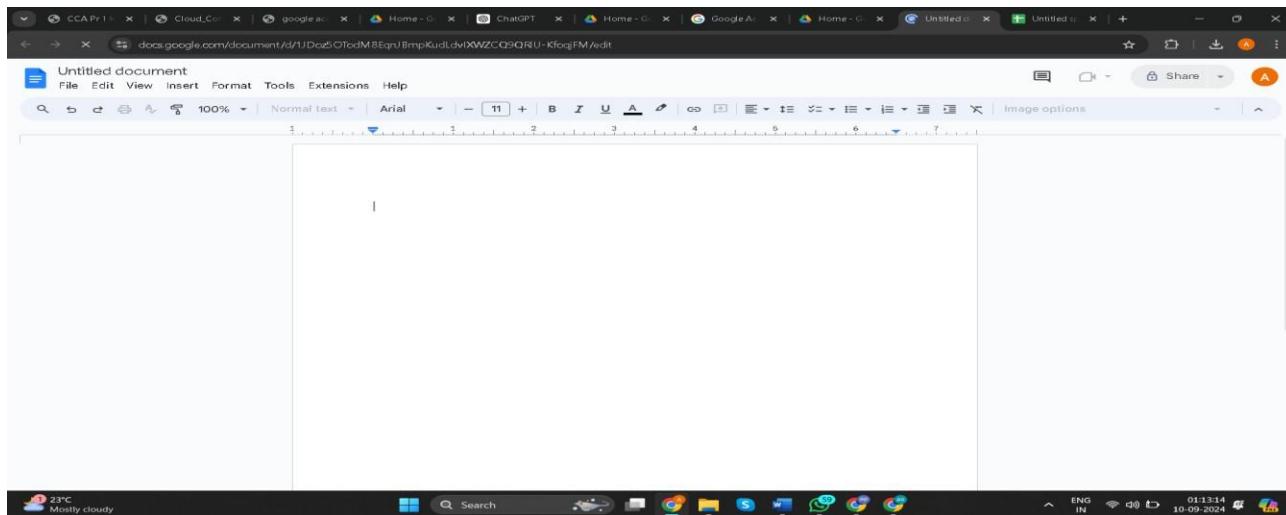
### Step 4: click on the google drive



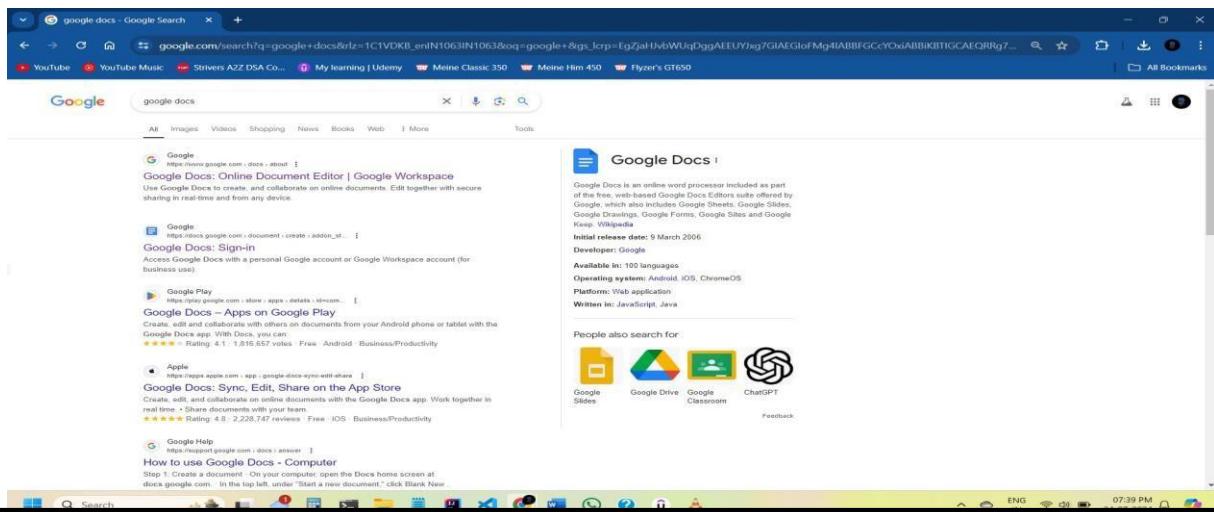
Step 5: On the Google Drive home page, click the + New button in the top-left corner.



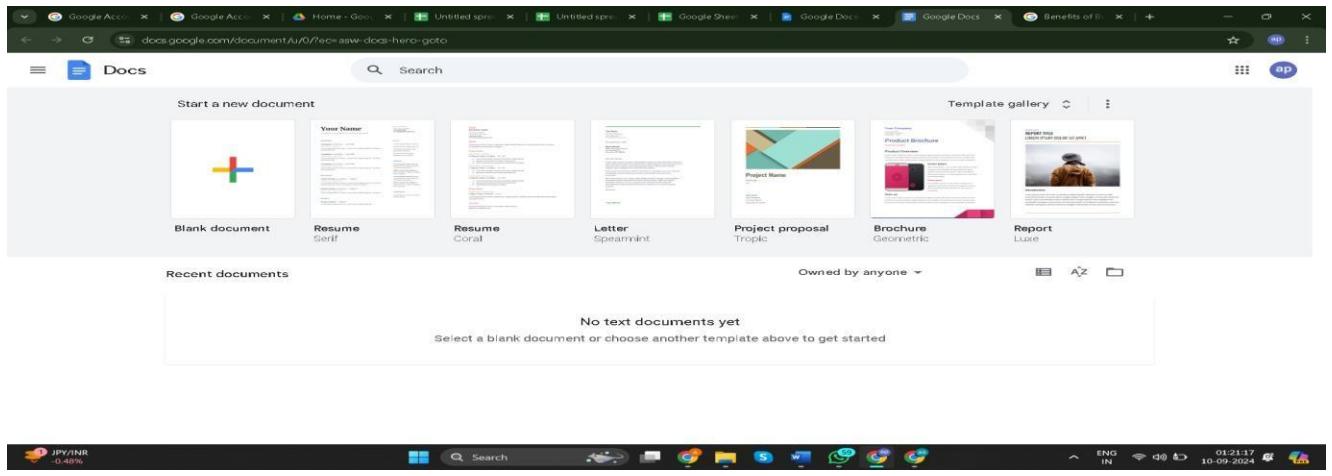
## Step 6: From the dropdown menu, select Google Docs



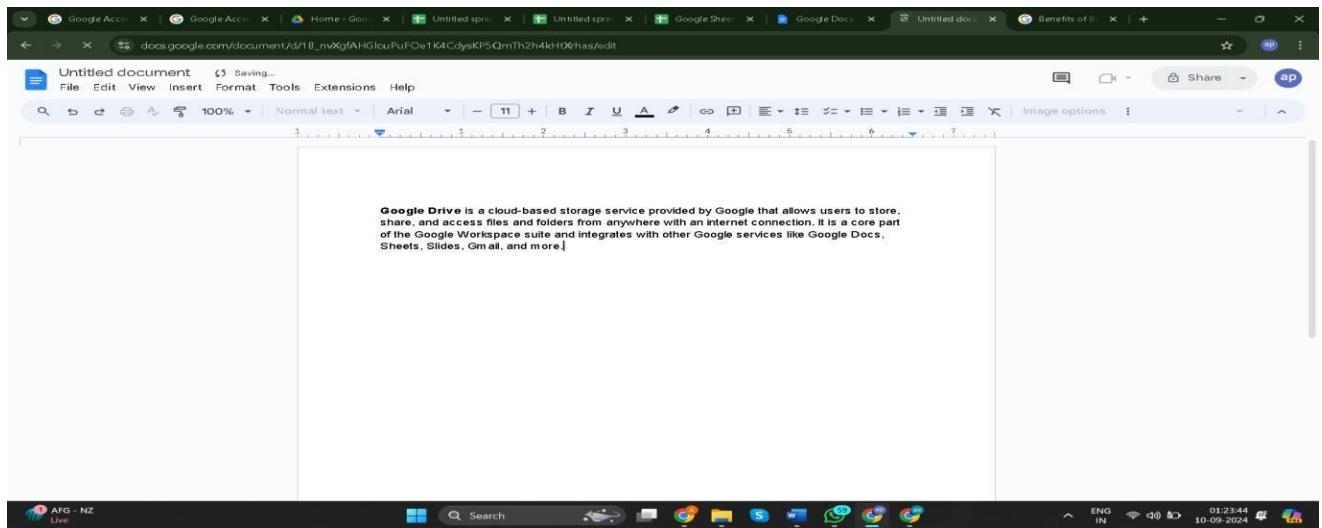
## (or) Search Google Sheets on the browser and click on the official link of Google Workspace



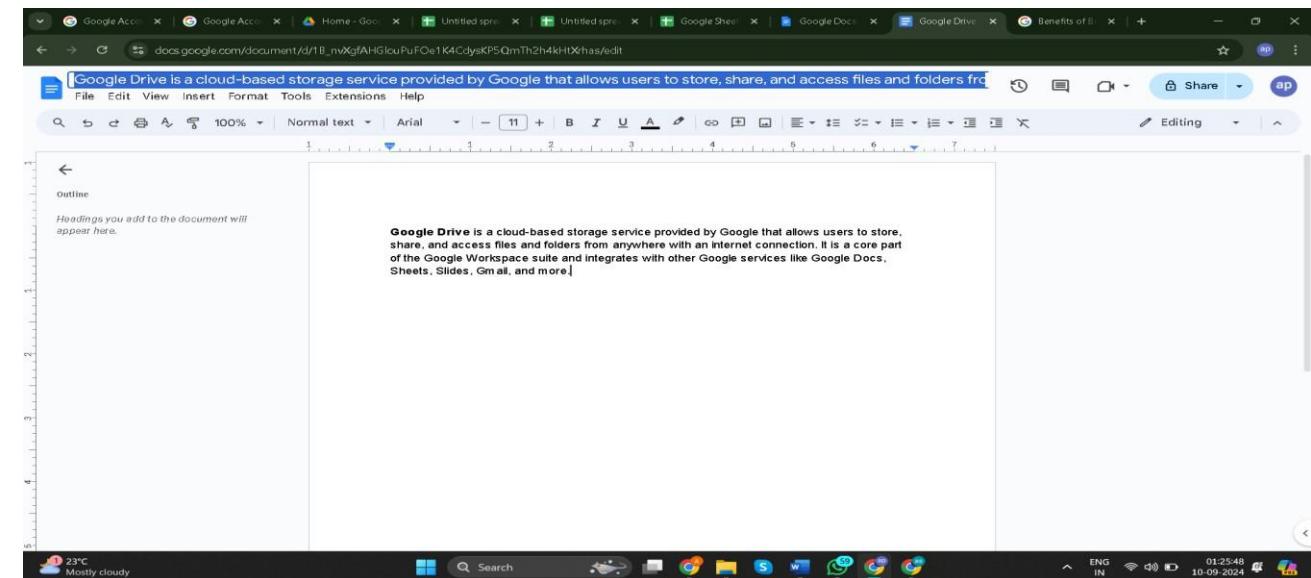
## Step 7: select a blank document.



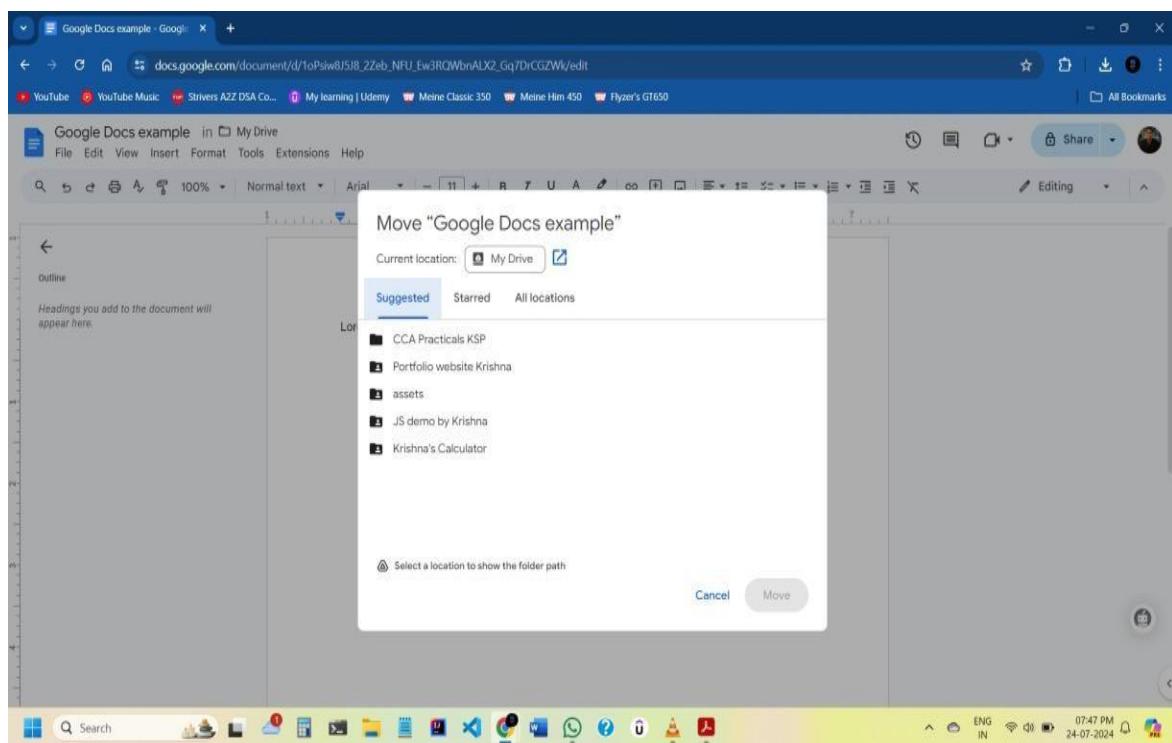
## Step 8: Open it and write a random paragraph



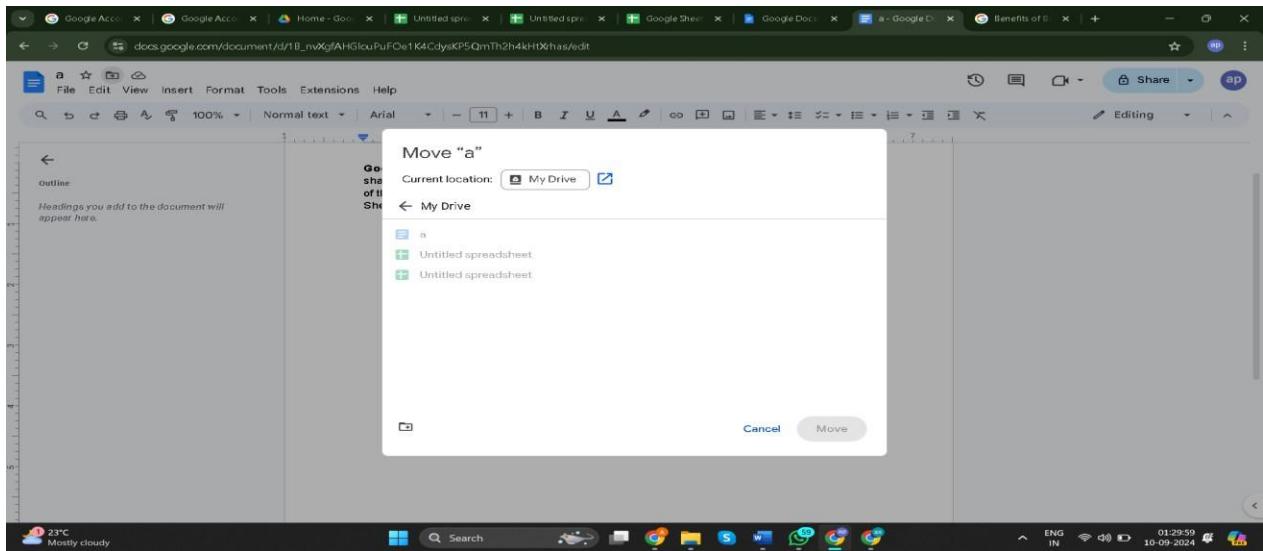
## Step 9: Rename the document as needed



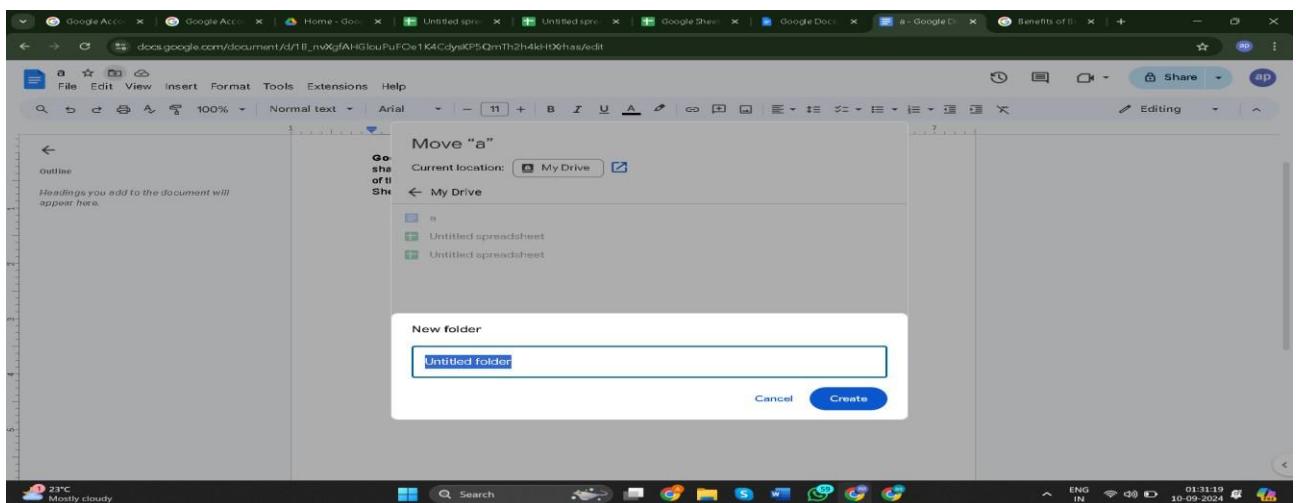
Step 10: click on “in my Drive” option:



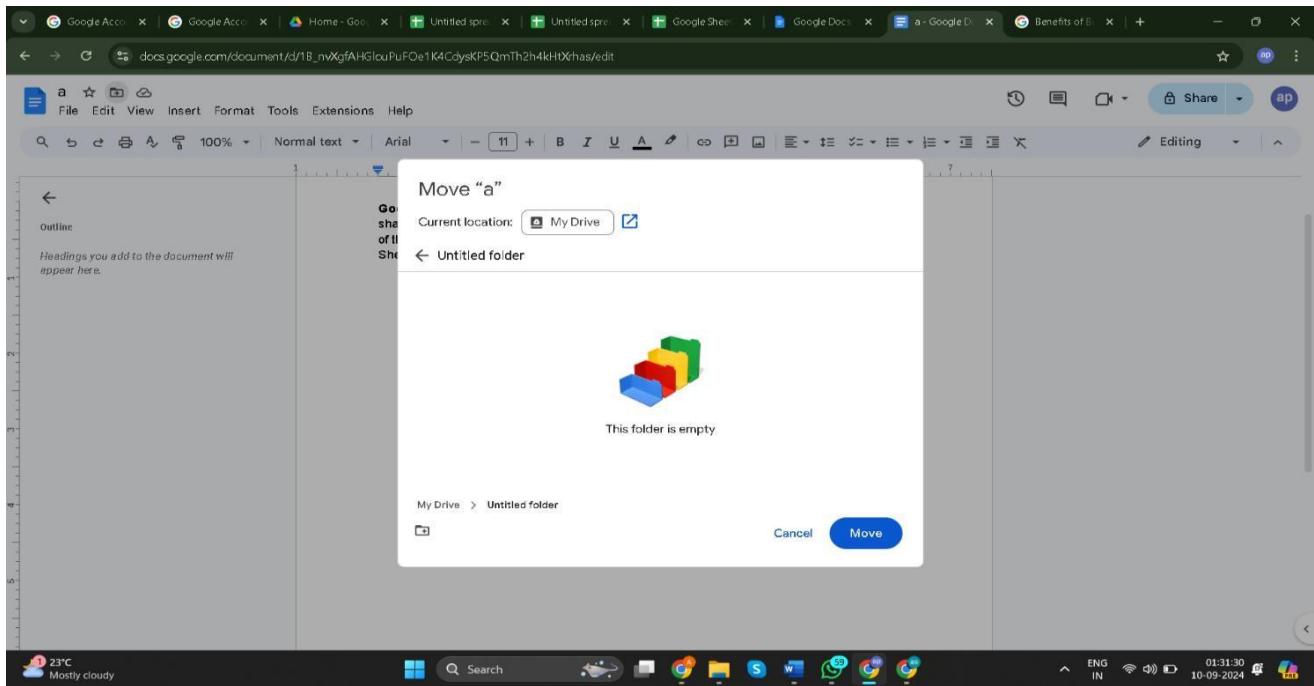
Step 11: click on “in my Drive” option:



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 interface. The left sidebar shows navigation options like Home, My Drive, Computers, Shared with me, Recent, Starred, Spam, Trash, and Storage. 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). The "Get Drive for desktop" button is visible at the bottom left.

### 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.

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Submitted By:

**Checked By : Ms.Swati.S.Badhe**

Sign :

Name :

Roll No :

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**Practical: 02**

**DOP:**

**DOC:**

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**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.

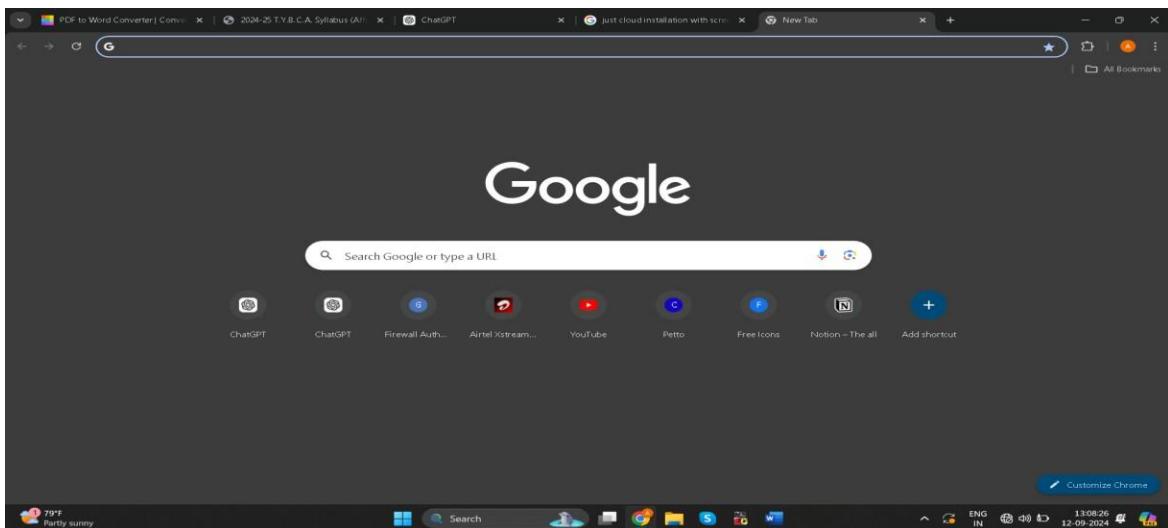
**Requirements:**

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.

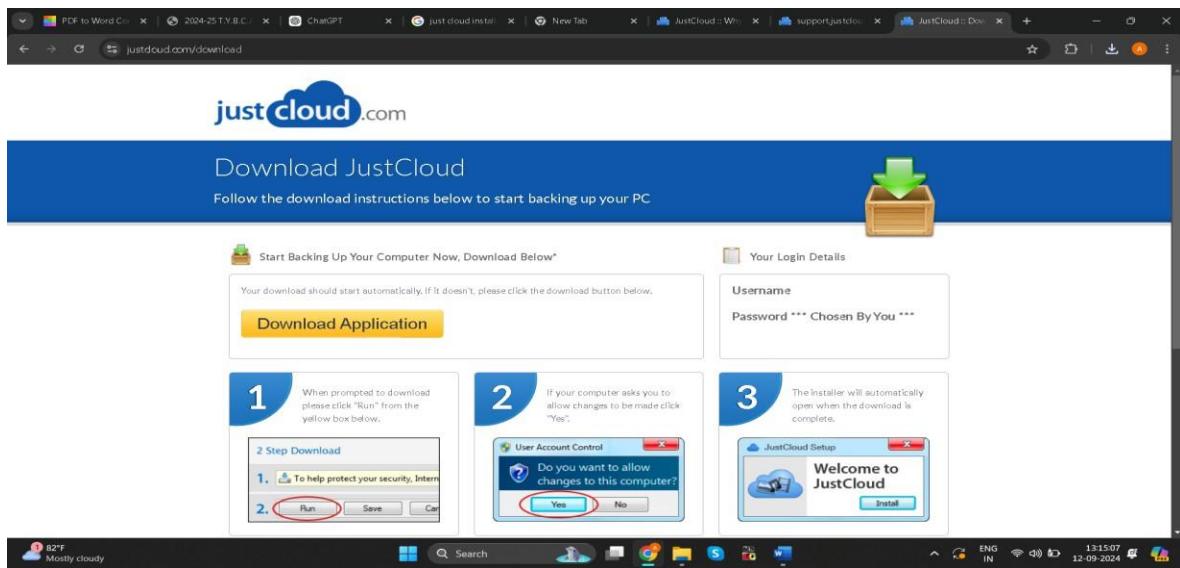
**Step-by-Step Instructions:**

**1. Download JustCloud:**

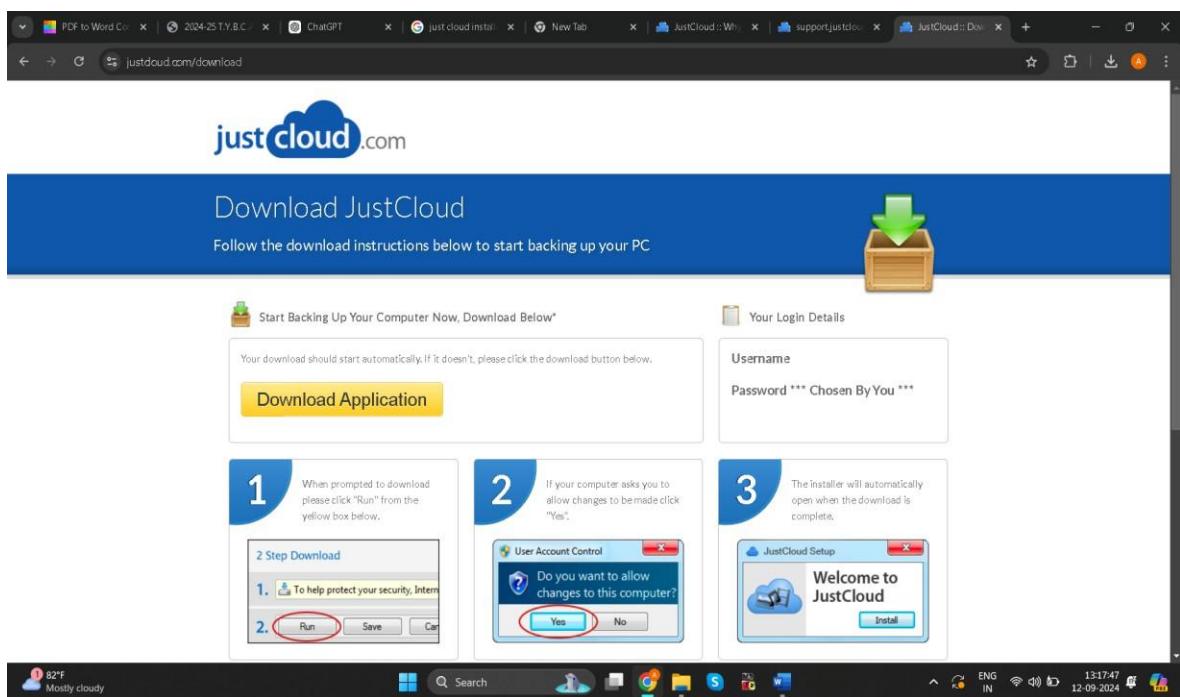
**Step 1:Open your browser** (e.g., Chrome, Firefox, or Edge).



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

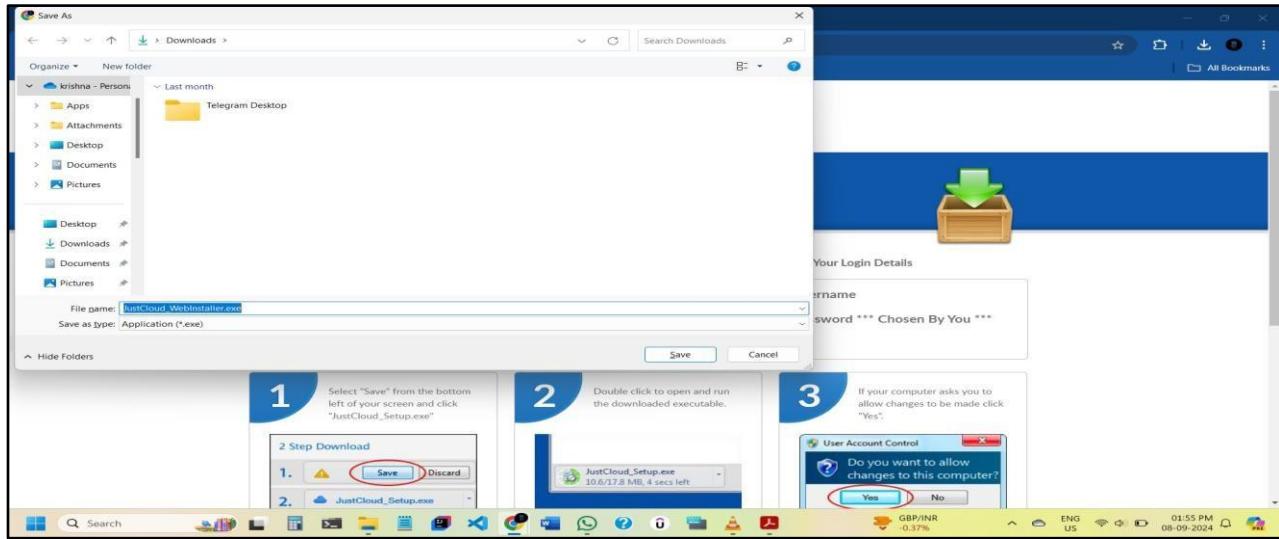


**Step 3 :** click on the Download Application download will automatically start



## 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).



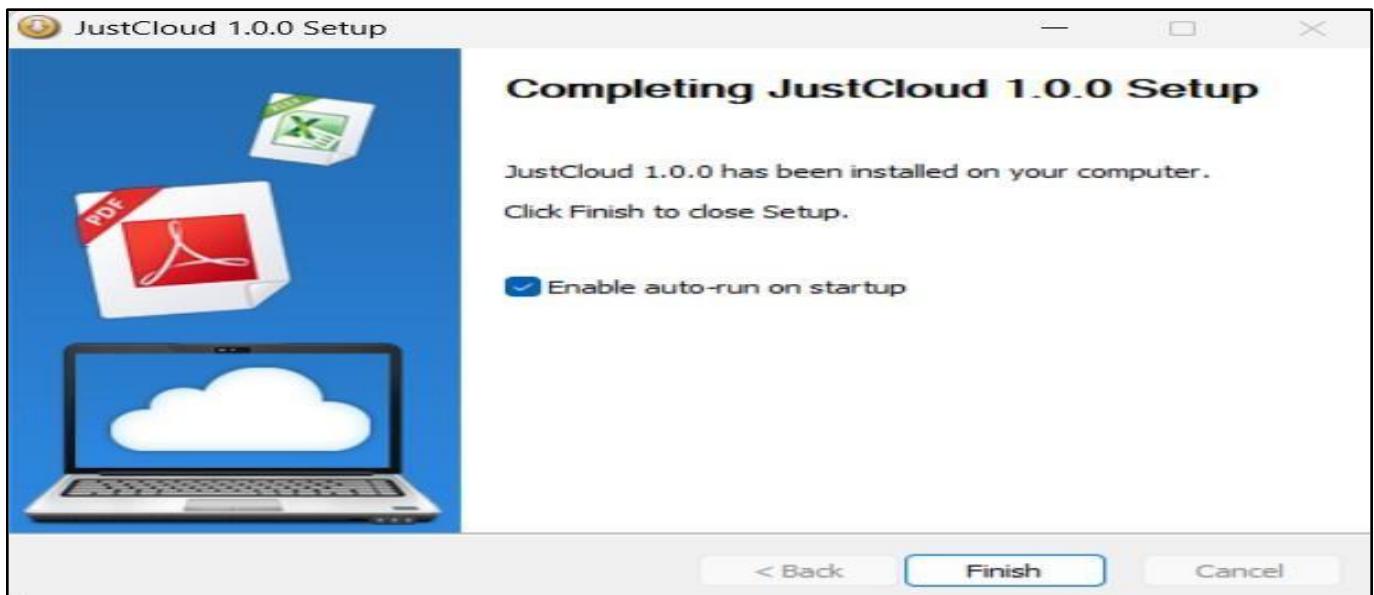
**Step 2:** Double-click the installer file with the left mouse button to start the installation process

**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". At the bottom right is a yellow "Next" button. At the very bottom of the screen 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 the "Password" field is a note: "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." There are two checkboxes: "I do not want to receive marketing emails" and "I agree to the Terms and Conditions and acknowledge receipt of the Privacy Notice.". At the bottom left is a link "Already have an account?". At the bottom right is a yellow "Next" button.



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 : Ms.Swati.S.Badhe**

Sign :

Name :

Roll No :

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**Practical: 03**

**DOP:**

**DOC:**

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**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.

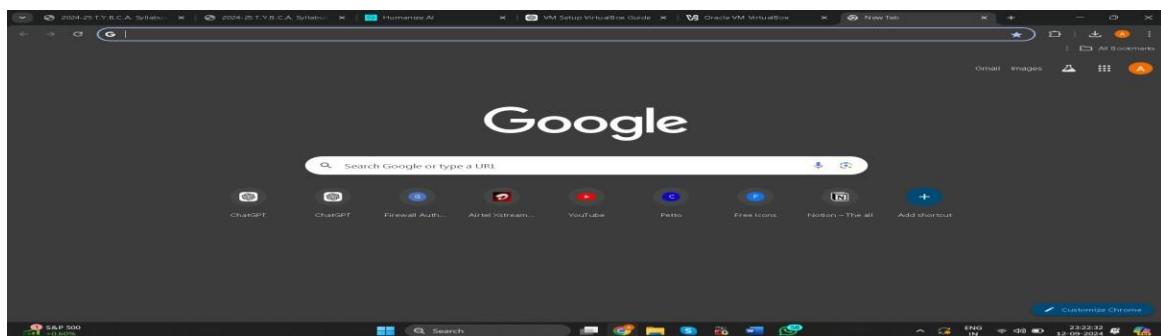
**Requirements:**

- 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)

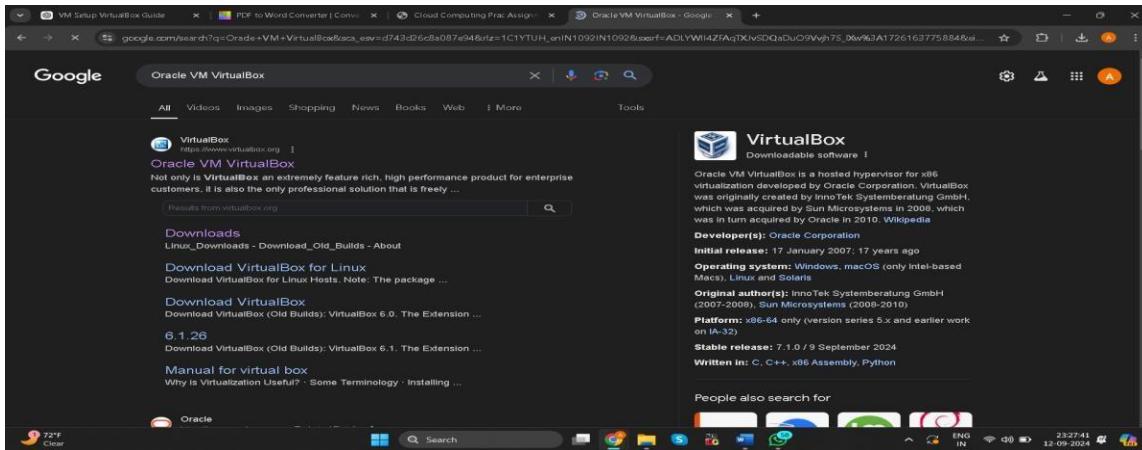
**Step-by-Step Instructions:**

**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

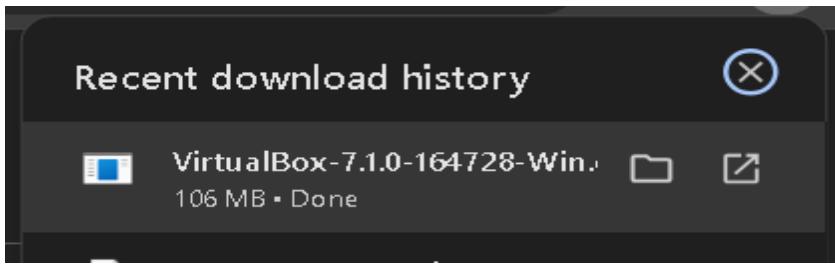


**Step 3:** click on the Download VirtualBox 7.0. 20

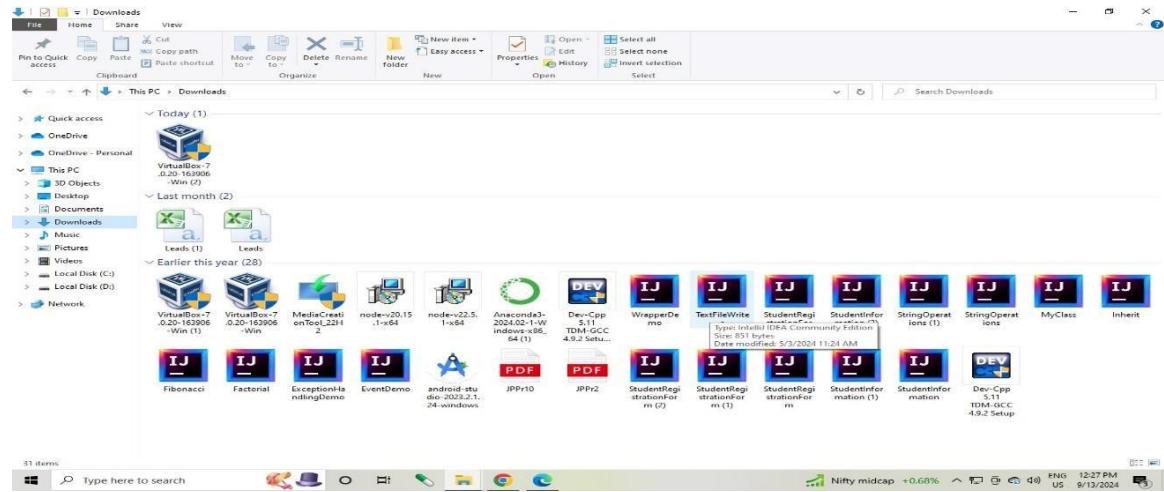
**Step 4:** Choose your operating system (Windows, macOS, Linux) header select your "VirtualBox Platform Packages" and click the corresponding link.



**Step 5:** Wait for Downloading file



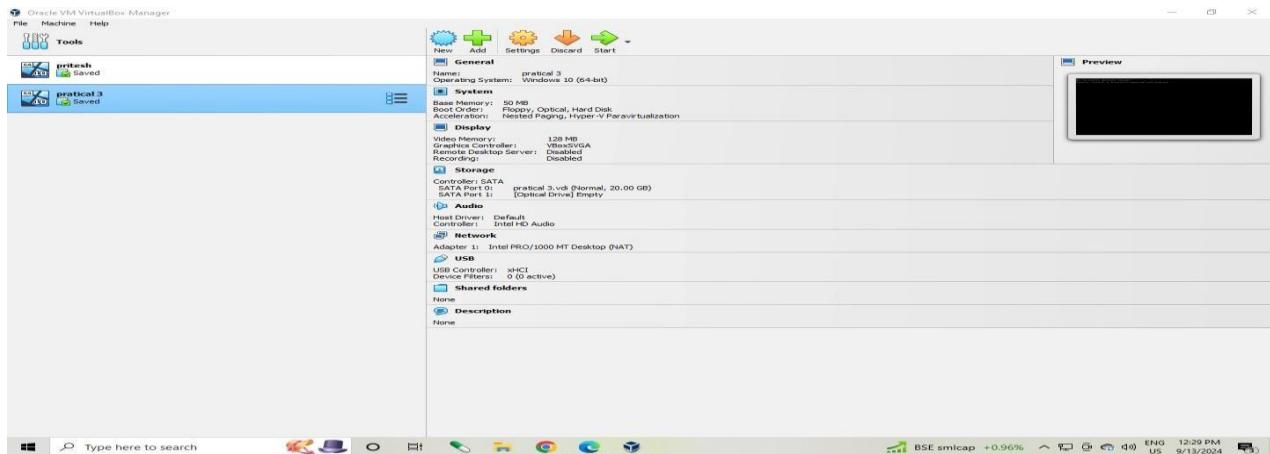
**Step 6:** Once the file is downloaded, go to your Downloads folder. Look for the Just installer file



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

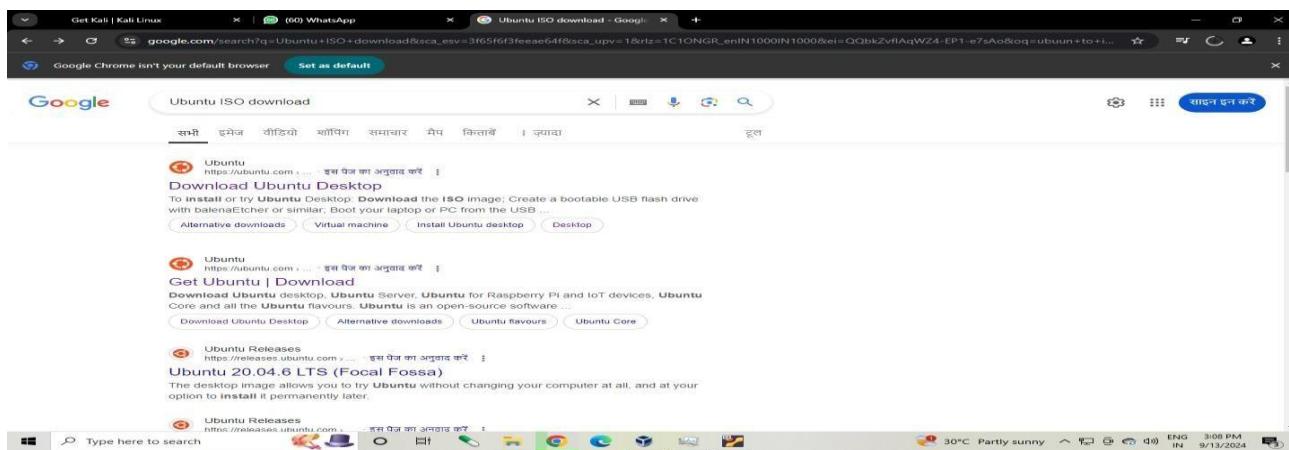


**Step 8:** After installation is complete, launch VirtualBox.

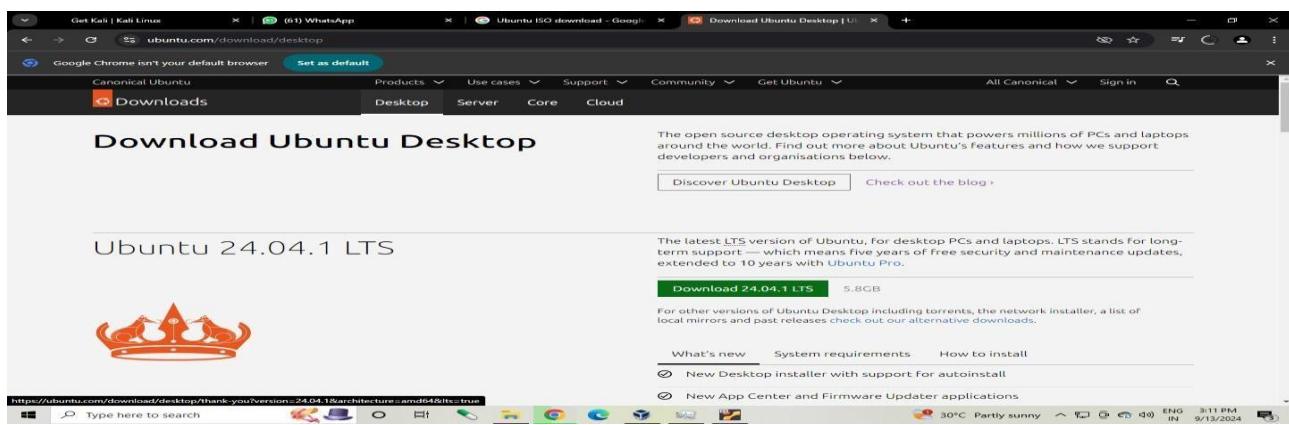


## 2. Download an Operating System ISO

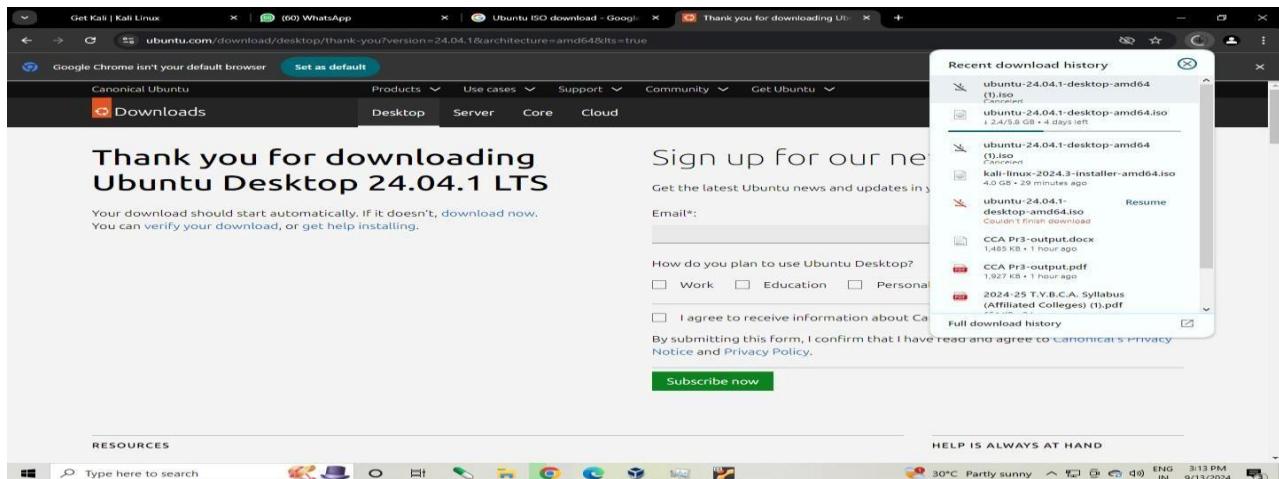
**Step 1:** Select an OS: Visit the official website of your preferred operating system (e.g., Ubuntu)



**Step 2:** click on the Download 24.04 LTS

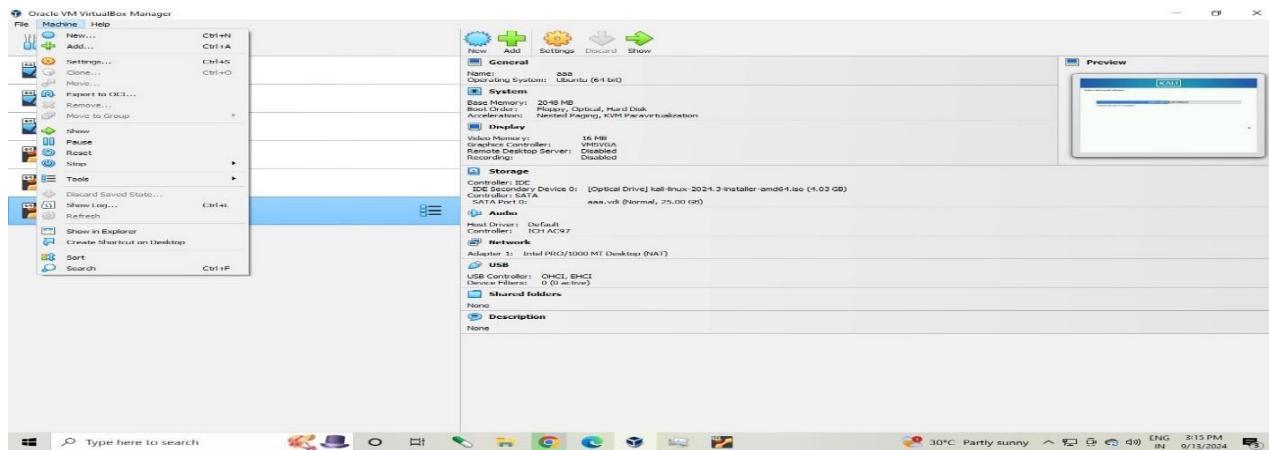


## Step 3 : Downloading is started



### 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.

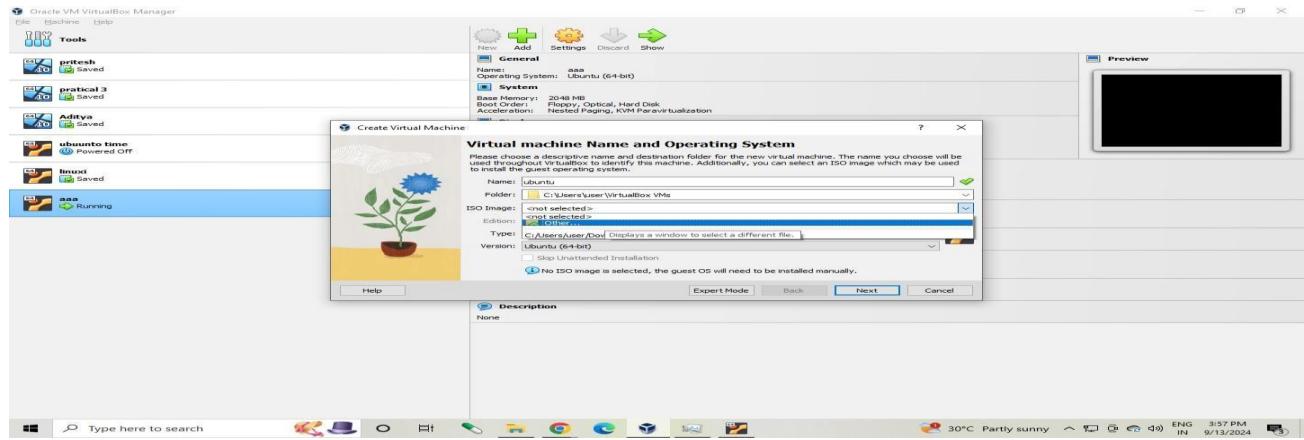


**Step 2 :** Click on "New" button

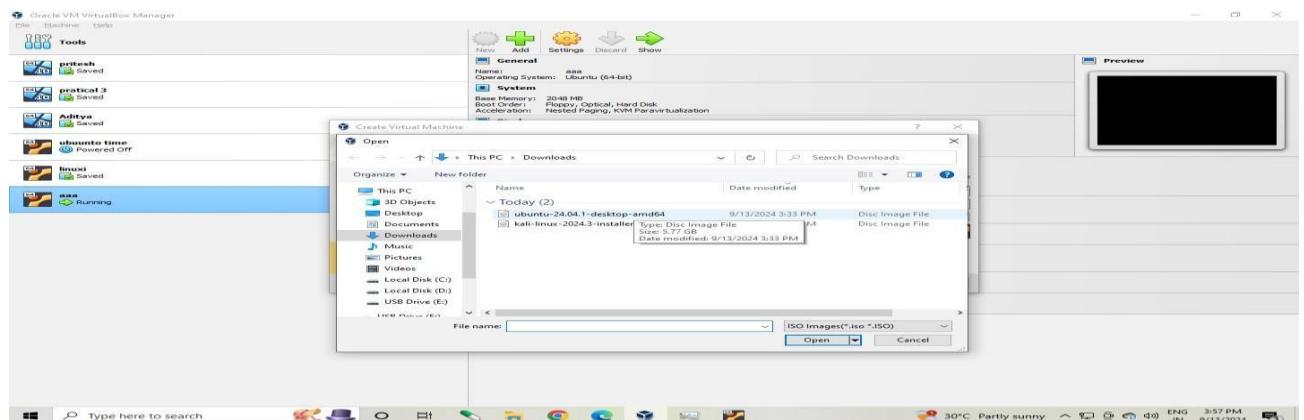


**Step 3:** A pop-up window titled "Create Virtual Machine" will appear

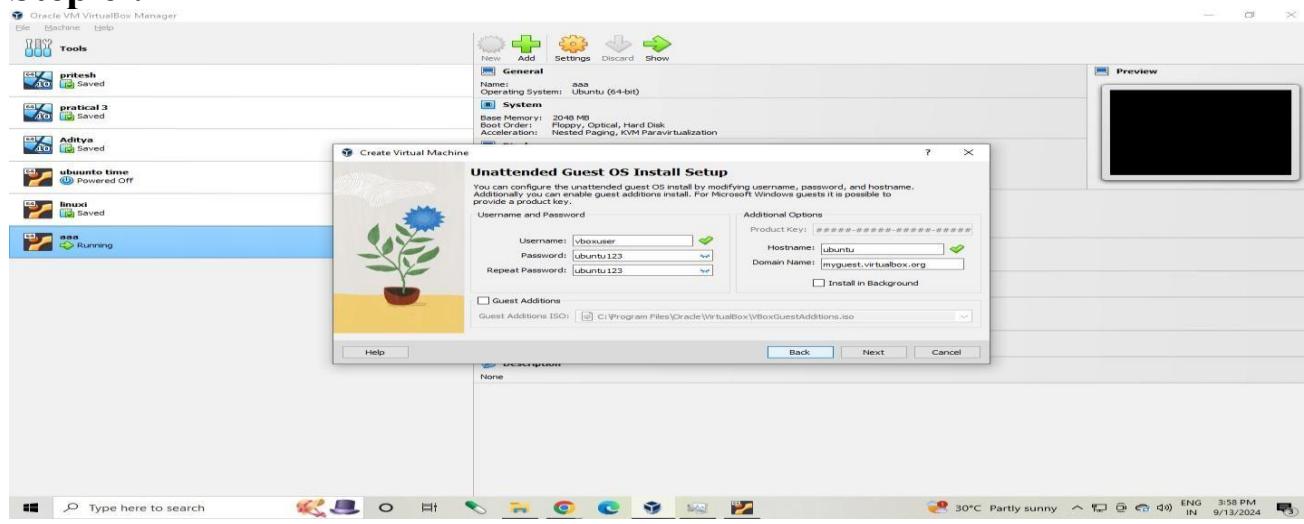
**Step 4:** In the "Name" field, give a name to your VM.



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



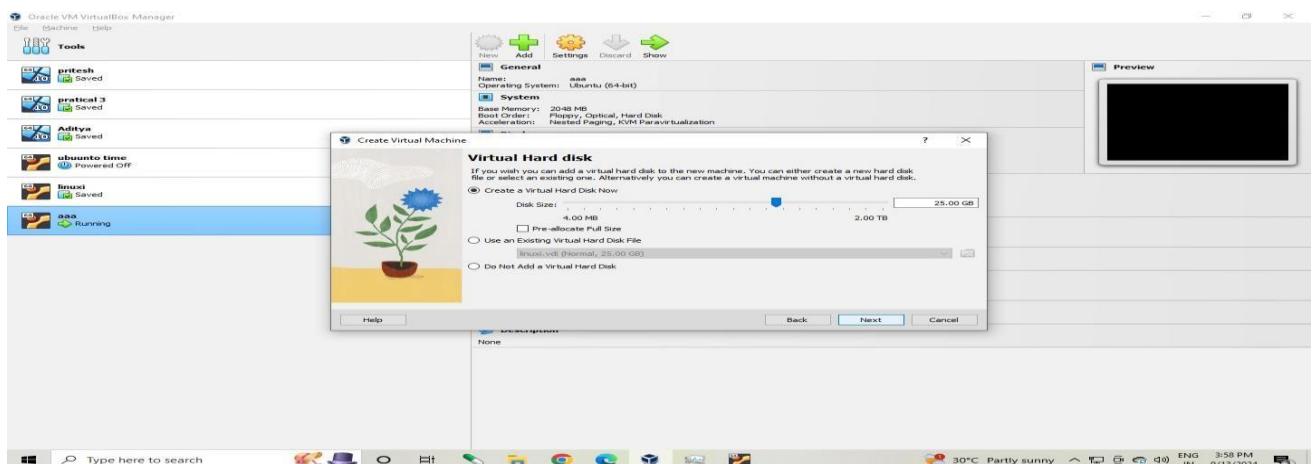
**Step 6 :** Set the Username and Password Click "Next."



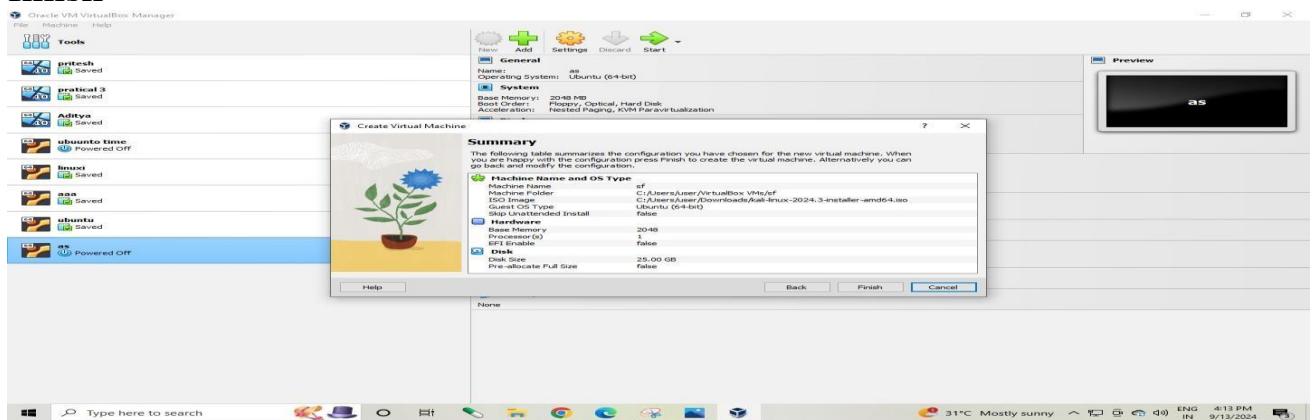
**Step 7: Allocate Memory** (Select the size of memory & no of CPU cores you want to allocate to your VM) Click "Next."



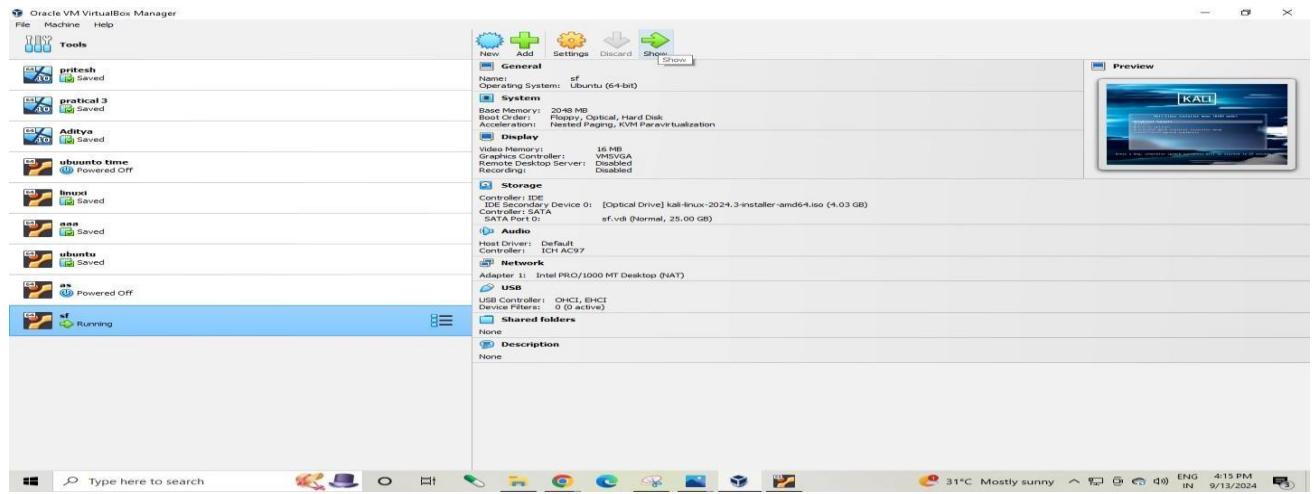
**Step 8: Create a Virtual Hard Disk** (Select the size of storage you want to allocate) Click "Next."



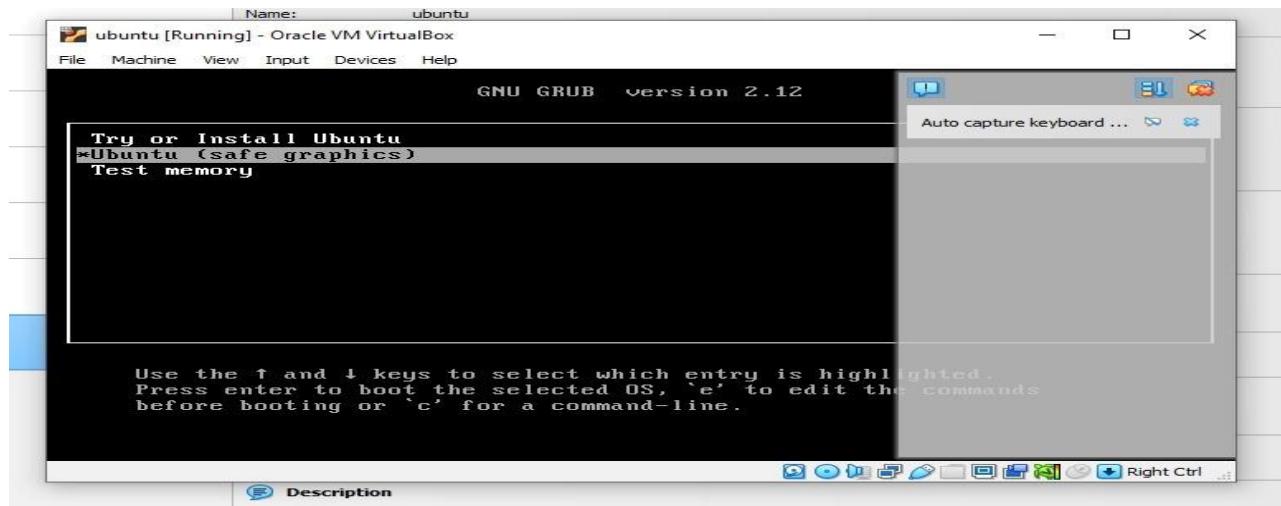
**Step 9: Summary**(Verify if the information about your VM is correct ) click on finish



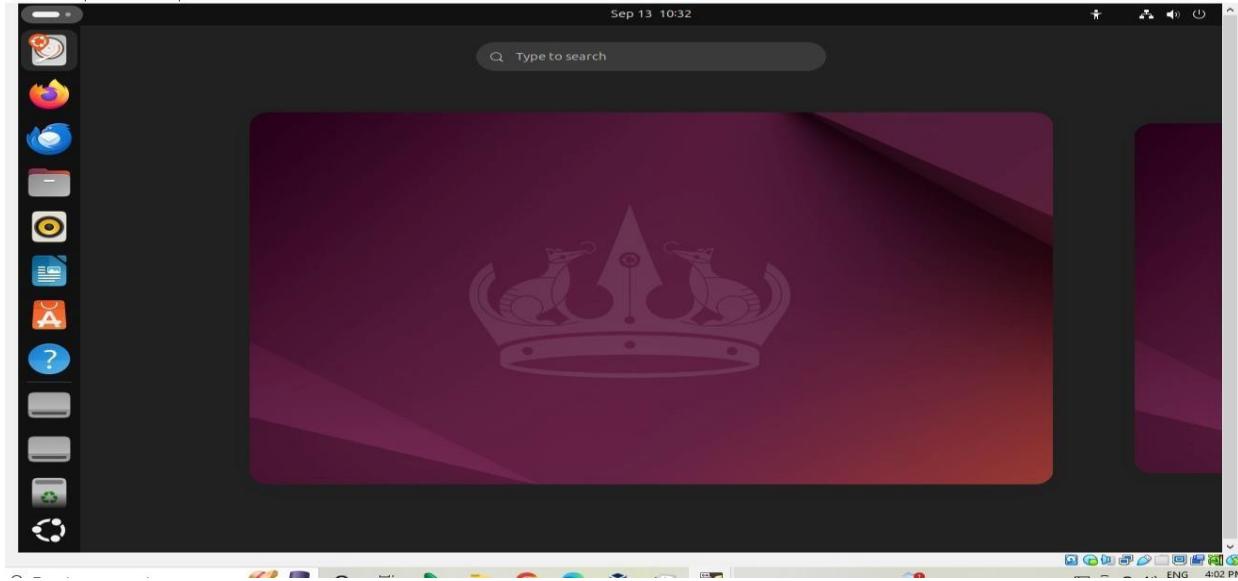
**Step 10:** Start the VM(In the main VirtualBox window, click the Start button at the top)



**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: Ms.Swati.S.Badhe**

**Sign :**

**Name :**

**Roll No :**

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**Practical: 04**

**DOP:**

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**DOC:**

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**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:

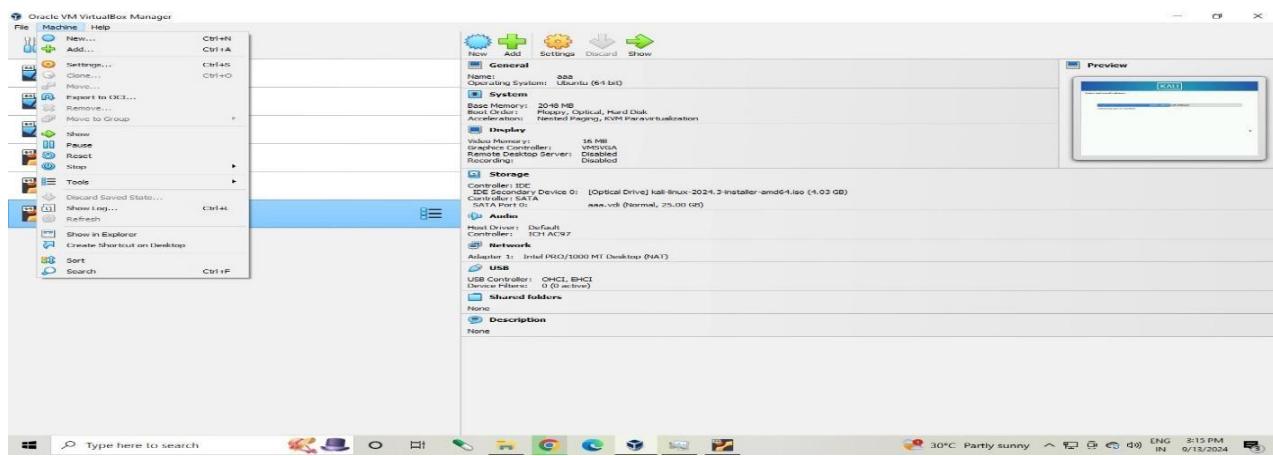
**2) Host OS: Windows/macOS/Linux**

- 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.

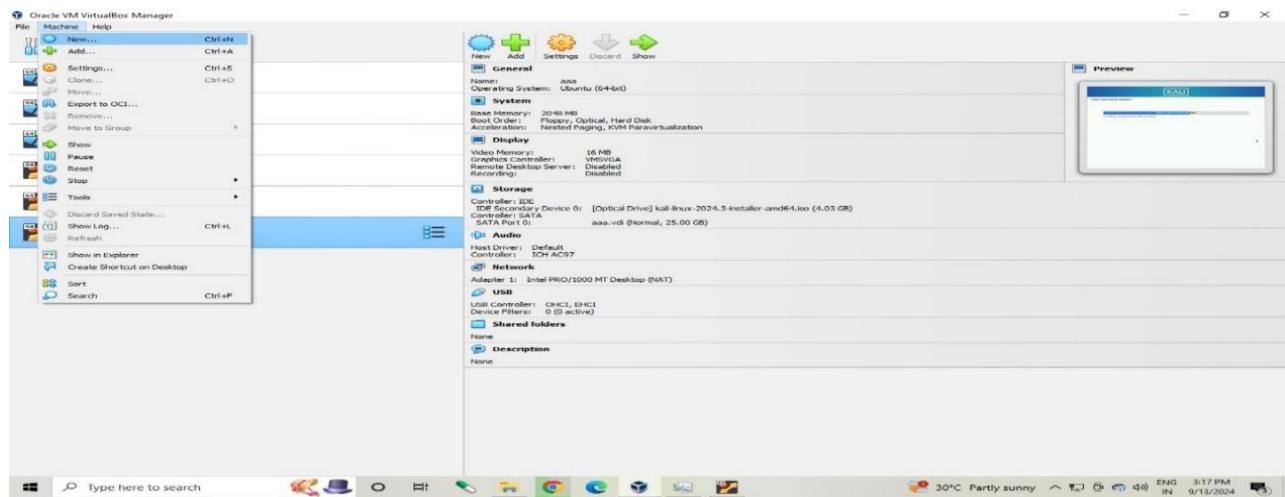
## Step-by-Step Instructions:

### 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.

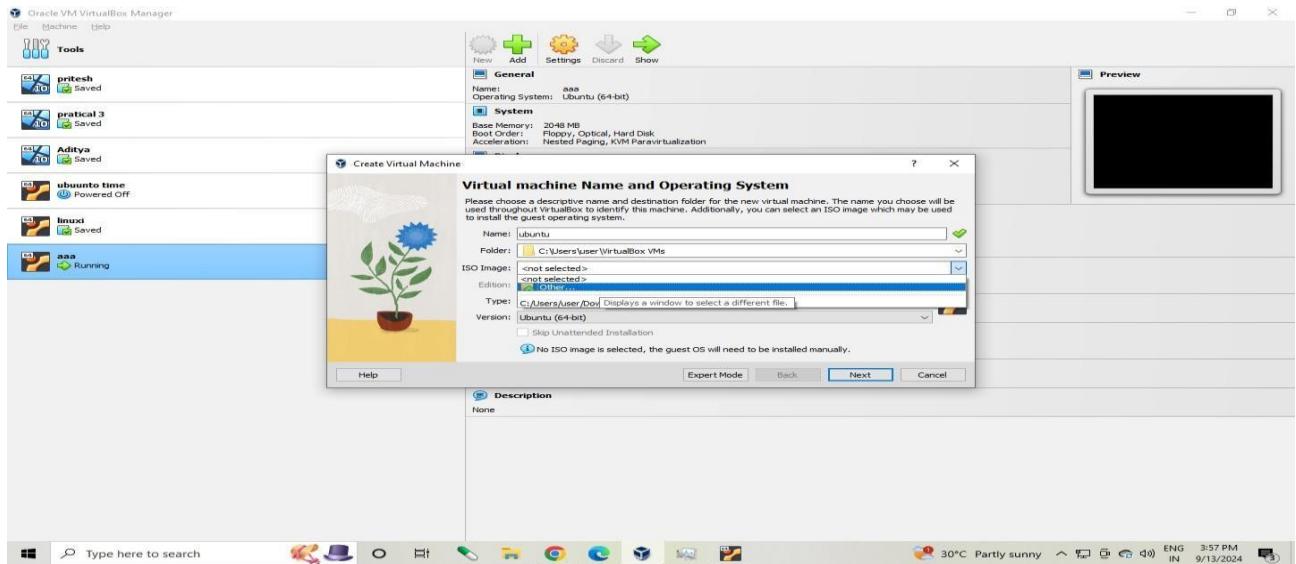


**Step 2 :** Click on "New" button

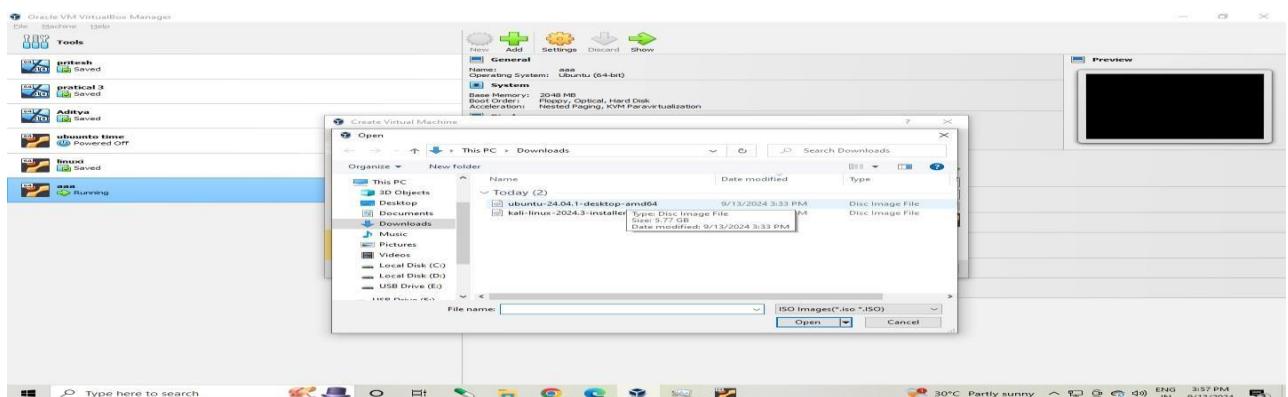


**Step 3:** A pop-up window titled "Create Virtual Machine" will appear

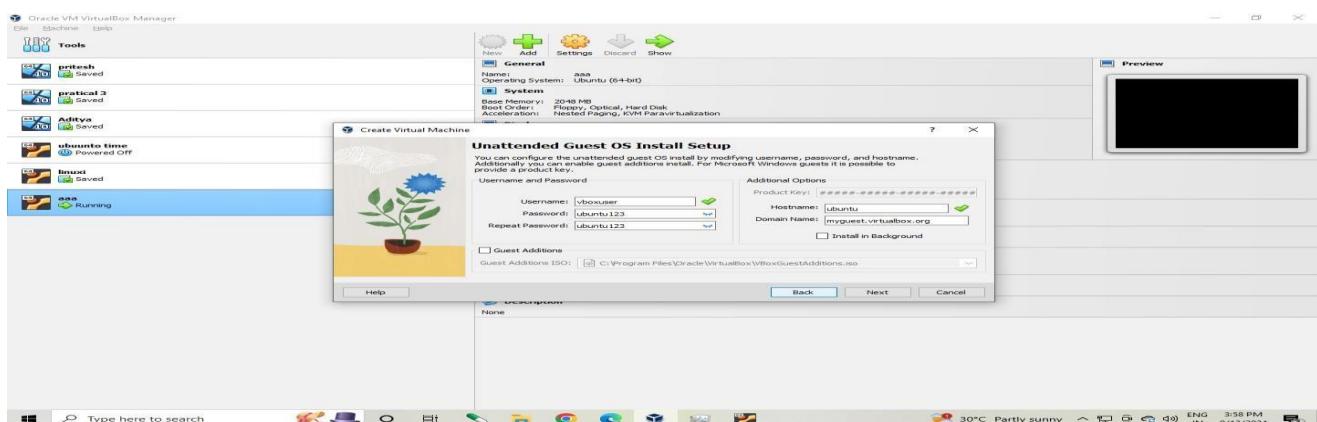
**Step 4:** In the "Name" field, give a name to your VM.



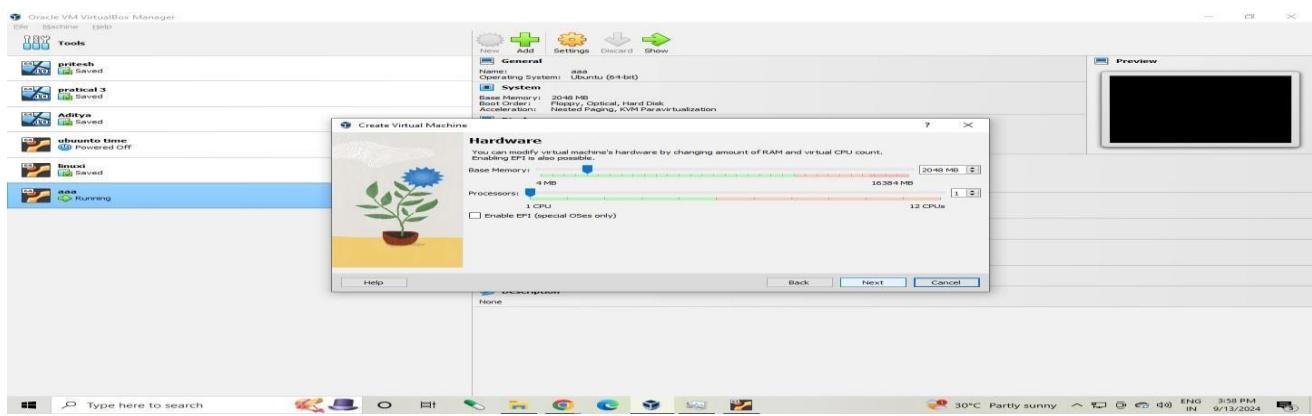
## Step 5: Select the Type of the OS (e.g ubuntu, Linux, Windows)



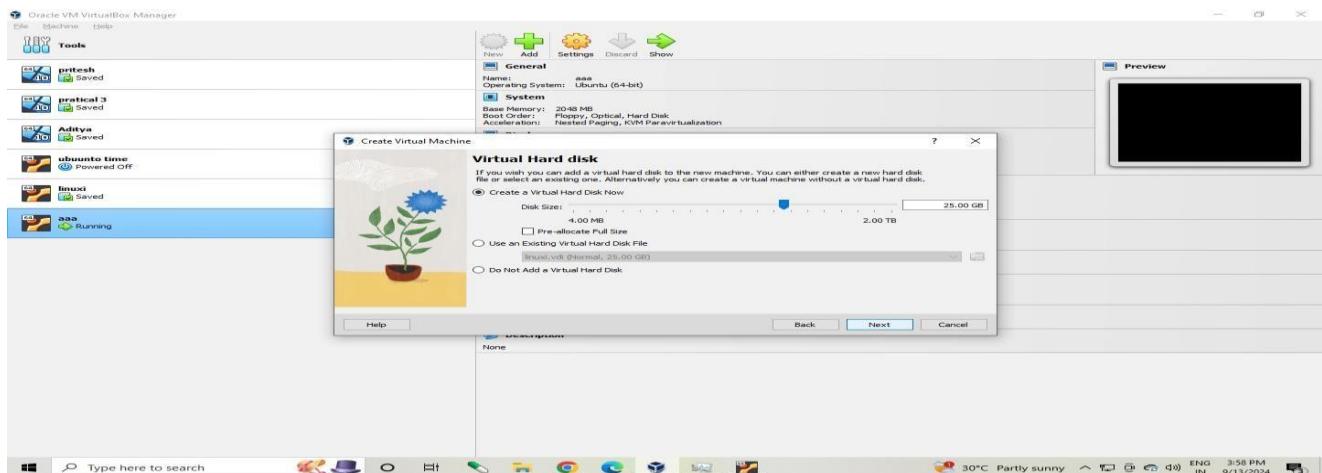
## Step 6 : Set the Username and Password Click "Next."



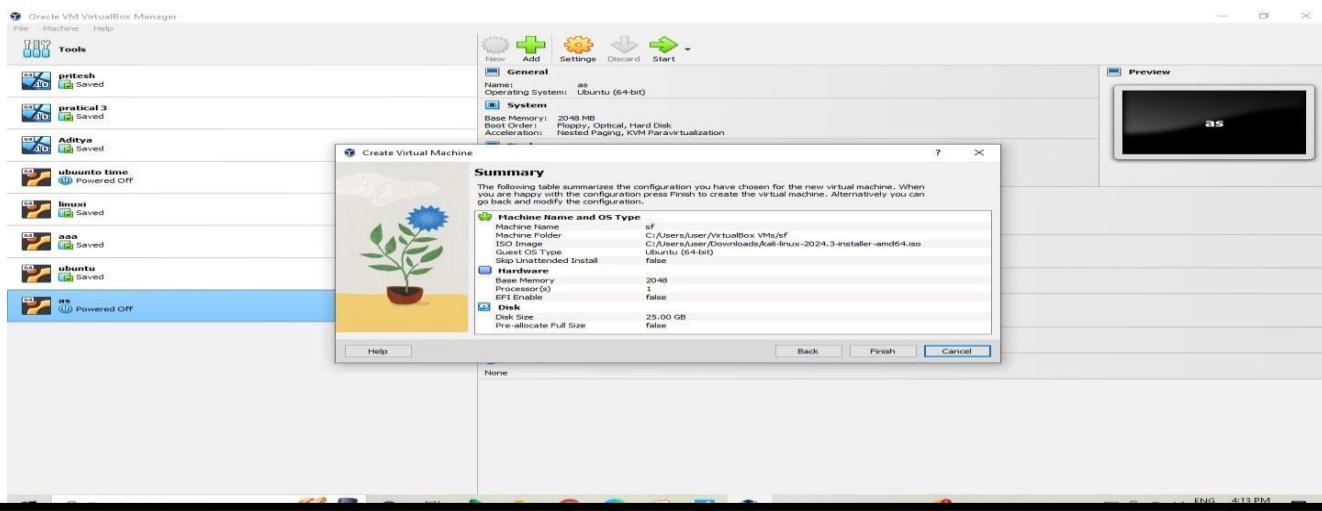
## Step 7: Allocate Memory (Select the size of memory & no of CPU cores you want to allocate to your VM) Click "Next."



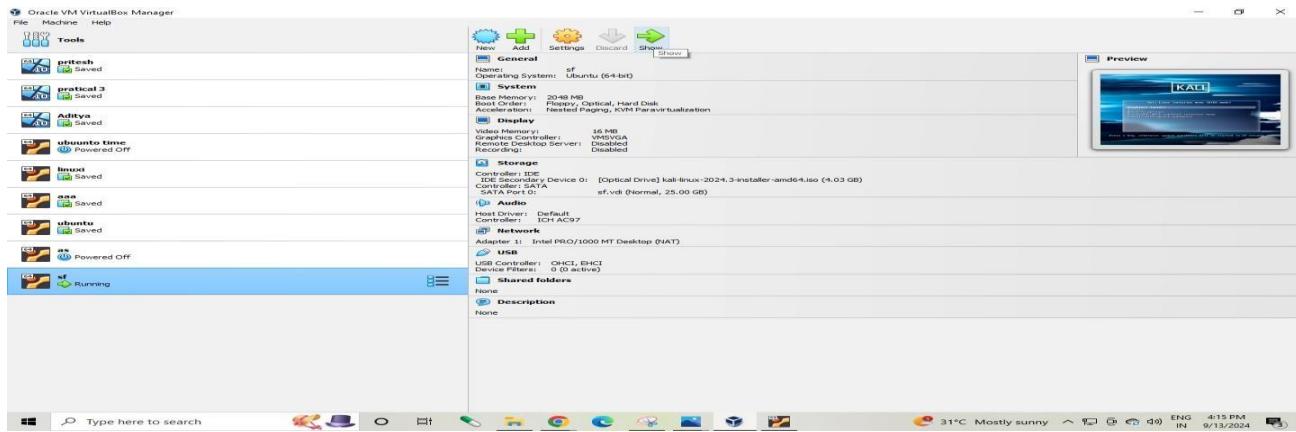
**Step 8:** Create a Virtual Hard Disk (Select the size of storage you want to allocate) Click "Next."



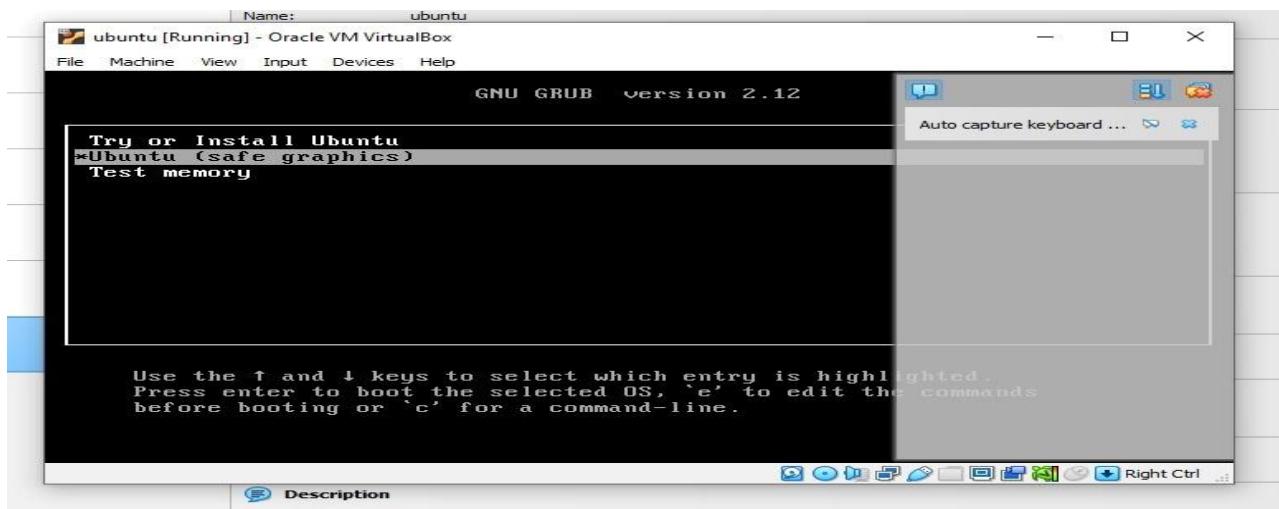
**Step 8:** Summary(Verify if the information about your VM is correct ) click on finish



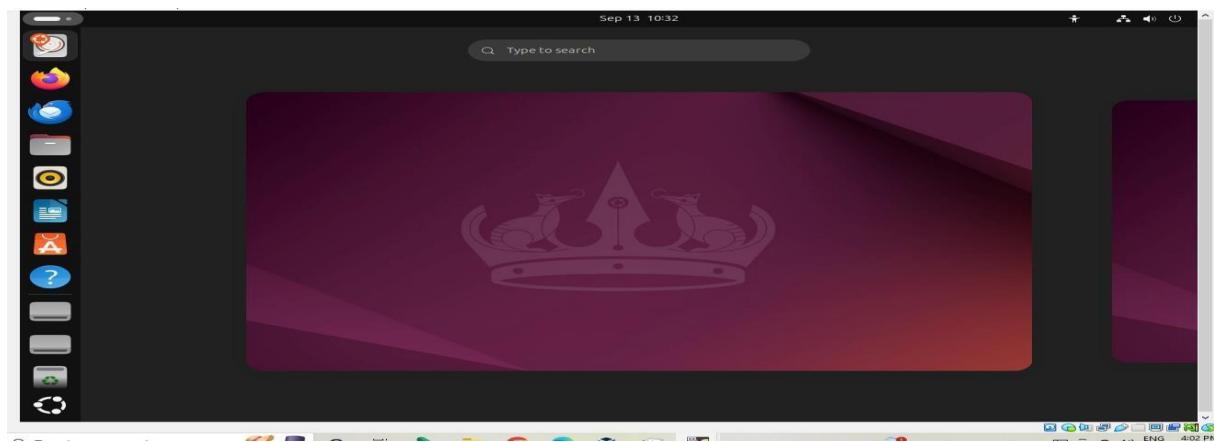
**Step 8:** Start the VM(In the main VirtualBox window, click the Start button at the top)



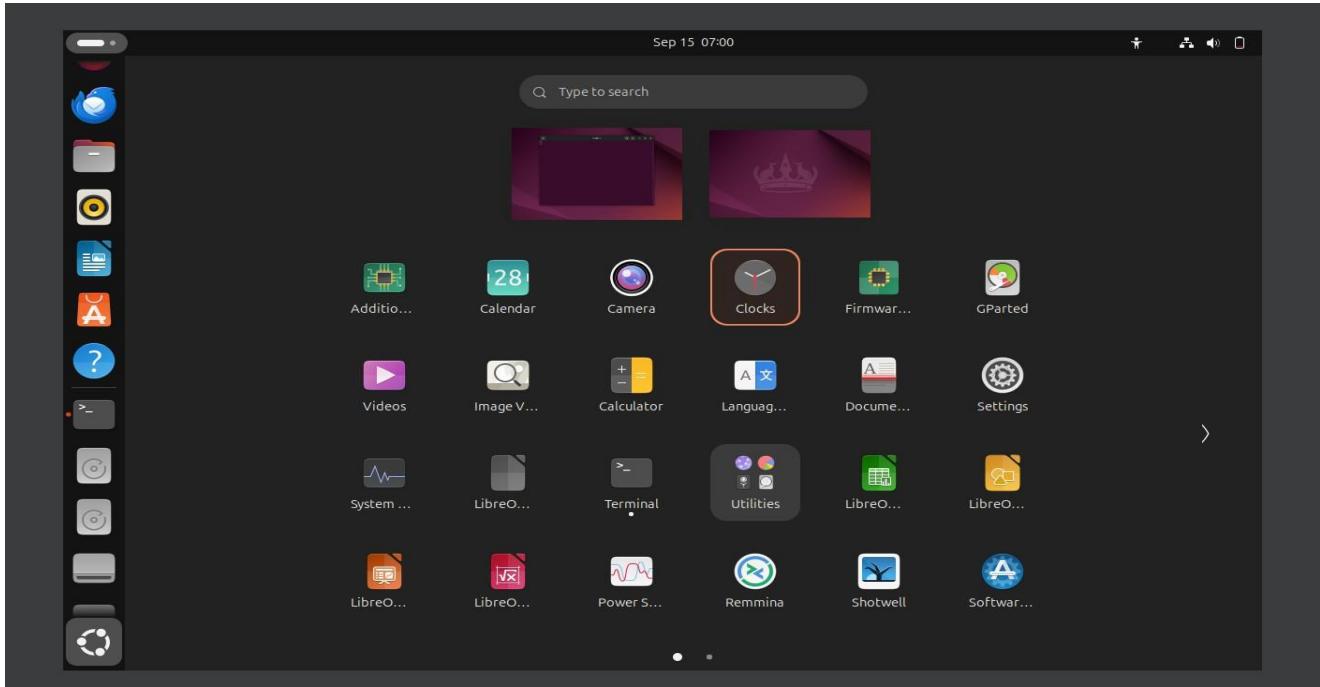
**Step 8:** Now you need to setup your OS click on the Ubuntu(safe Graphics)



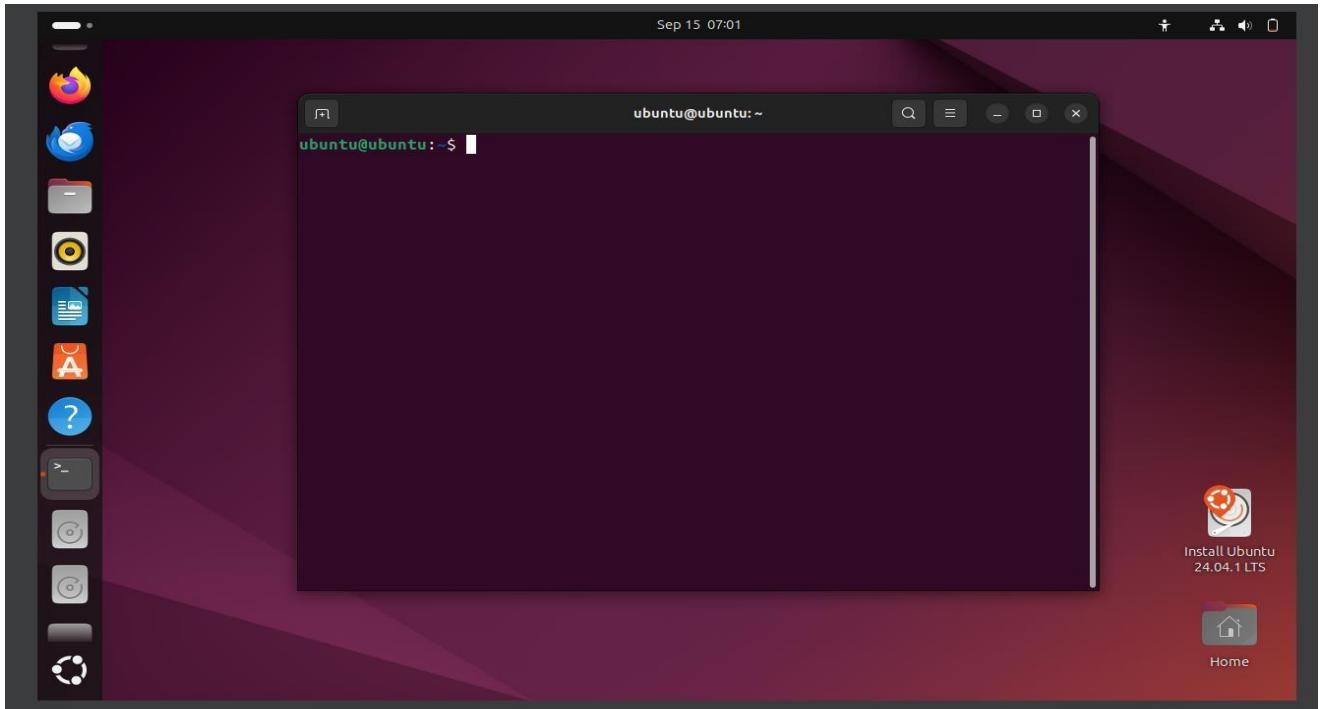
**Step 9:** now you can used the ubuntu



## 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:~$ 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
```

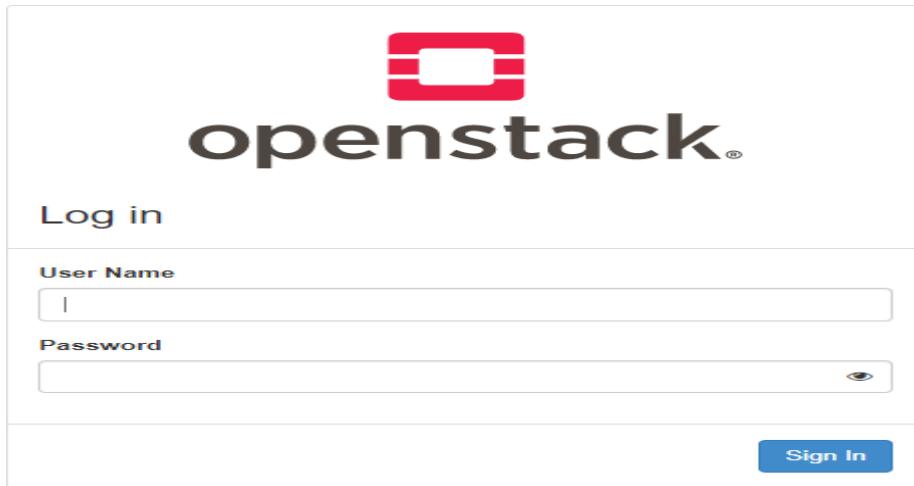
## Step 5: Start DevStack Installation

Run the stack.sh script to install OpenStack:

```
./stack.sh
```

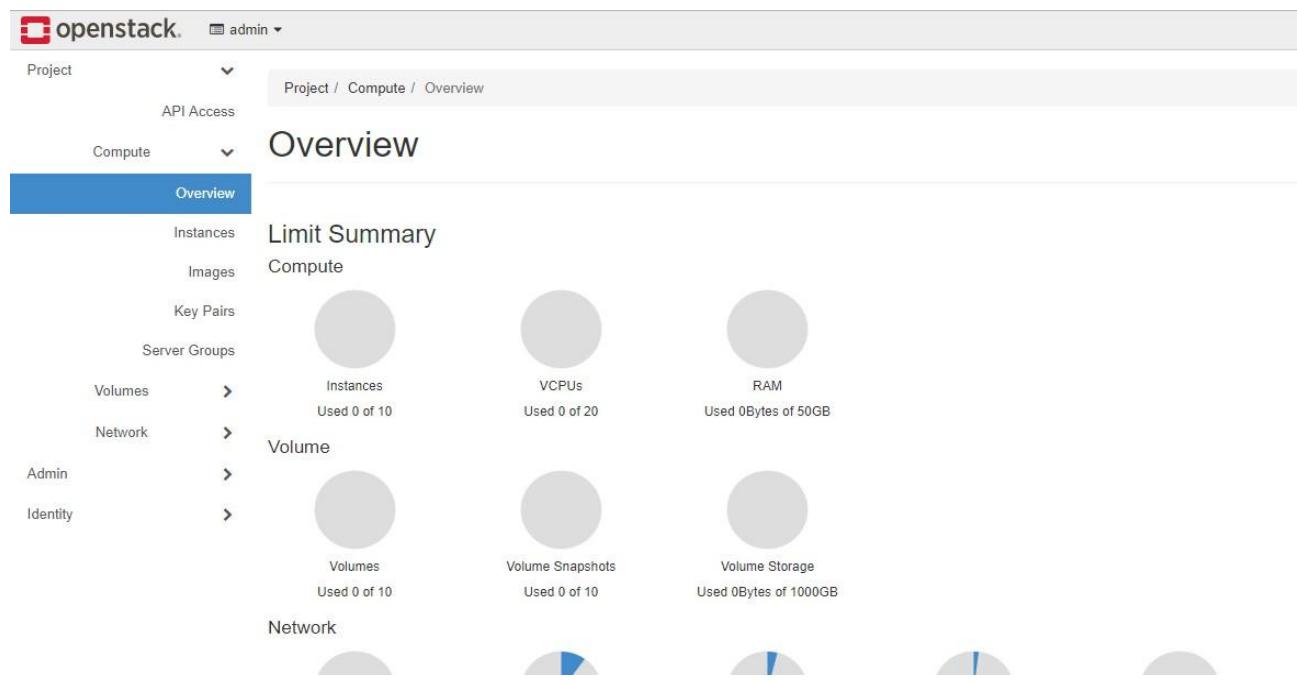
## Step 6: Accessing OpenStack on a web browser:

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 with three white horizontal bars of decreasing height from left to right, followed by the word "openstack" in a lowercase sans-serif font with a registered trademark symbol. Below the logo is the word "Log in" in a dark blue font. There are two input fields: "User Name" with a placeholder of a single vertical bar, and "Password" with a placeholder of a single vertical bar and an "eye" icon to toggle 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: Ms.Swati.S.Badhe**

**Sign :**

**Name :**

**Roll No :**

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Bachelor Of Computer Application (B.C.A)**

**Practical: 05**

**DOP:**

**DOC:**

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**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.

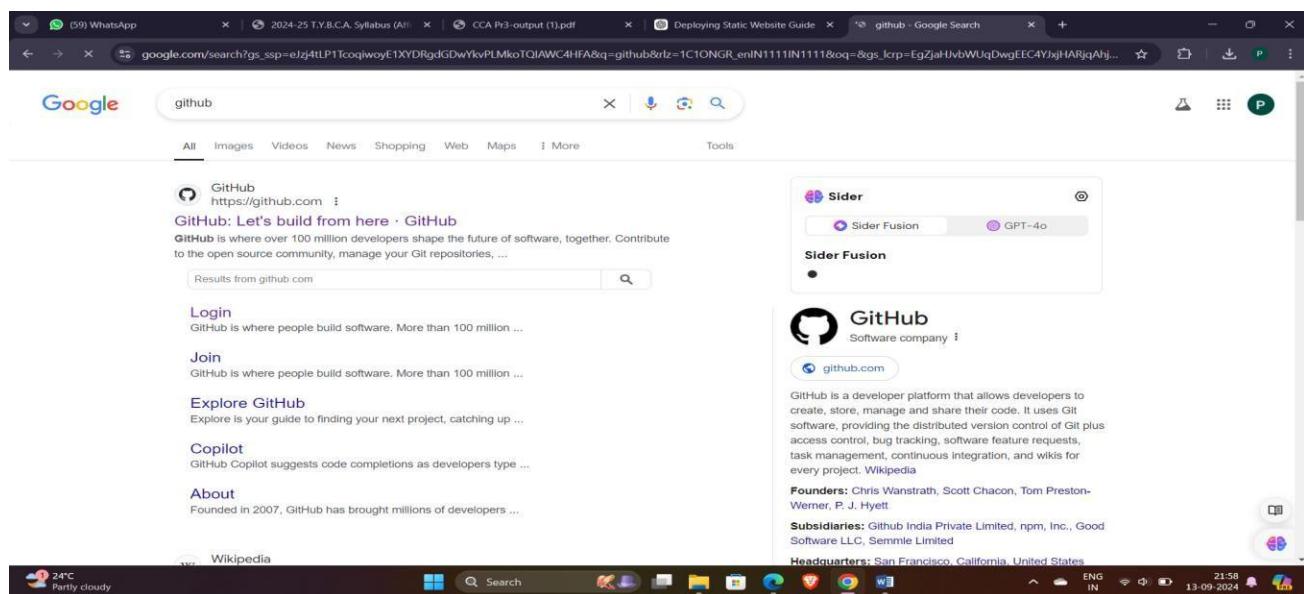
**Requirements:**

- 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)

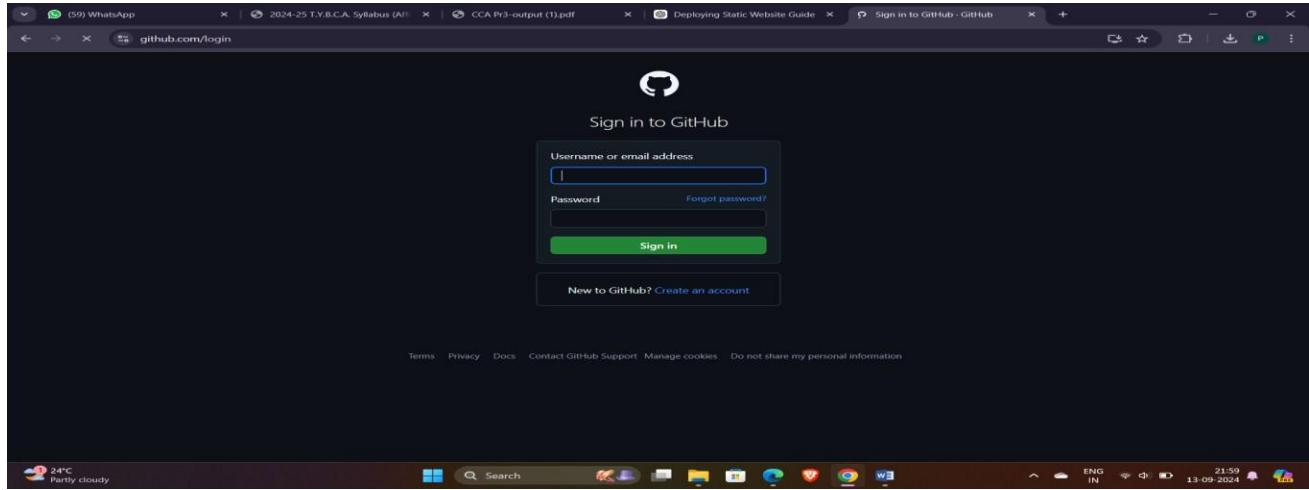
**Step-by-Step Instructions:**

**1. Create a GitHub Repository**

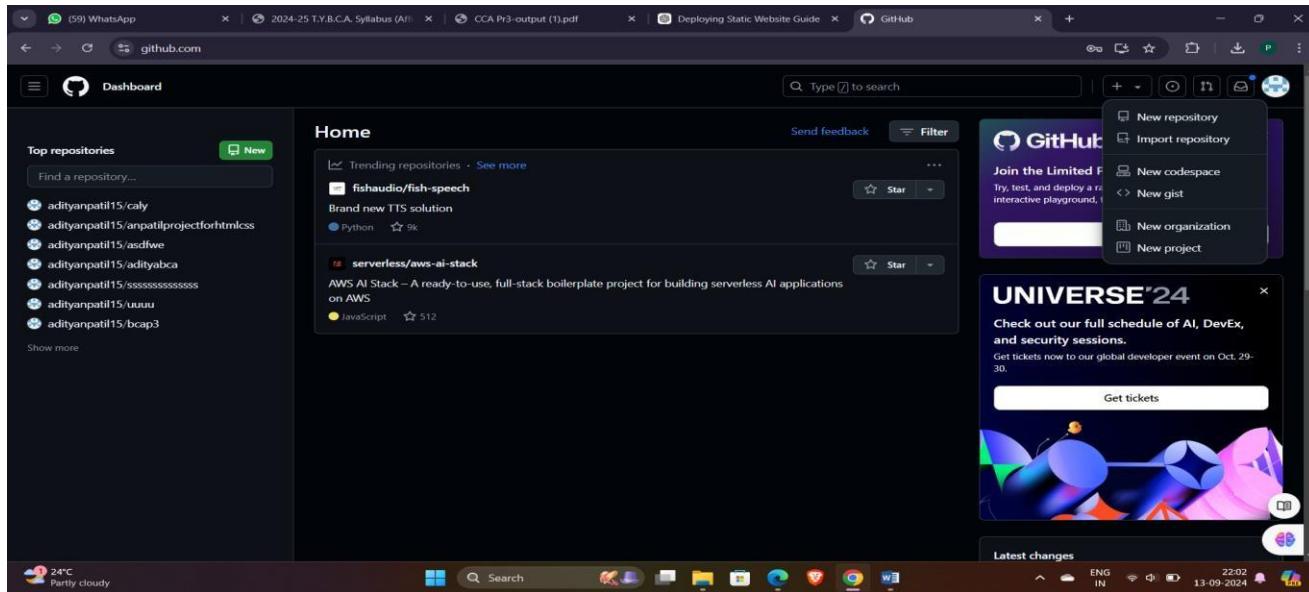
**Step 1: Search for GitHub in a browser.**



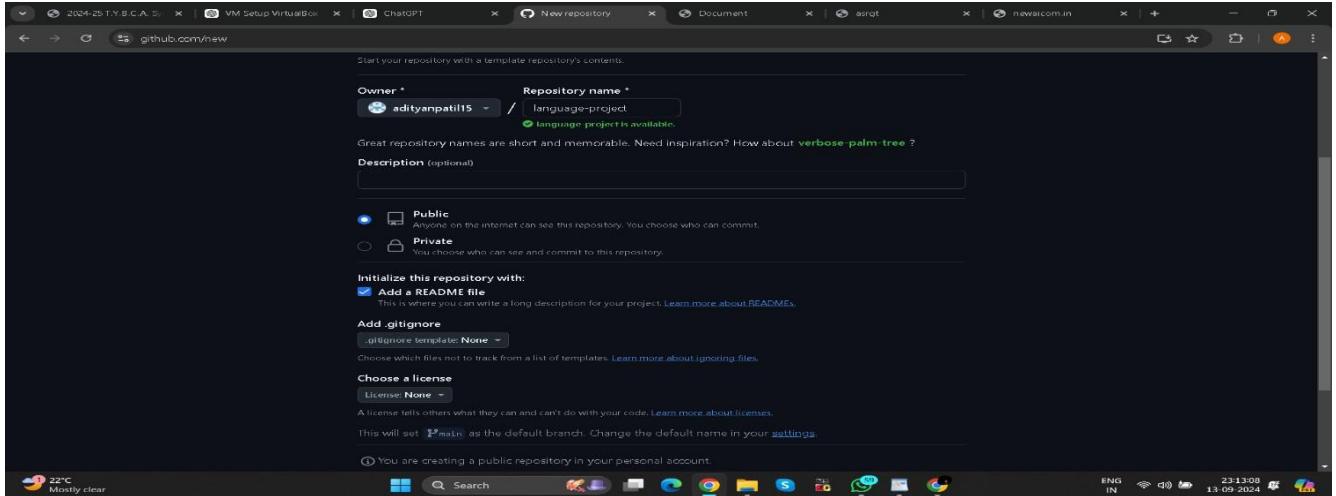
## Step 2: Log in to your GitHub account.



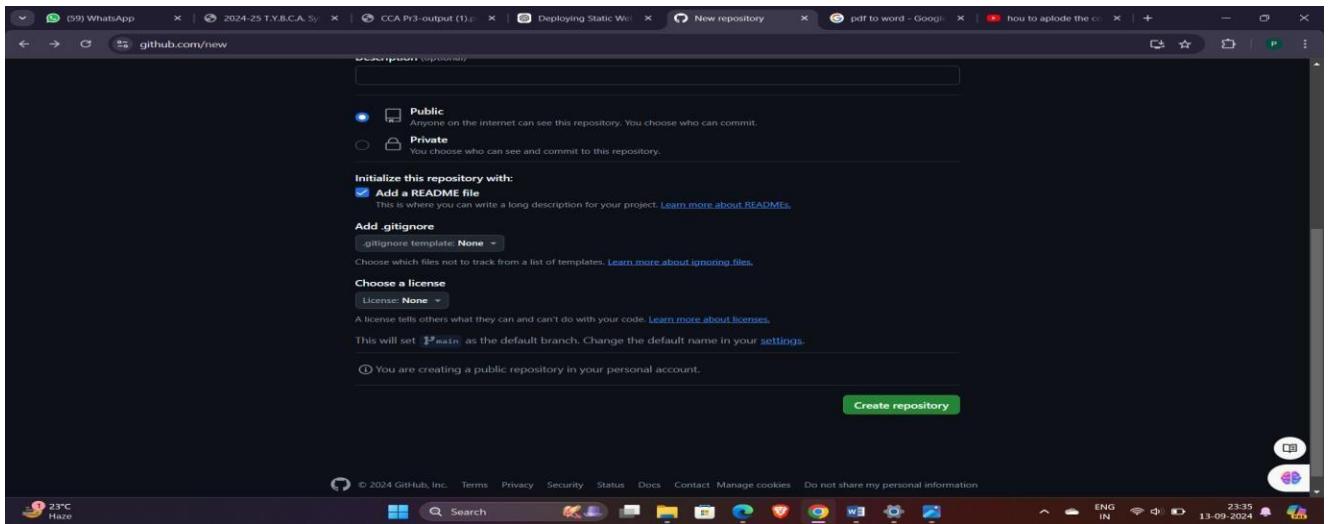
## Step 3: On the top-right corner, click the + icon, then select New repository from the dropdown.



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

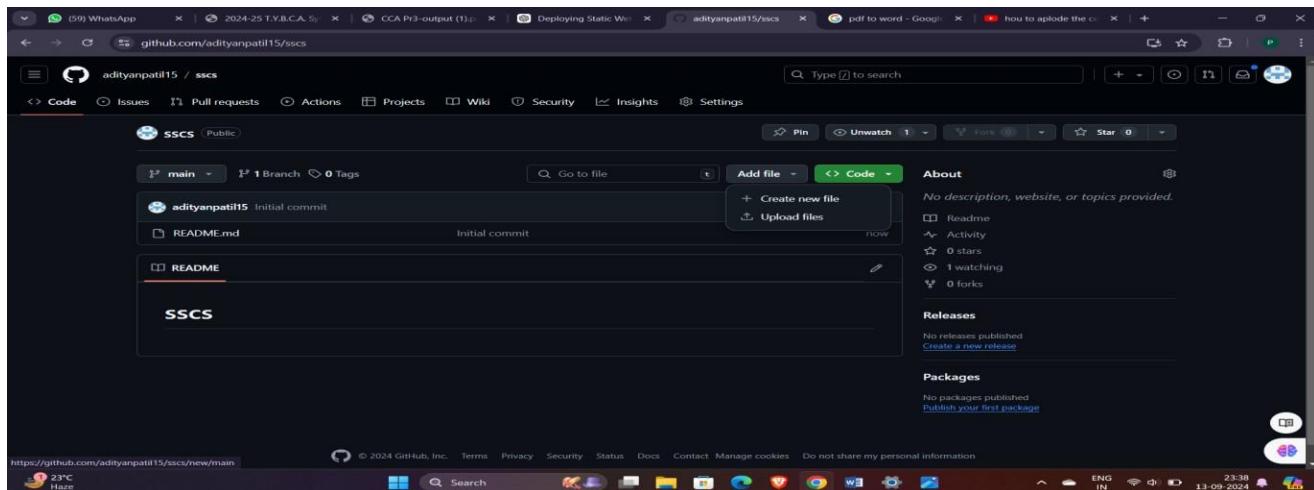


**Step 5:** Click the "Create repository" button (bottom of the form).

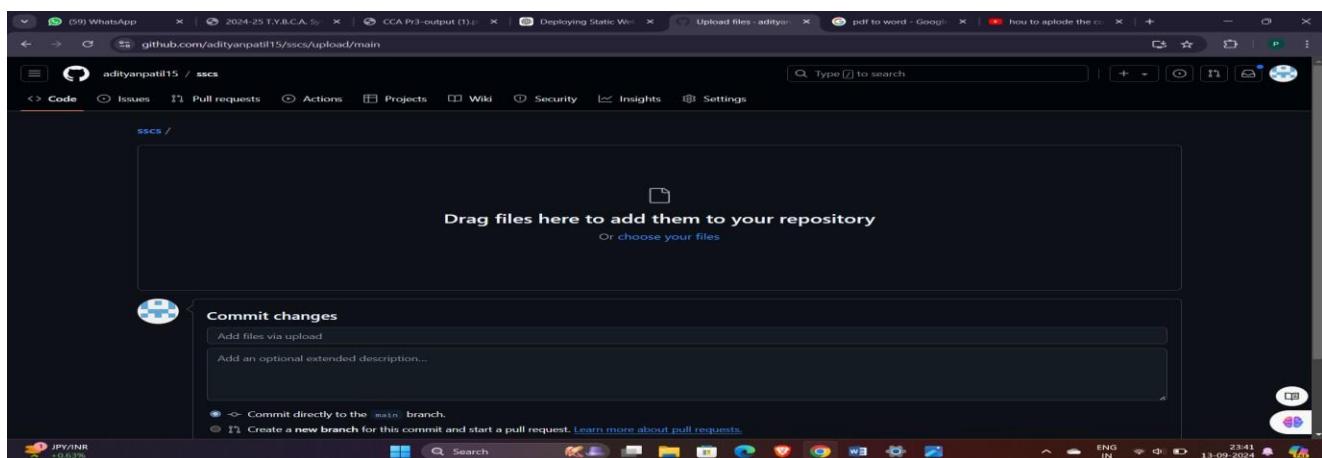


## 2: Upload Your Website Files

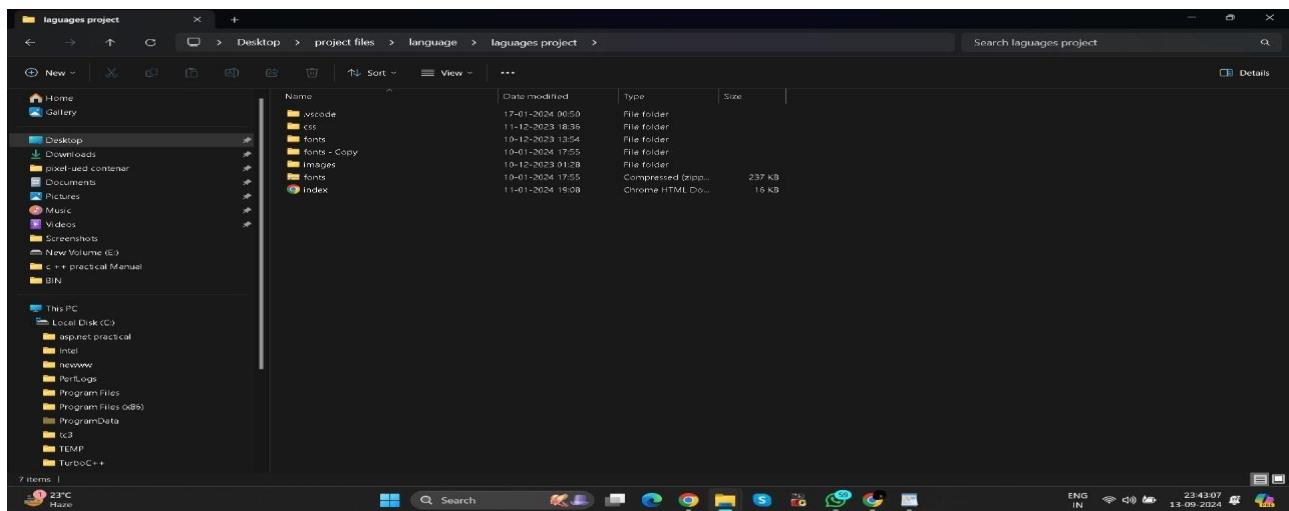
**Step 1:** Click the "Add file" button (top-right side).



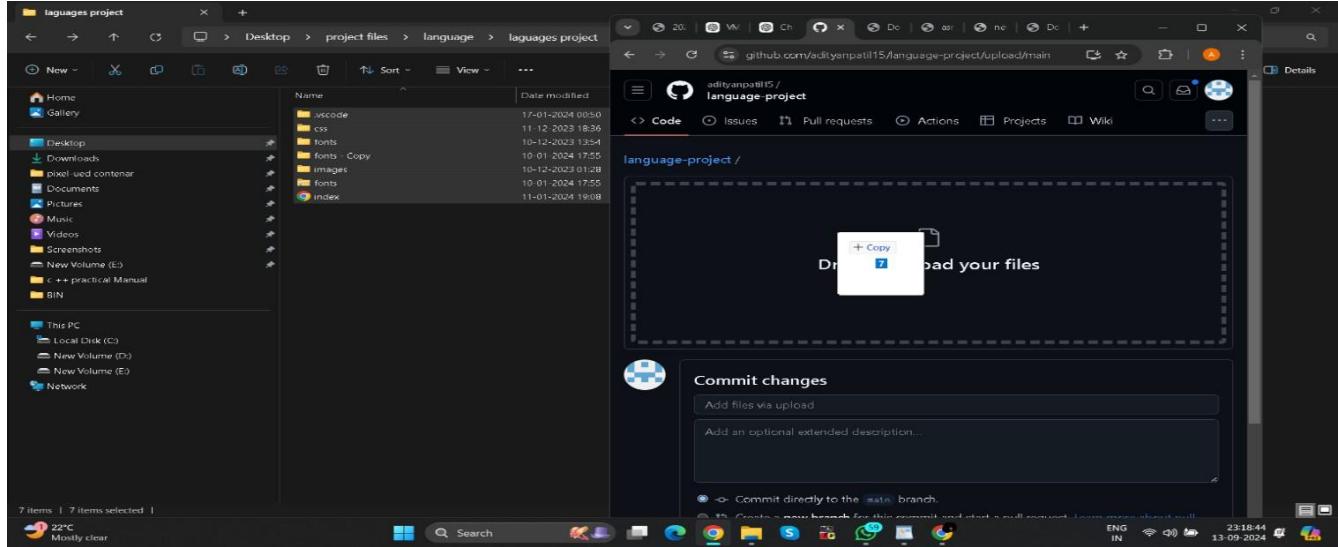
## Step 2: Select "Upload files" from the dropdown.



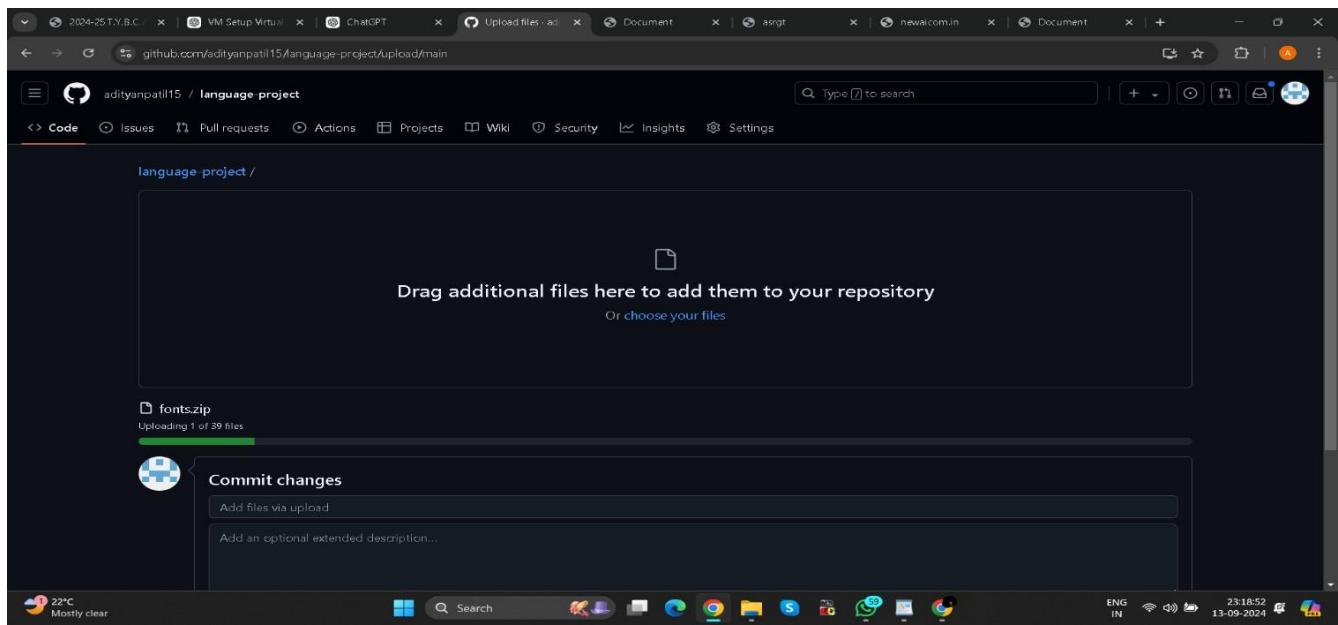
## Step 3: select all files(Ctrl + A)



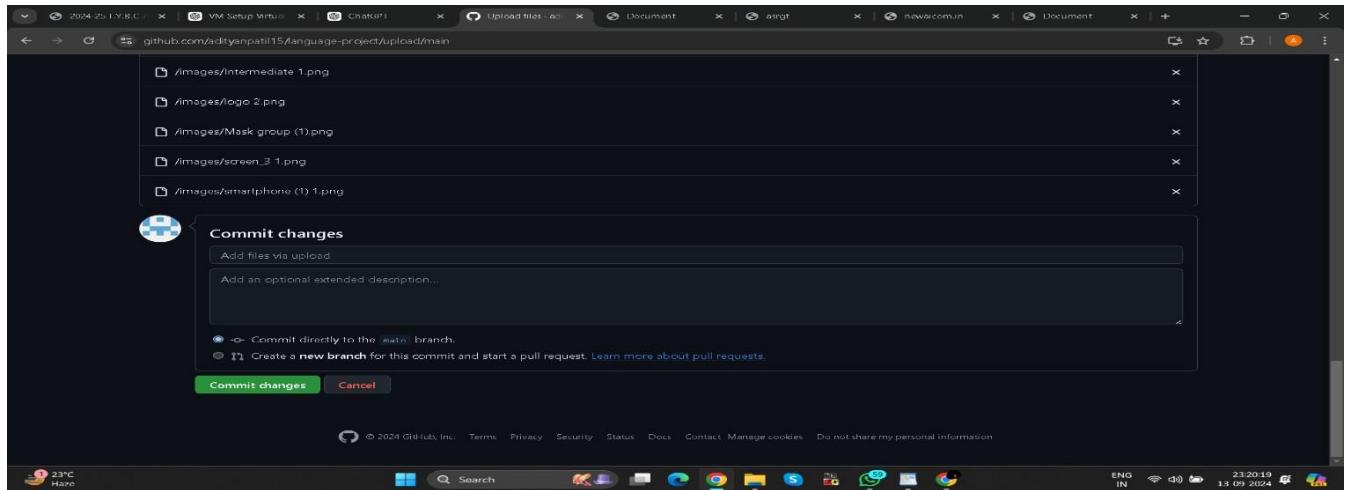
**Step 4:** Drag and drop your website files (HTML, CSS, images) into the upload area or click the "choose your files" button to browse.



**Step 5:** uploading the files

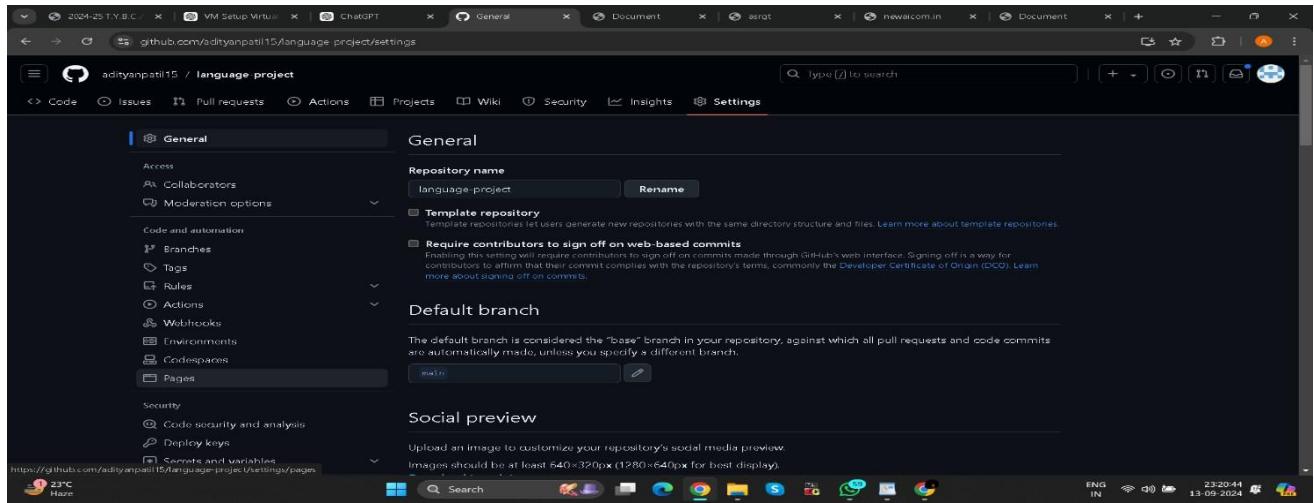


**Step 6:** After uploading the files, scroll down and click the "Commit changes" button (bottom-left).

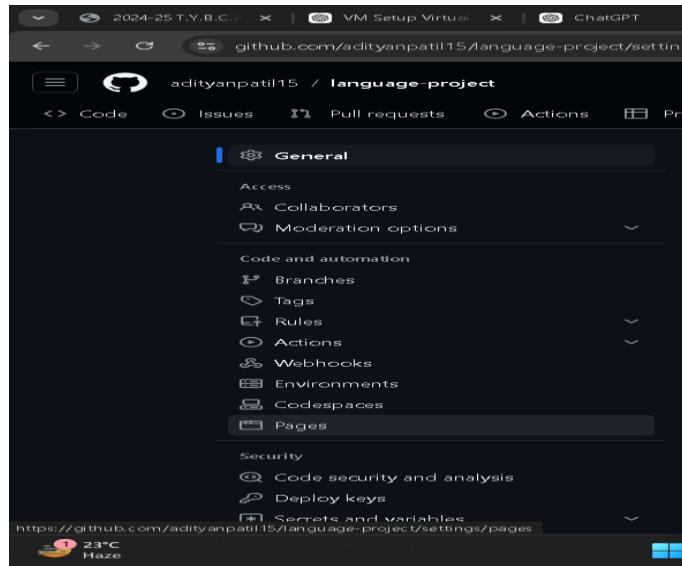


### 3: create link

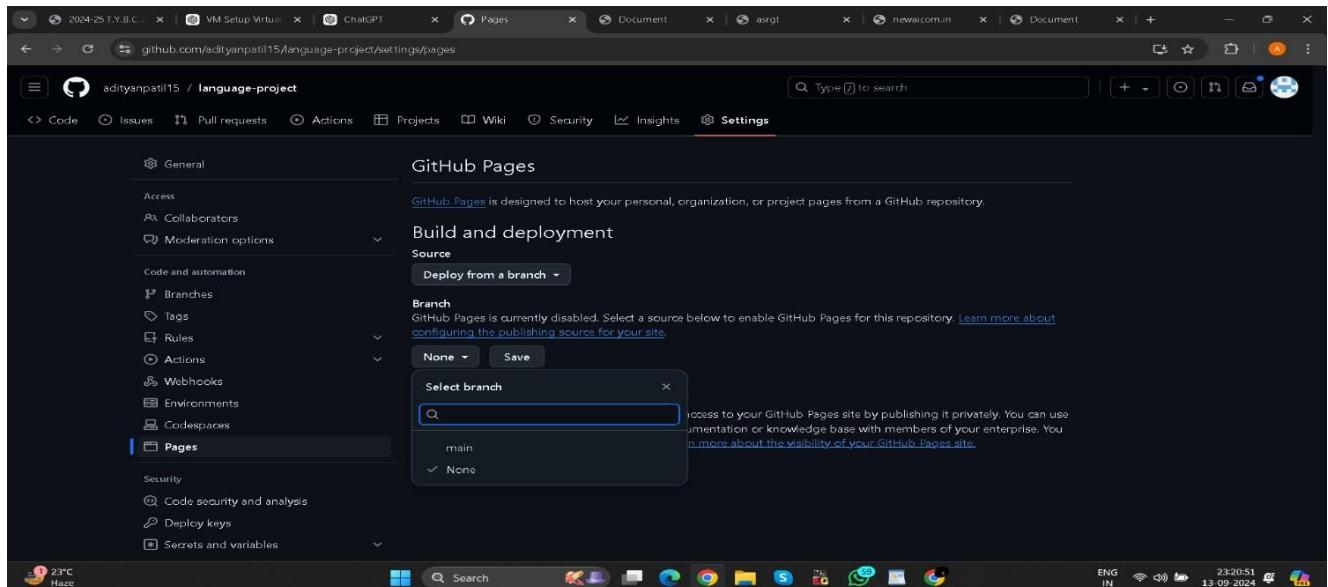
**Step 1:** Click on the "Settings" tab (top-right corner of the repository page).



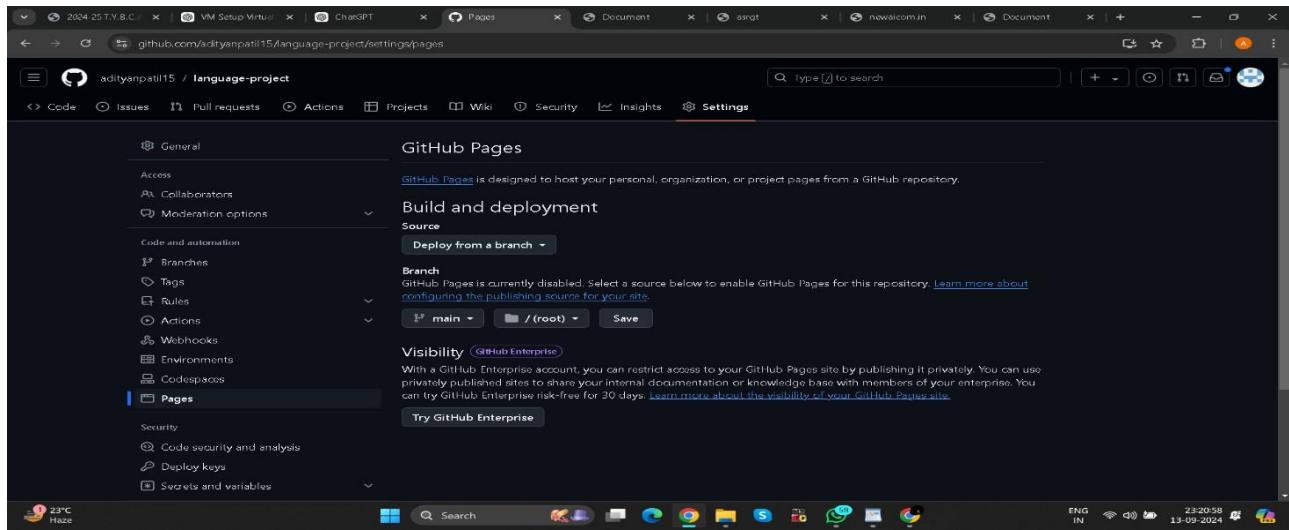
**Step 2:** On the left sidebar, scroll down and select "Pages".



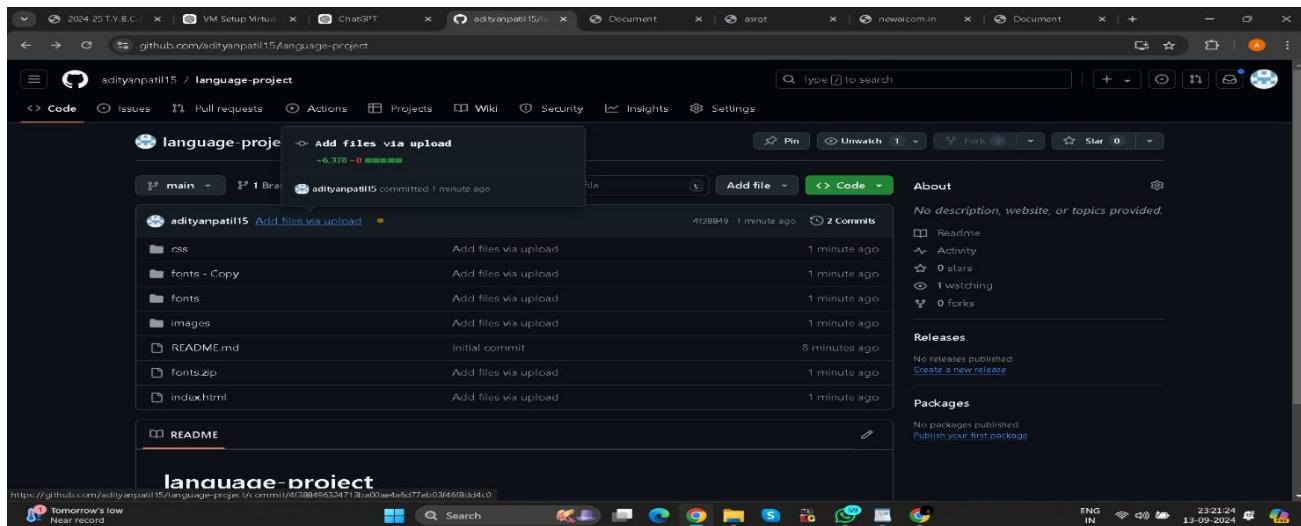
**Step 3 :** In the "Source" section, select the branch as "main" and folder as "/ (root)".



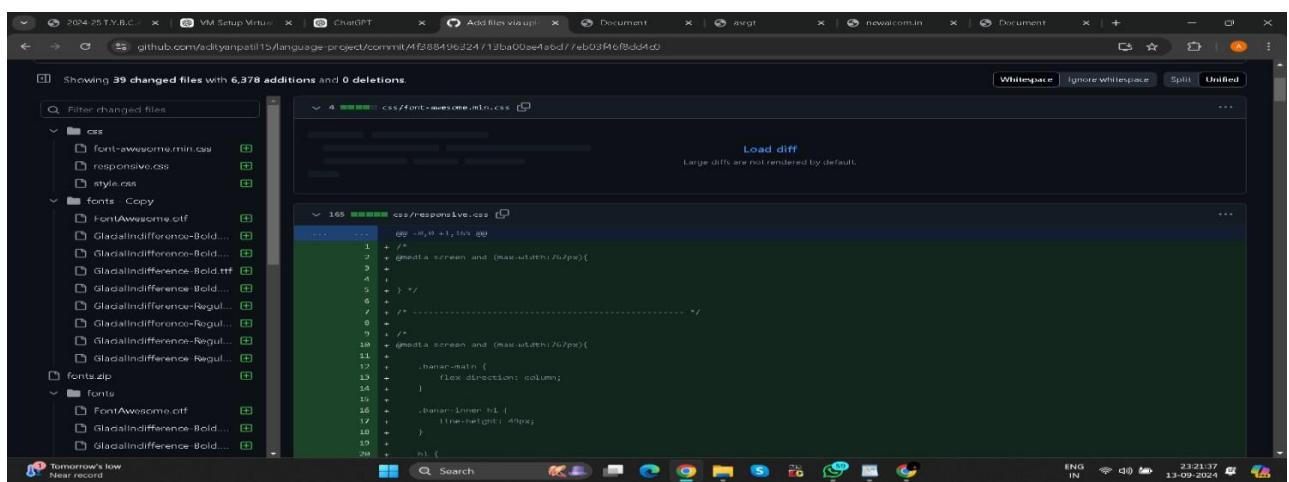
**Step 4 :** click on save (wait for some time)



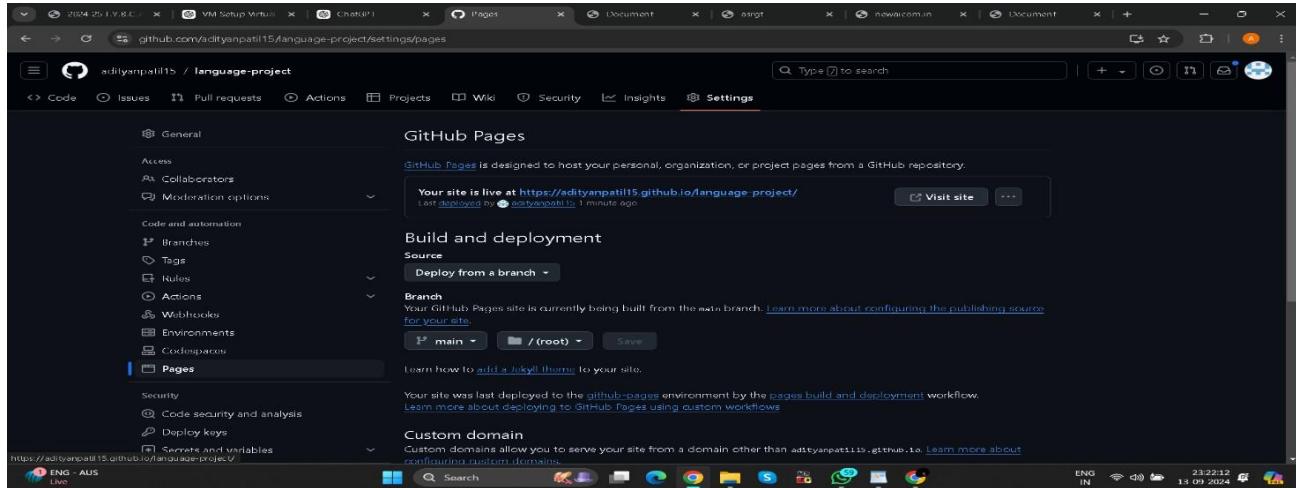
## Step 5: create link for files are upload



## Step 6: uploading

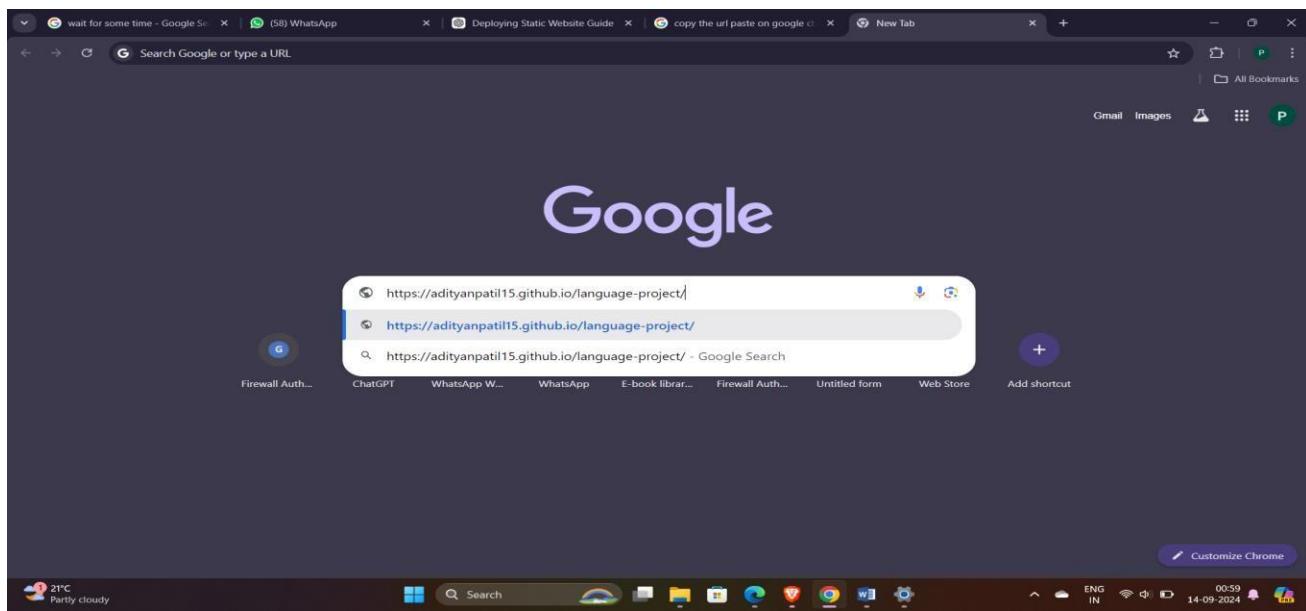


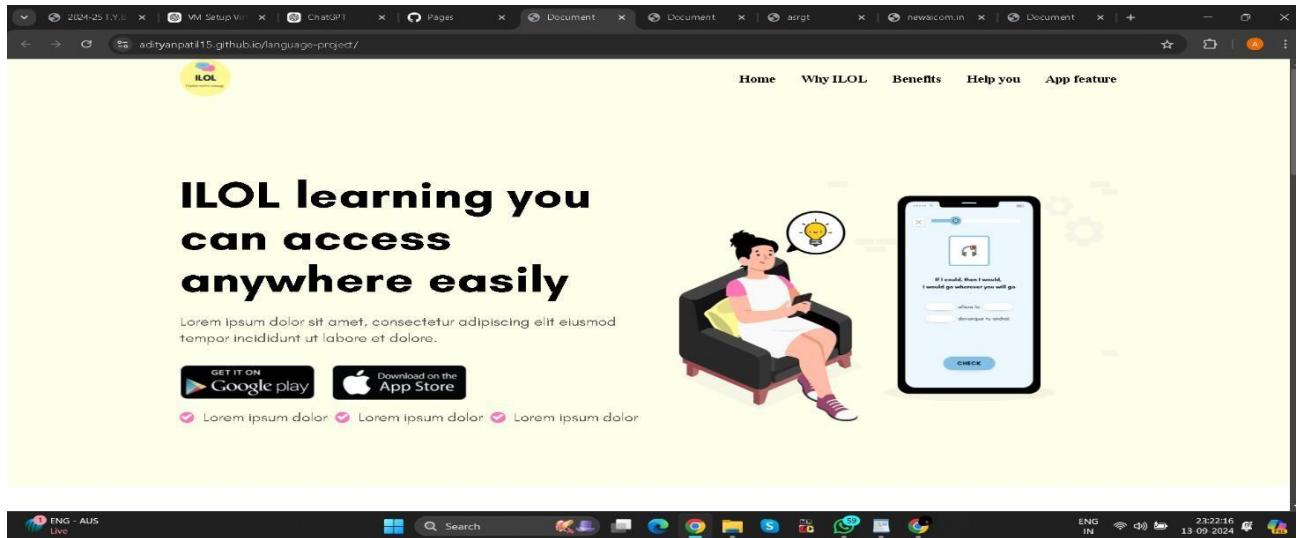
## Step 6: In the "Pages" section we can create link



## 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: Ms.Swati.S.Badhe**

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Bachelor Of Computer Application (B.C.A)**

**Practical: 06**

**DOP:**

**DOC:**

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**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.

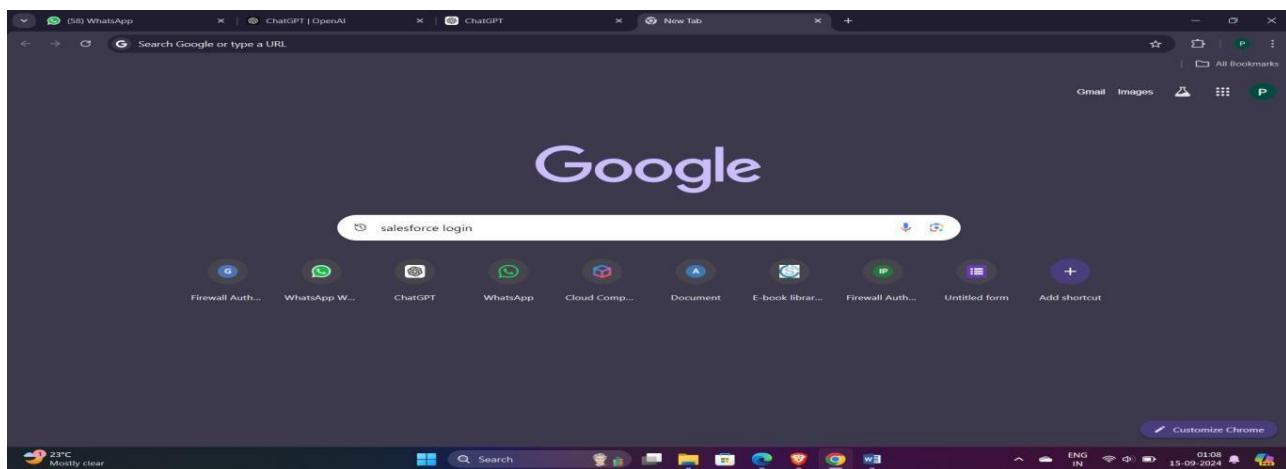
**Requirements:**

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

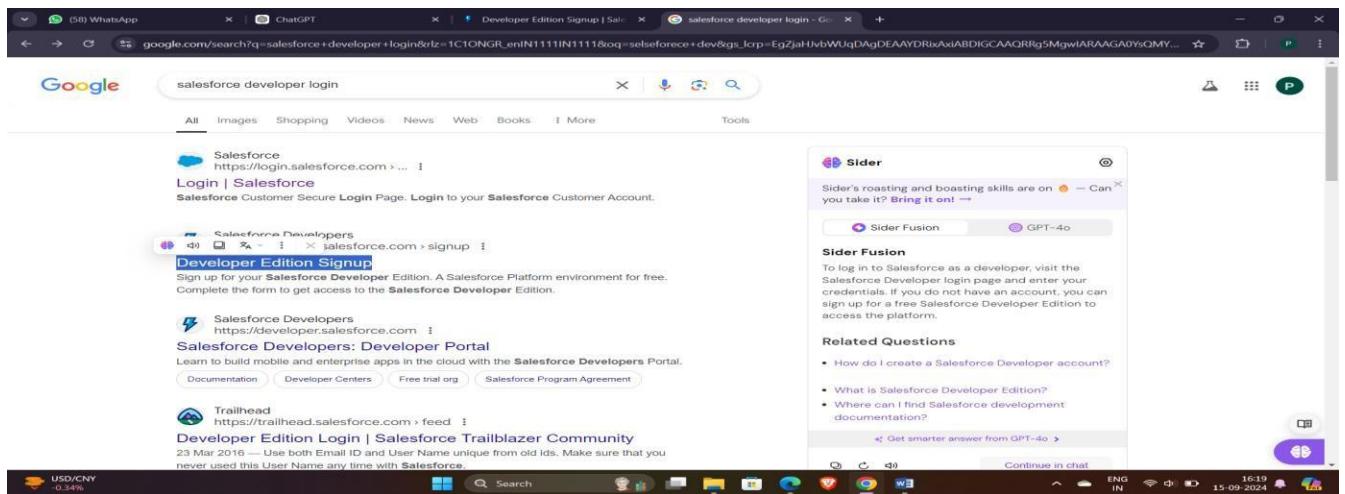
**Step-by-Step Instructions:**

**1: Create a Salesforce Developer Account**

**Step1: Go to Google Chrome.**

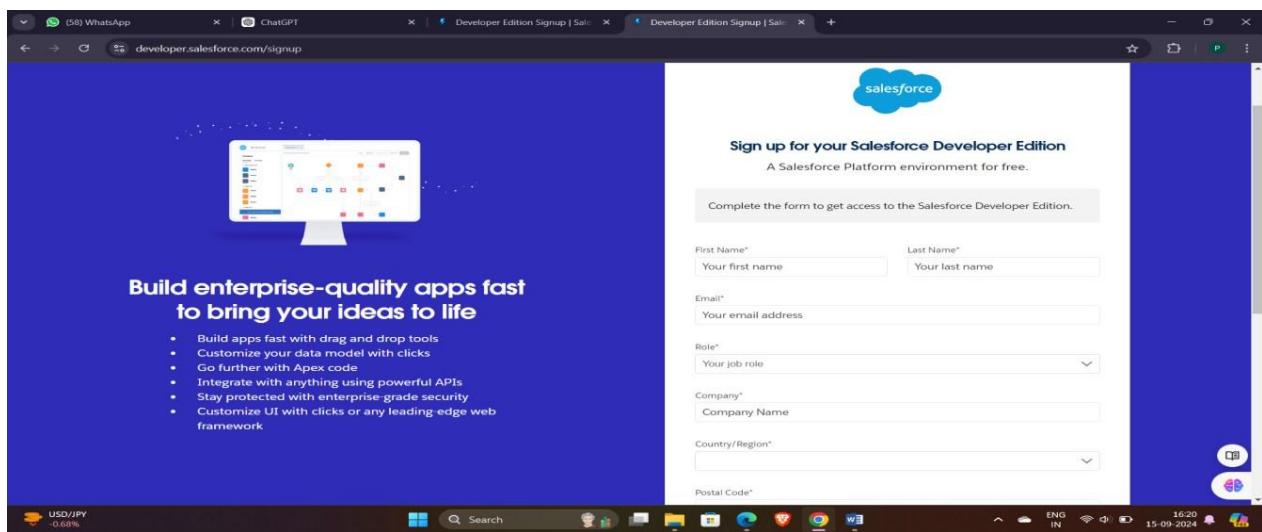


## Step 2: Search for “Developer Edition Signup” on a browser and click on the official link

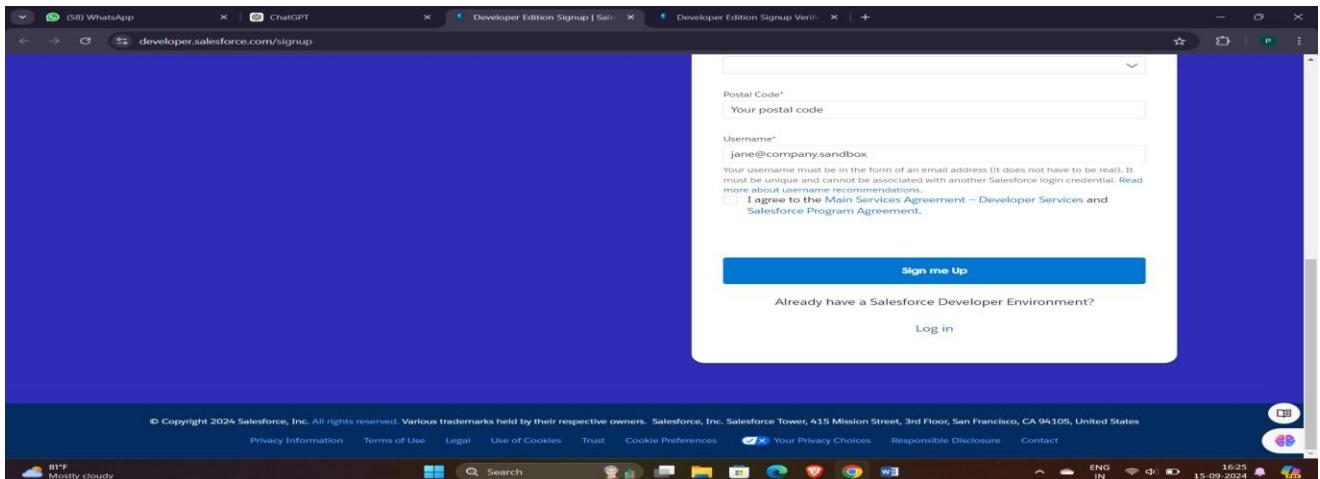


## Step 3: Fill in your details:

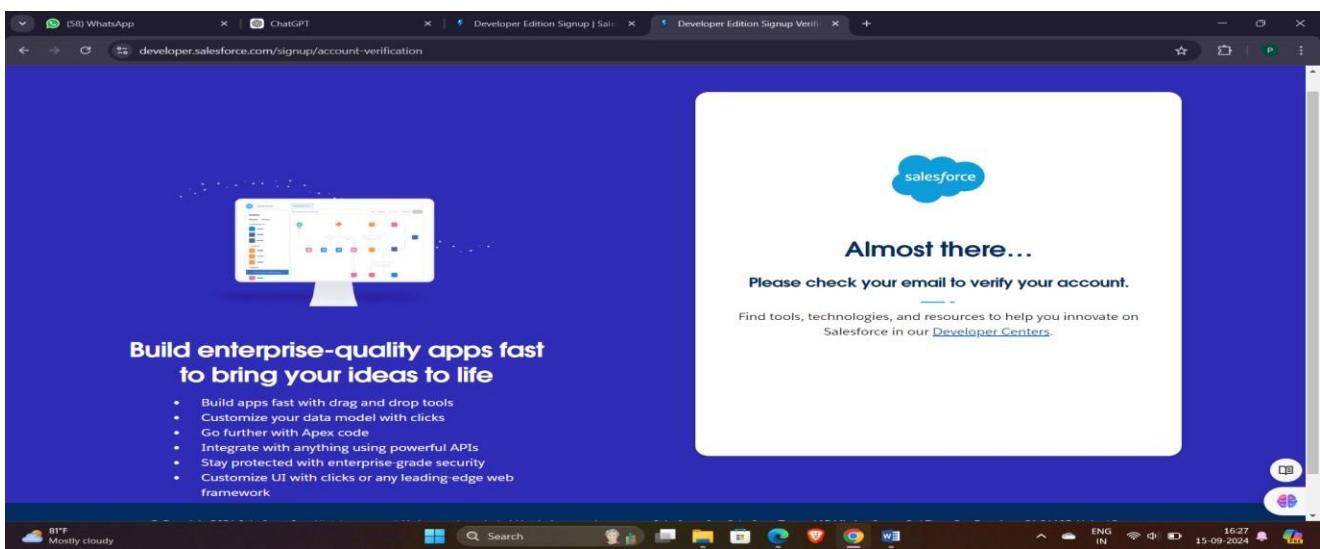
1. First Name
2. Last Name
3. Email (Use a valid email address)
4. Job Title (Choose "Student" or leave it blank if not applicable)
5. Company (Use "Self" if not part of a company)
6. Country



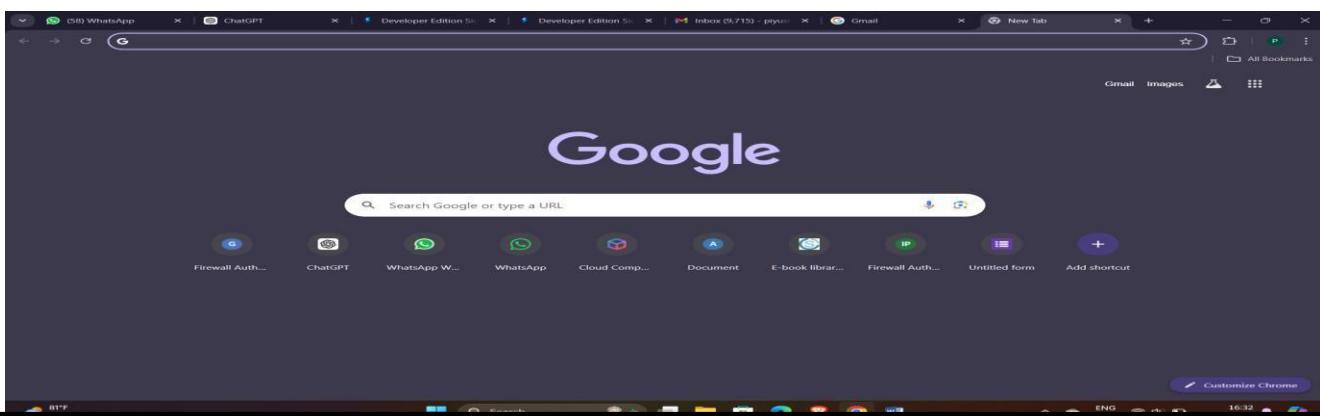
## Step 4: Click on: "Sign Me Up" (Right side button)



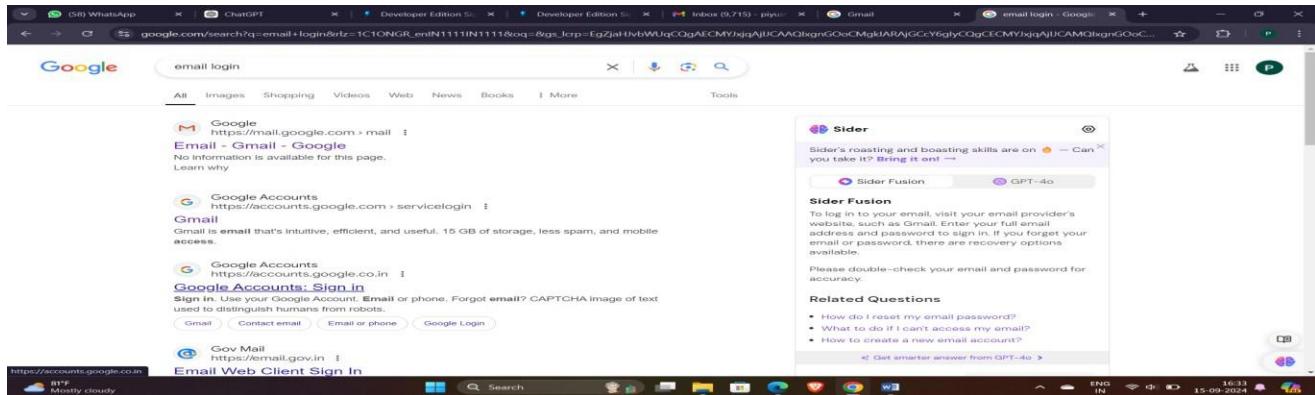
## Step 5: Verify your email:



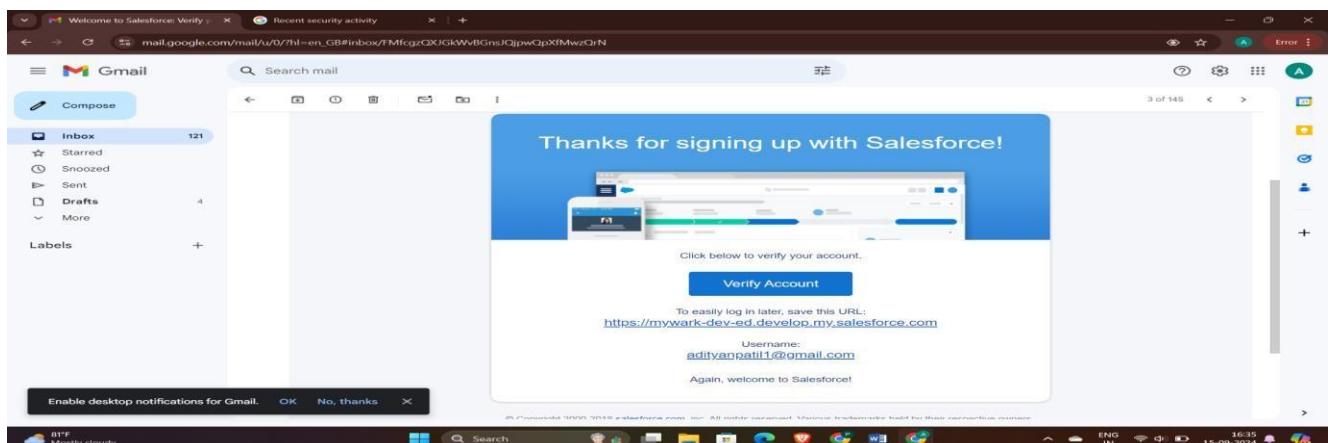
### A) Go to Google Chrome.



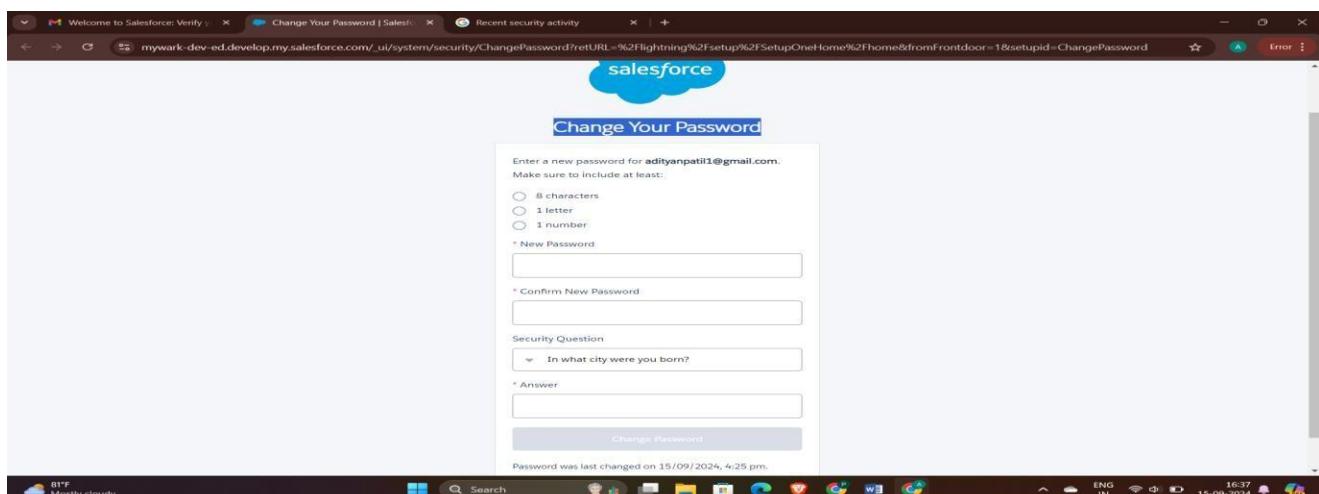
B) Search for “Email” on a browser and click on the official link



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

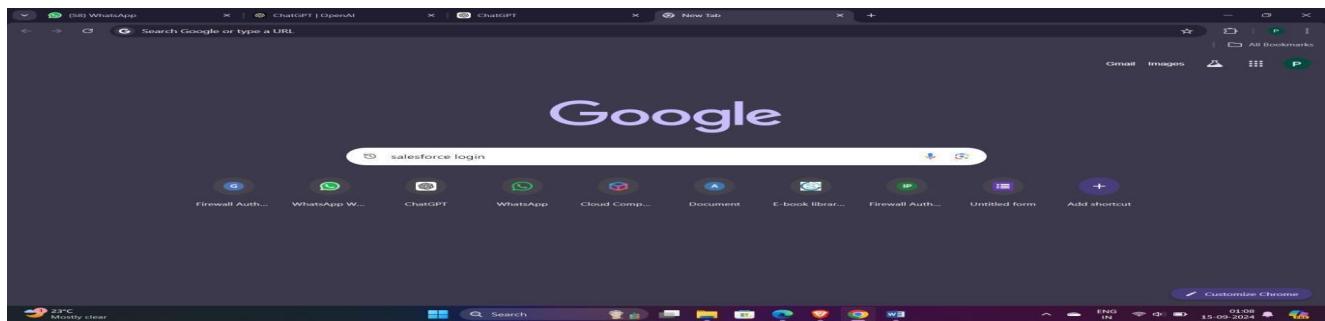


D) Click on the link in the email to verify your account.( Change Your Password )

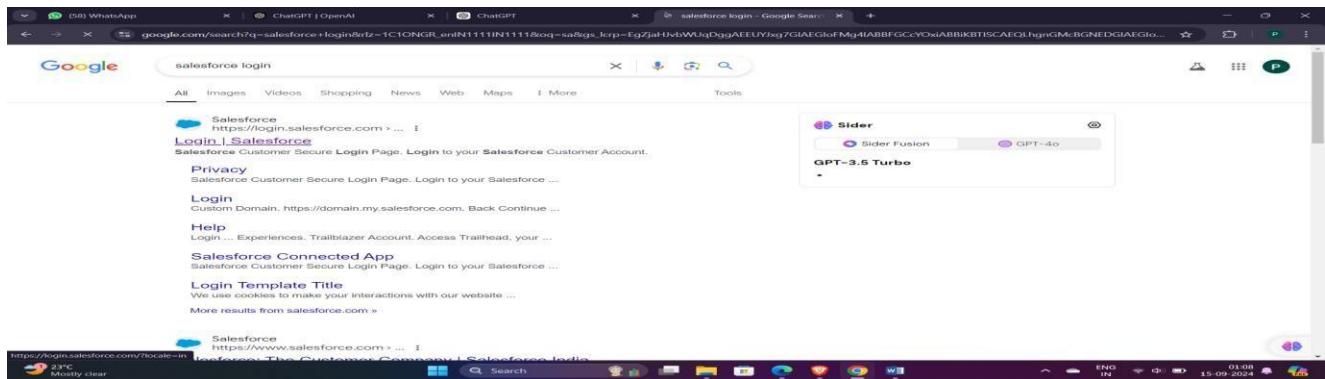


## 2: Log into Salesforce Developer Account

### Step1: Go to Google Chrome.

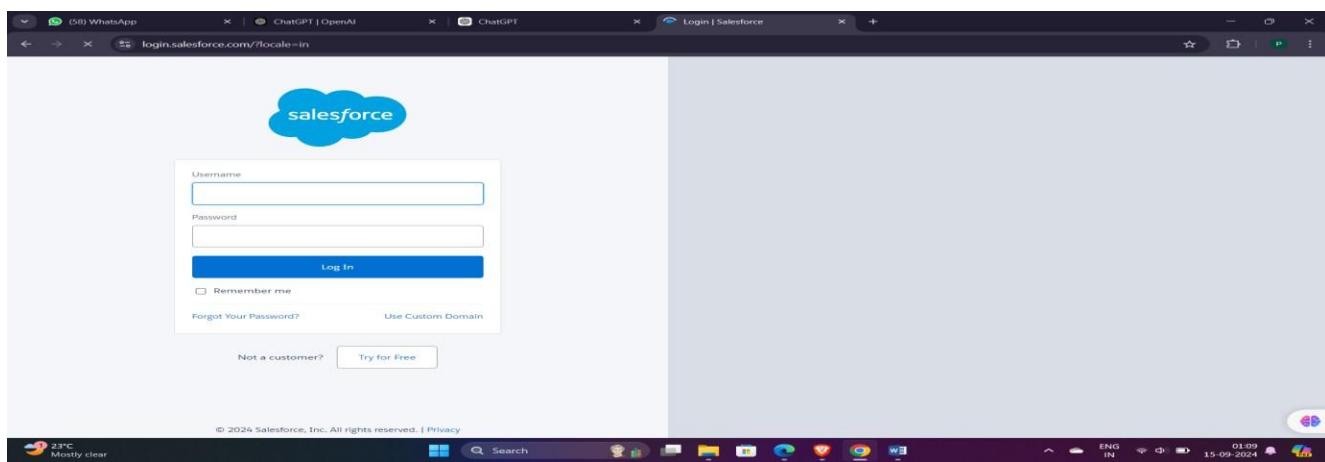


### Step 2: Search for “ Salesforce login ” on a browser and click on the official link



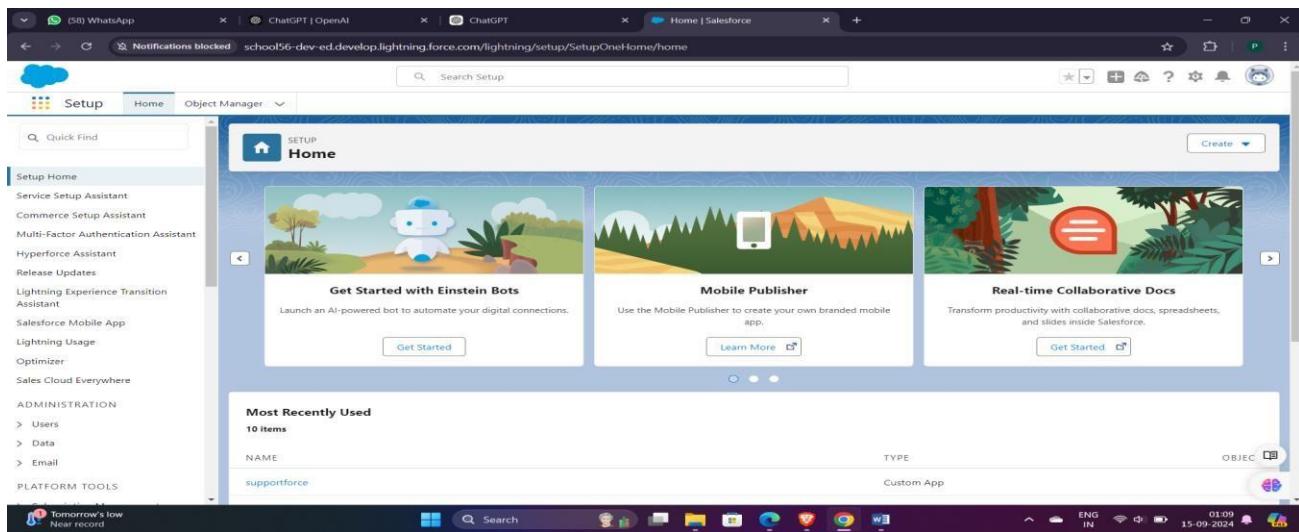
### Step 3: Enter your

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

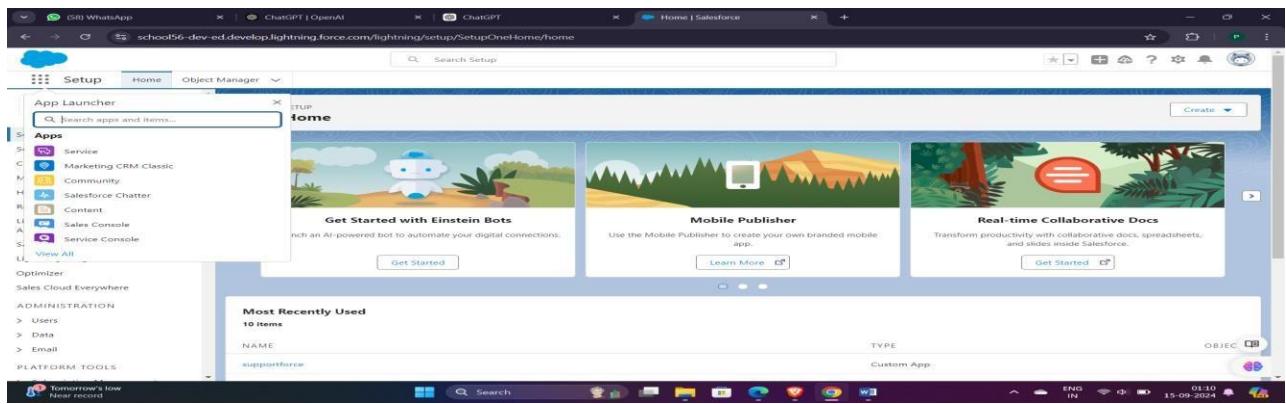


## 3: Understand the Salesforce Interface

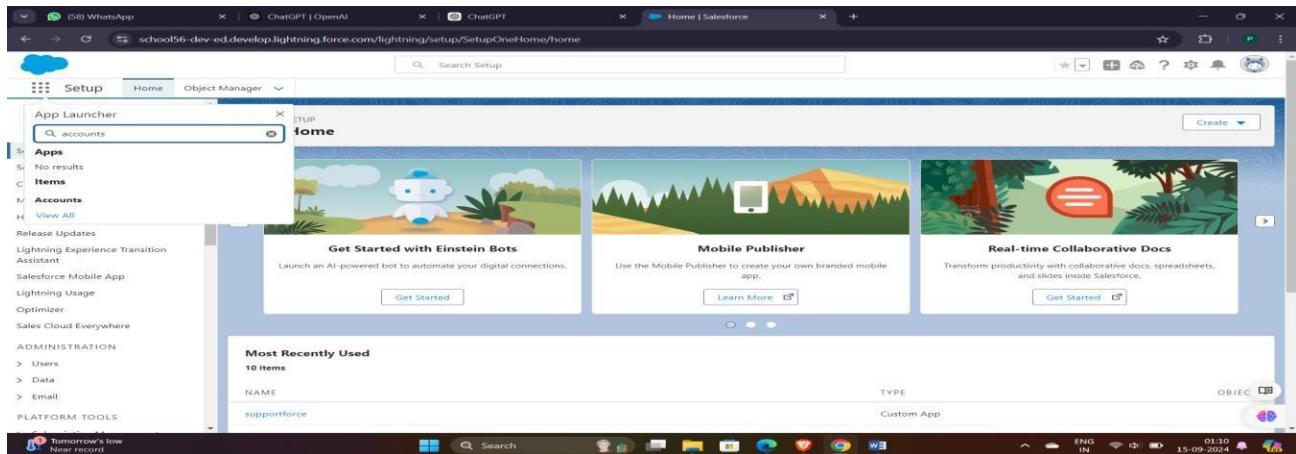
**Step 1:** Enter Salesforce: Once logged in, you'll be in your Salesforce environment.



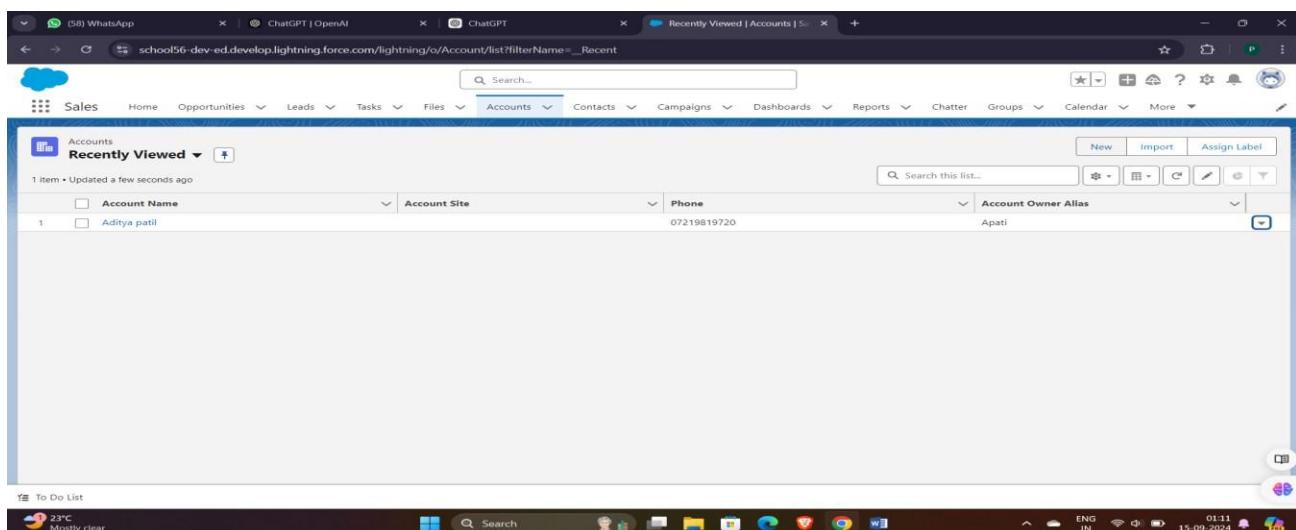
**Step 2:** Go to the App Launcher: On the top left, you'll see the App Launcher (the icon with 9 dots).



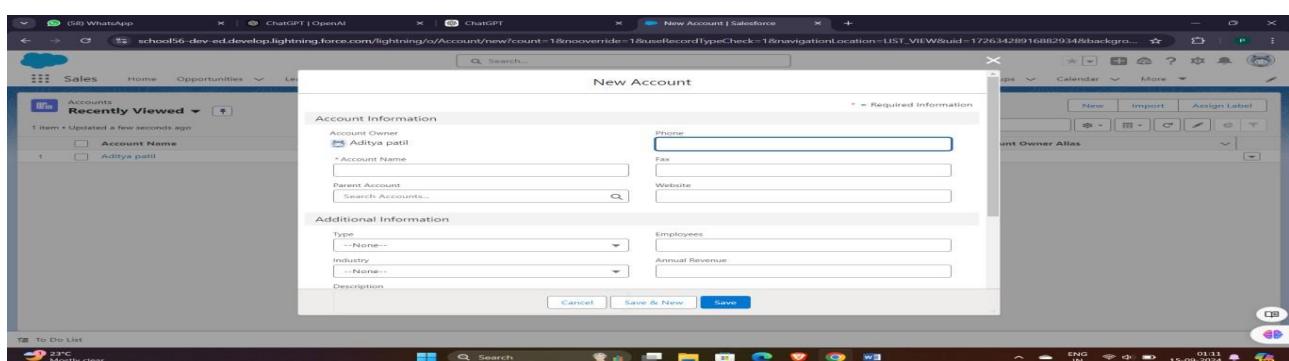
**Step 3:** Search for "Accounts": In the search bar within the App Launcher, type "Accounts" and select it.



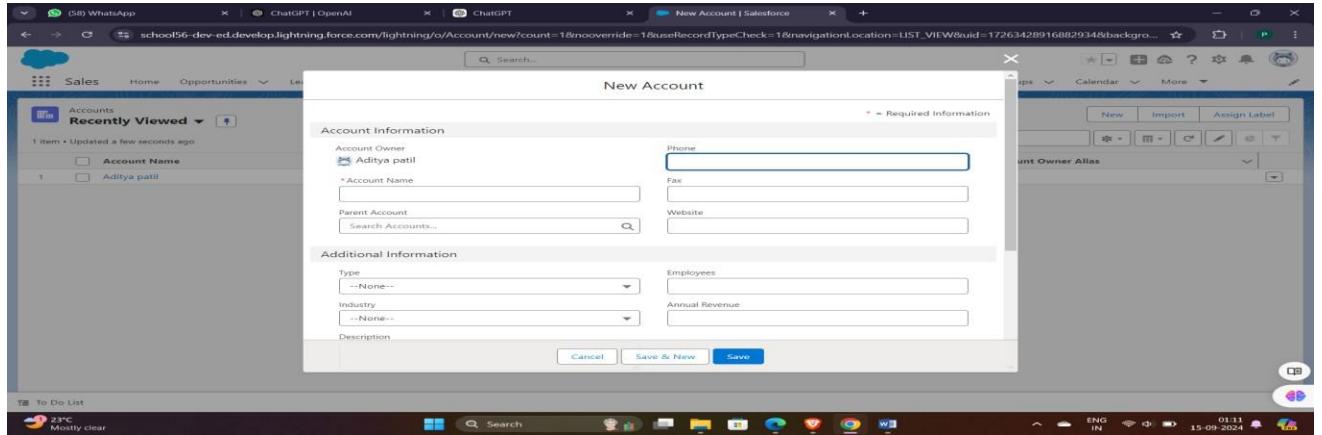
**Step 4:** Create a New Account: Once you're in the Accounts section, click on the "New" button to create a new account.



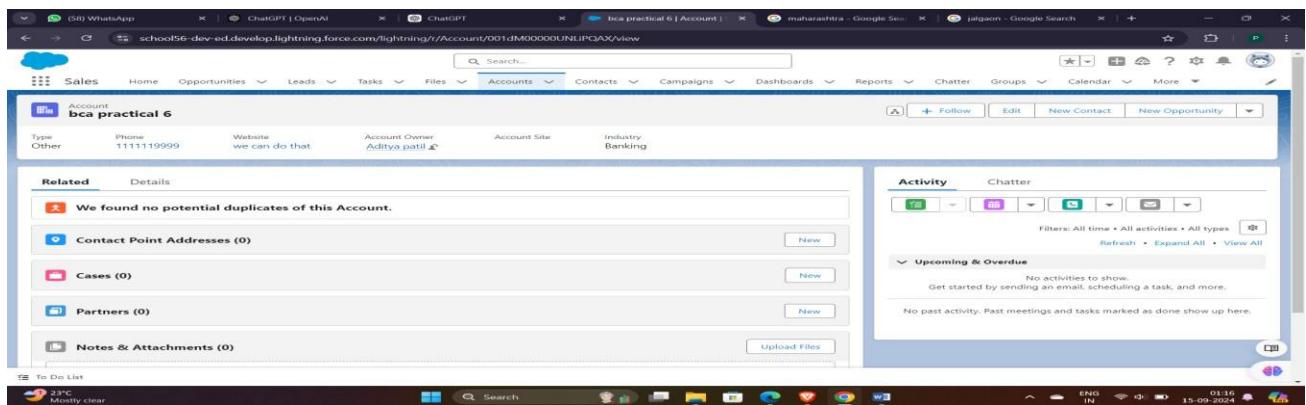
**Step 5:** Fill in Account Information: Provide the account details



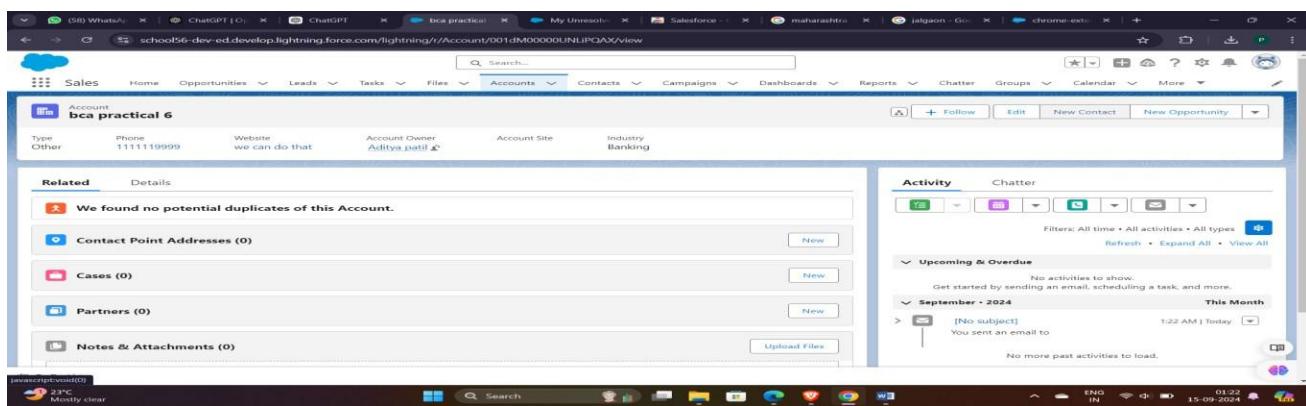
**Step 6: Save the New Account:** After filling out the account details, click "Save" to create the new account.



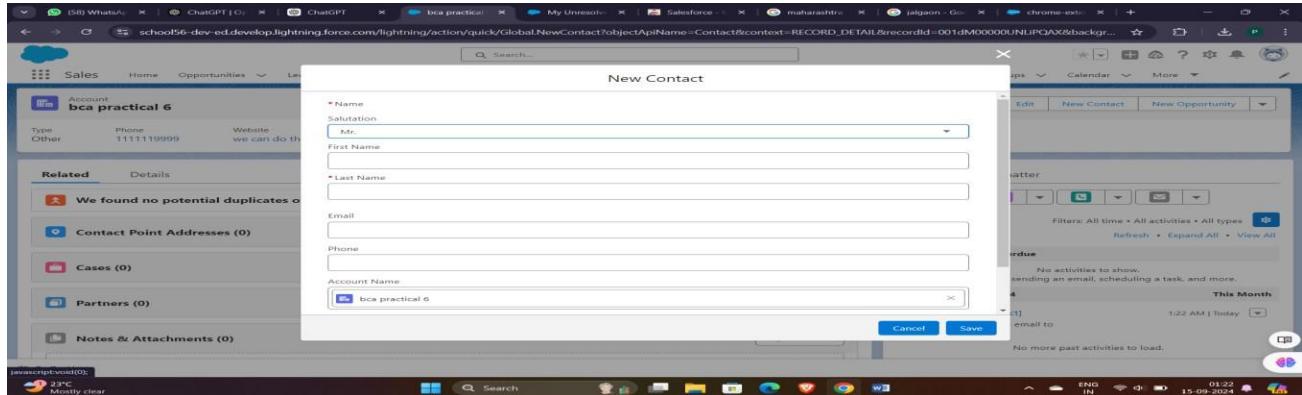
**Step 7 :Open the New Account:** Once saved, you'll be taken to the new account's page.



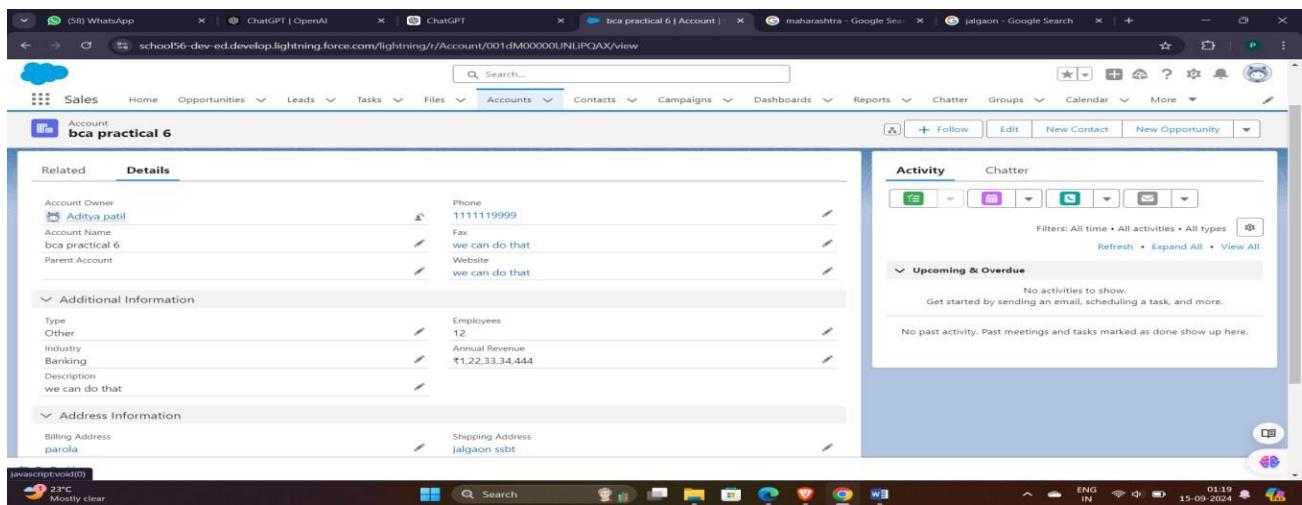
**Step 8: Create a New Contact:** In the account's details page, look for the "Contacts" section and click "New" to add a new contact.



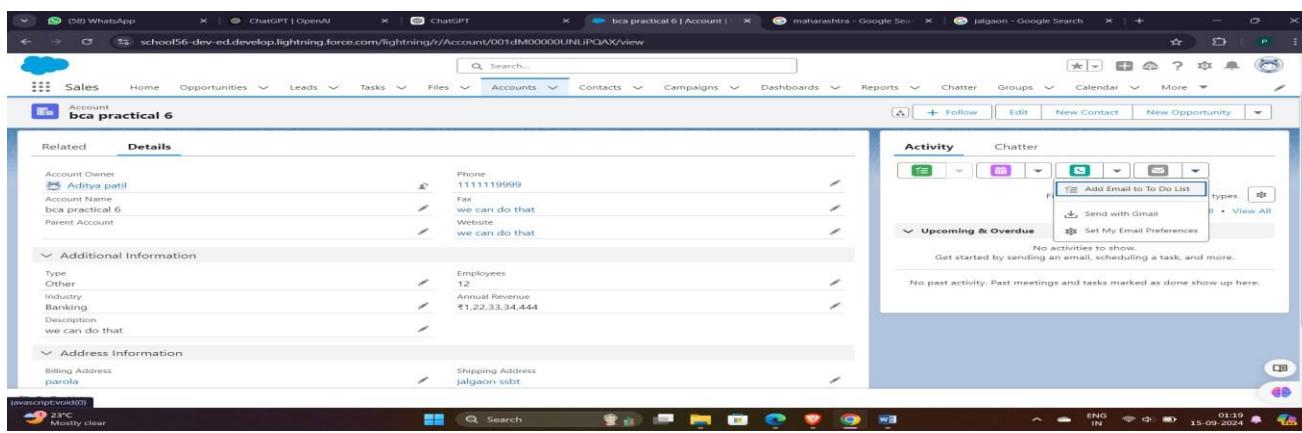
**Step 9 :Fill in Contact Information:** Enter the contact details, like:



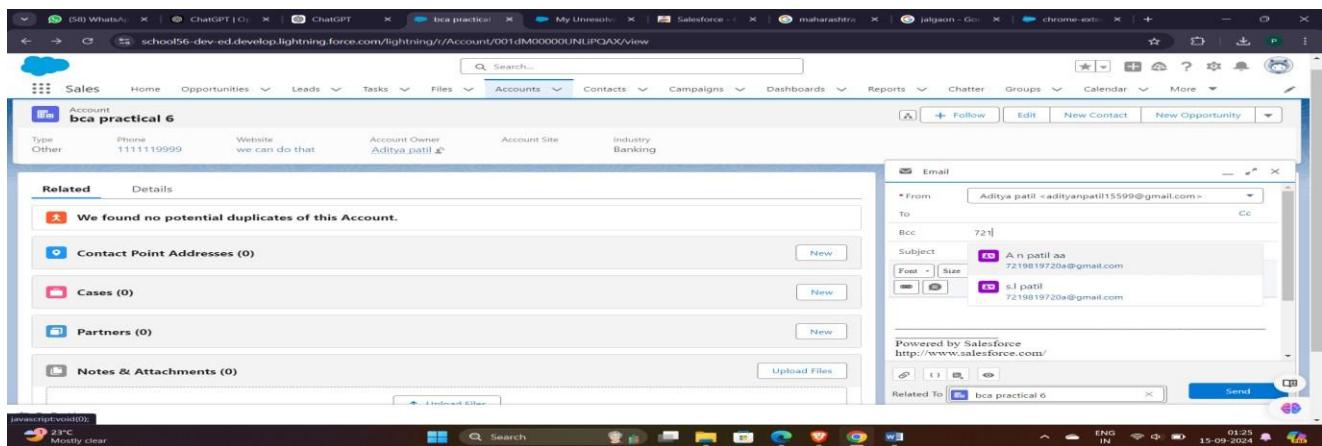
**Step 10 : Send an Email:** In the new contact's page, go to the "Activity" section on the right side.



**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: Ms.Swati.S.Badhe**

**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:**

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**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.

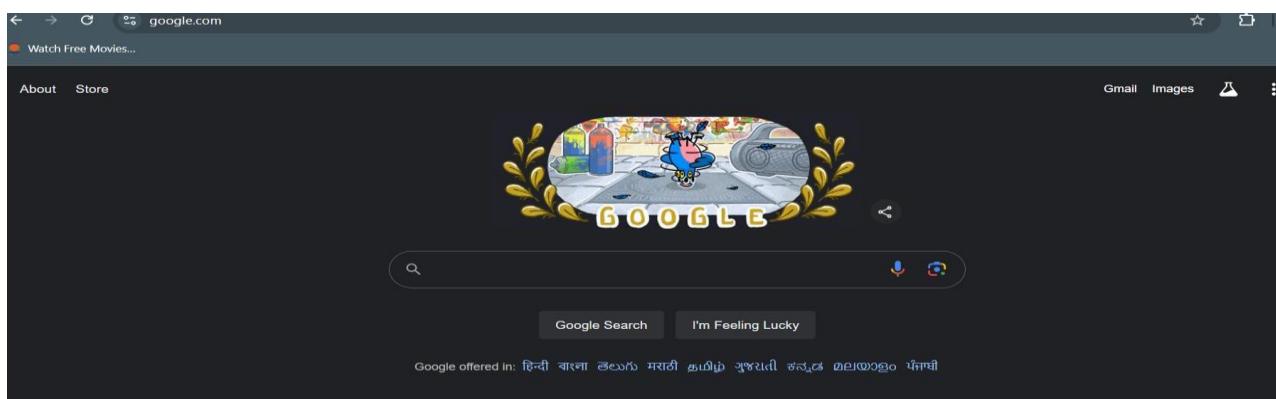
**Requirements :**

- 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.

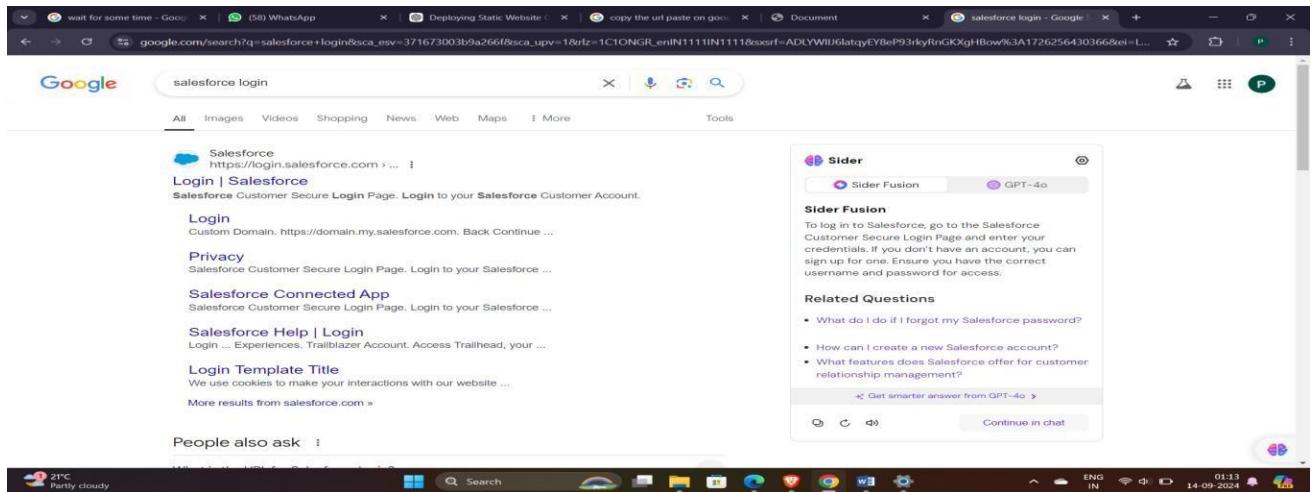
**Step-by-Step Instructions:**

**1. Log in to Salesforce:**

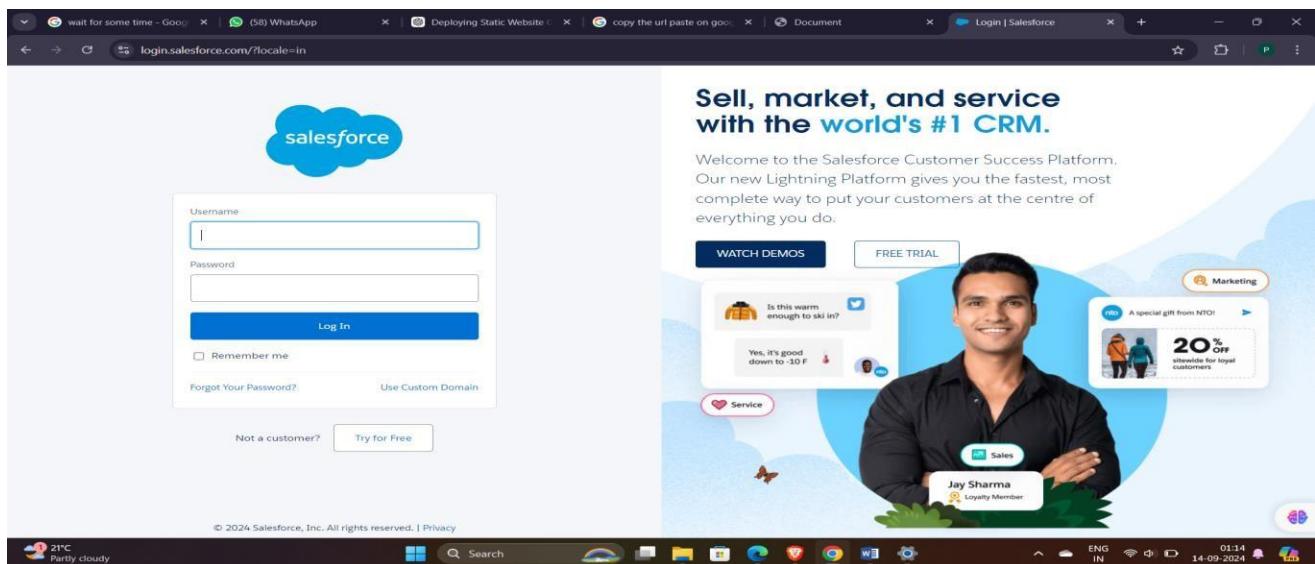
Step 1: Open Google Chrome



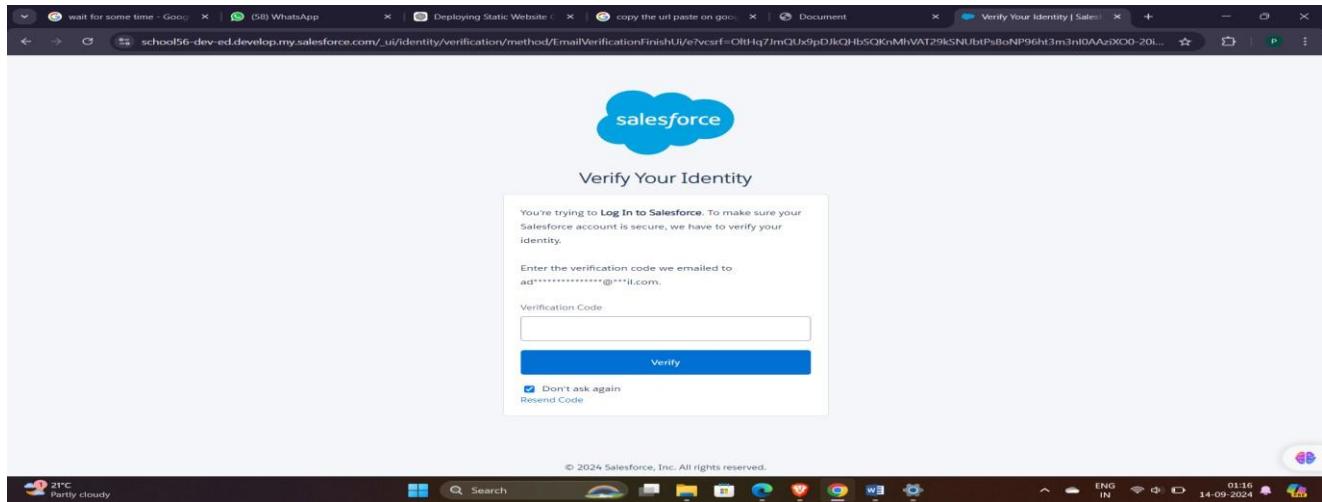
## Step 2: search for salesforce login



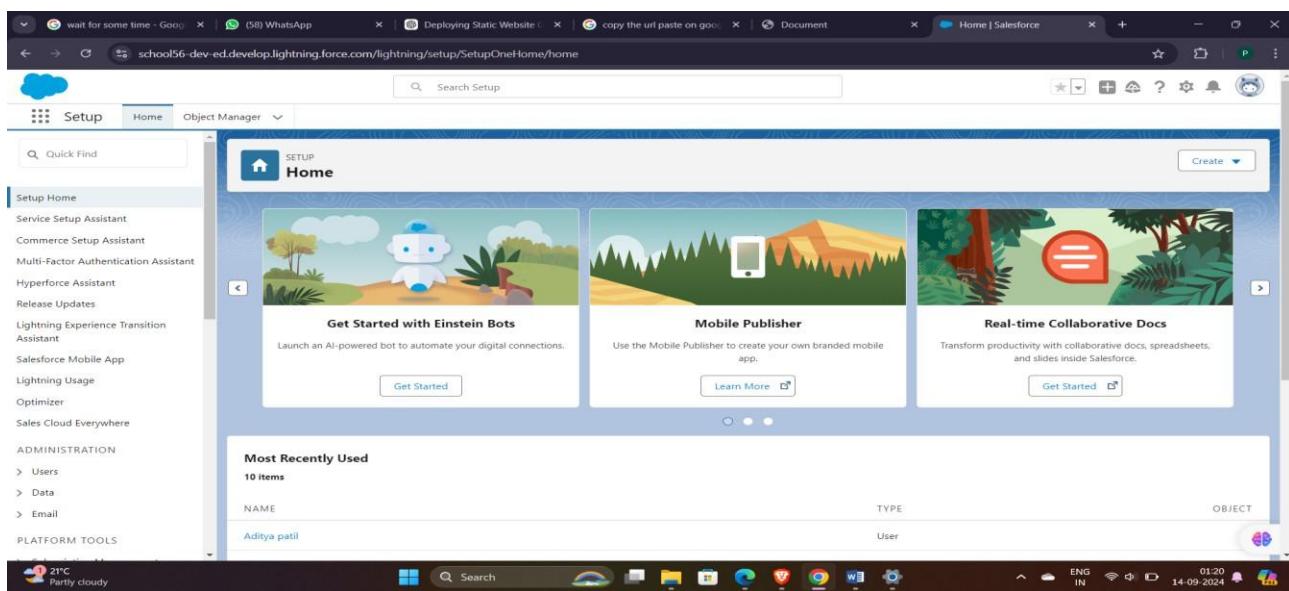
Step 3: Enter your username and password, and click the "Log in" button (top-right side).



Step 4: Verify your identity in Salesforce



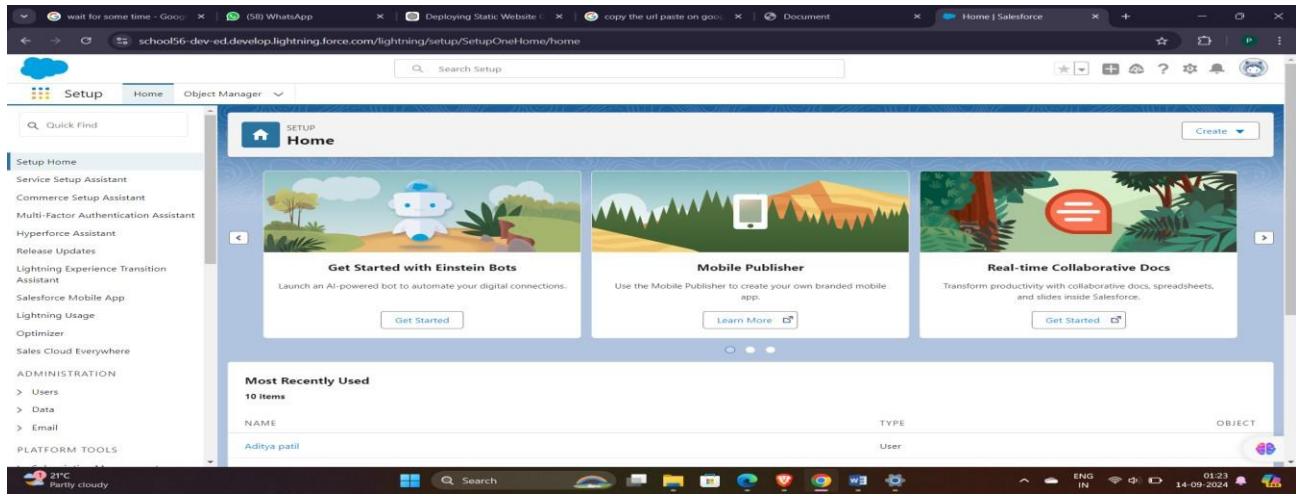
Step 5: Once logged in, you will be on the Salesforce dashboard.



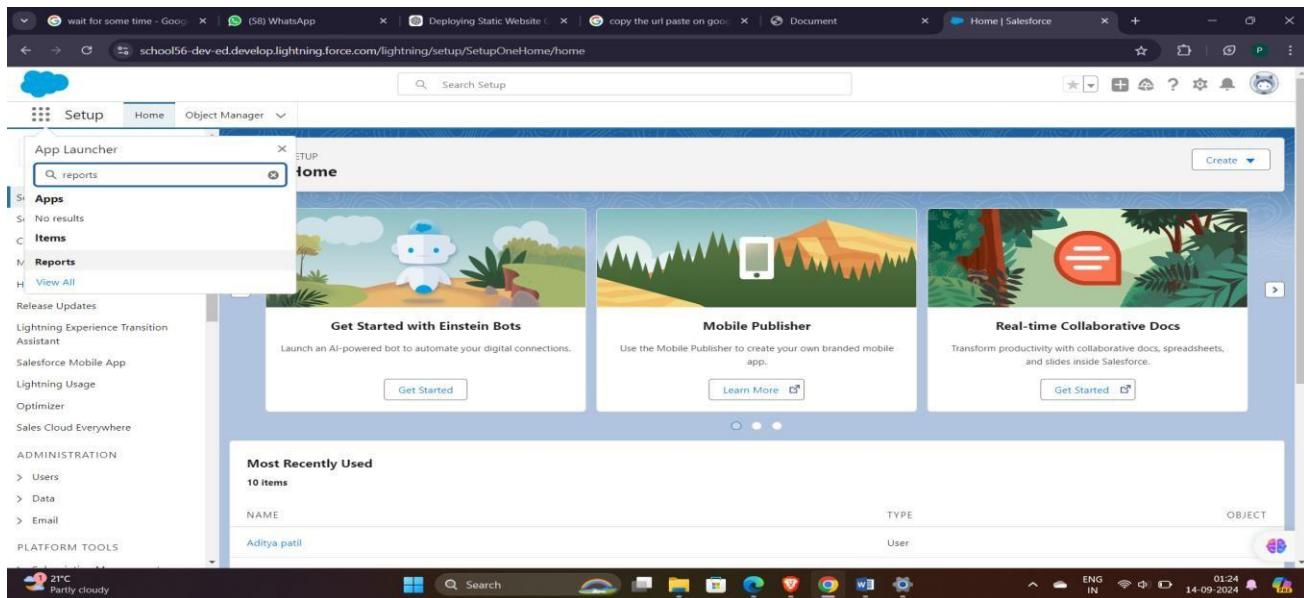
Step 6: Once logged in, you will be on the Salesforce dashboard.

## 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
asw	bca	Aditya patil	10/9/2024, 1:45 pm	<input type="checkbox"/>	
New Contacts & Accounts Report	bca	Aditya patil	3/9/2024, 4:32 pm	<input type="checkbox"/>	
aditya new	aaa	Aditya patil	3/9/2024, 1:56 am	<input type="checkbox"/>	

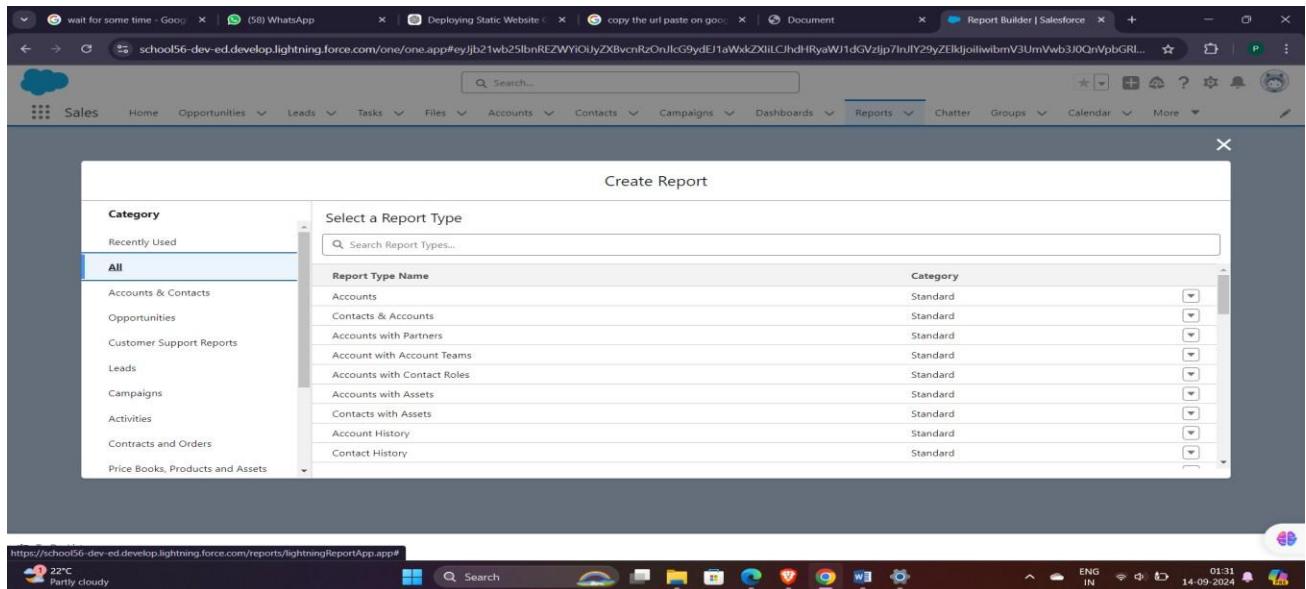
At the top right of the main area are buttons for 'Search recent reports...', 'New Report', 'New Folder', and a gear icon. Below the table is a 'To Do List' section. The bottom of the screen shows a Windows taskbar with various icons and system status.

### 3: Create a New Report

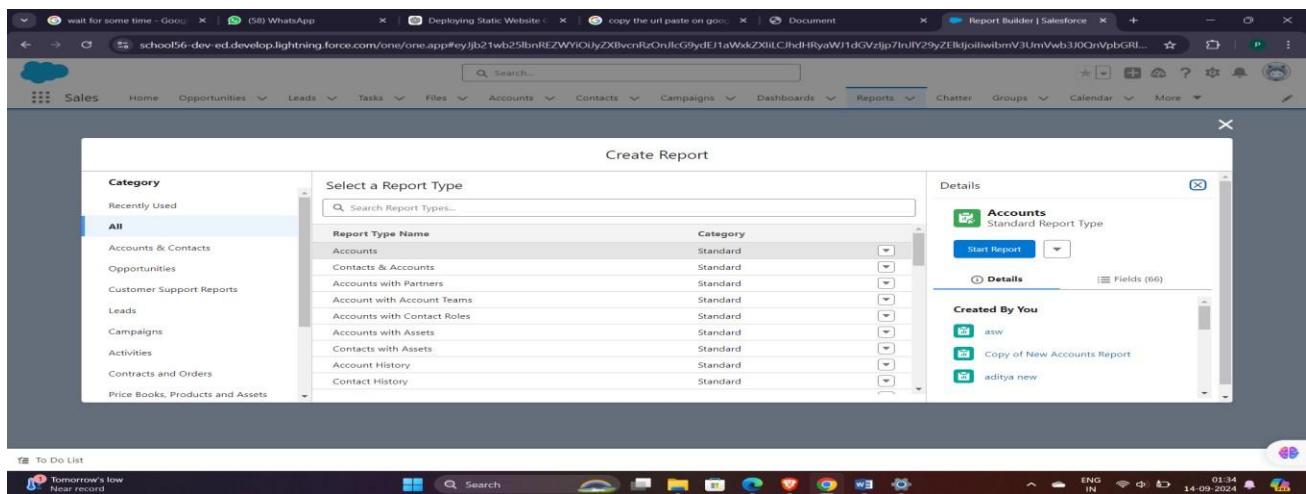
Step 1: On the Reports page, click the "New Report" button (top-right corner).

This screenshot is identical to the one above, showing the Reports page with the 'New Report' button highlighted at the top right of the main content area. The rest of the interface, including the sidebar and taskbar, remains the same.

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 > Outline Filters ?

Filters

Add filter... Search...

Show Me My accounts

Created Date  
On or after 07-Sept-2024

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

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

Add Chart Save & Run Save Close Run

## Step 2: Click on the Created Date

REPORT ▾  
New Accounts Report ▾ Accounts

Fields > Outline Filters ?

Filters

Add filter... Search...

Show Me My accounts

Created Date  
On or after 07-Sept-2024

Filter by Created Date

Name ▾ Billing State/Province ▾ Type ▾ Rating ▾ Last Modified Date ▾

Date

Created Date

Range

Custom

Start Date  
07/09/2024

End Date  
pick a date

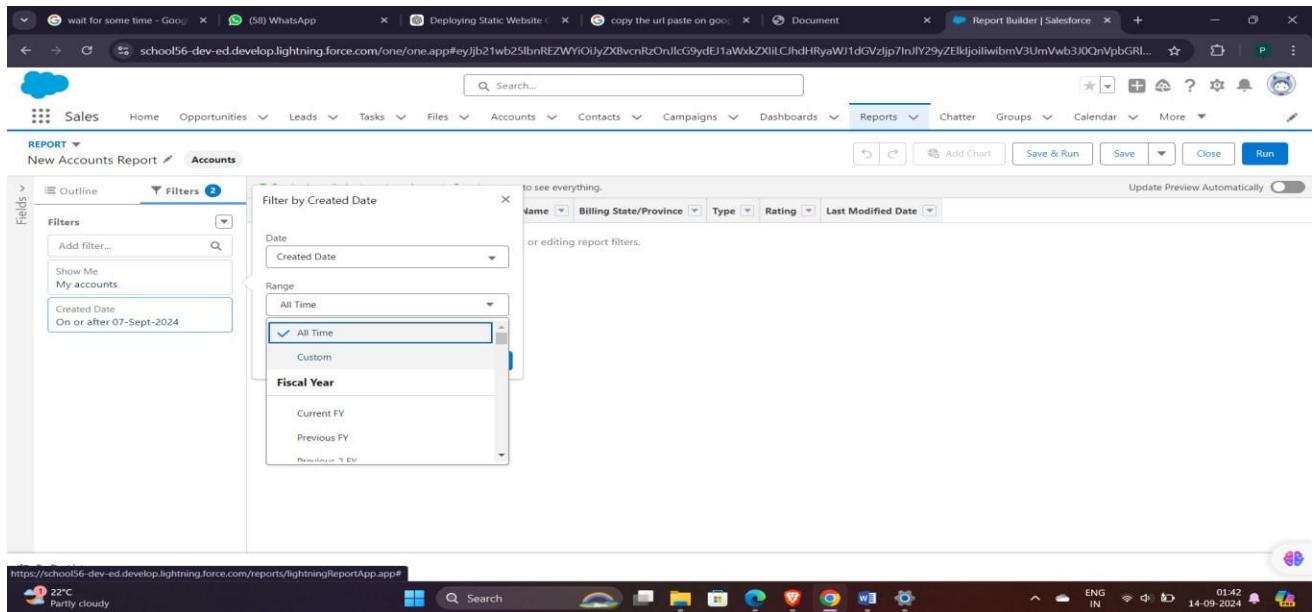
Cancel Apply

Update Preview Automatically

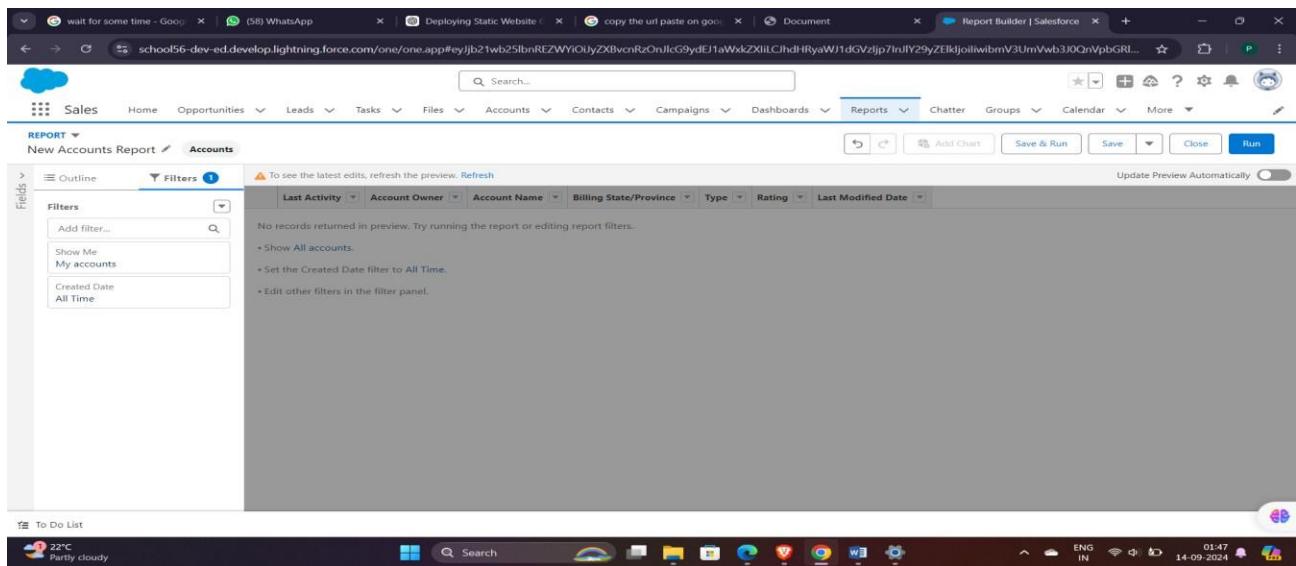
To Do List

22°C Partly cloudy

## 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, showing a list of accounts. The columns include Last Activity, Account Owner, Account Name, Billing State/Province, Type, Rating, and Last Modified Date. The "Rating" column is currently sorted by "Hot". A sidebar on the left lists available fields: Ticker Symbol, Rating, Account Source, Industry, SIC Code, SIC Description, NAICS Code, and NAICS Description. A "Filters" section at the top allows for filtering by these fields. The status bar at the bottom shows system information like weather (22°C, Partly cloudy), date (14-09-2024), and time (01:51).

## Step 6: I can select the Rating

The screenshot shows the "Filter By" dialog box in the Report Builder. The "Field" dropdown is set to "Rating". The "Operator" dropdown is set to "equals". The "Value" dropdown has a search icon and a placeholder "Search...". Below these dropdowns is a list of options: All, Cold, Hot, Warm, and "No Selection". The "Apply" button is visible at the bottom right of the dialog.

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

The screenshot shows the Salesforce Report Builder interface. A modal window titled "Filter By" is open, allowing the user to refine a list of accounts. The filters applied are:

- Field:** Rating
- Operator:** equals
- Value:** Hot

The main list displays account records sorted by rating. The visible data includes:

Account Name	Billing State/Province	Type	Rating	Last Modified Date
Burlington Textiles Corp of America	NC	Customer - Direct	Warm	30/07/2024
Pyramid Construction Inc.	KS	Customer - Channel	-	30/07/2024
Dickenson plc	IL	Customer - Direct	Warm	30/07/2024
els & Resorts Ltd	NY	Customer - Direct	Hot	30/07/2024
& Gas Corp.	OR	Customer - Channel	Cold	30/07/2024
Logistics and Transport	AZ	Customer - Direct	Warm	30/07/2024
of Arizona	UK	Customer - Direct	-	30/07/2024
& Gas, UK	Singapore	Customer - Direct	-	30/07/2024
& Gas, Singapore	CA	Customer - Channel	Cold	30/07/2024
	CA	-	-	30/07/2024
p5	maharashtra	Prospect	Hot	02/08/2024
v bca	MAHARASHTRA	Prospect	-	03/09/2024
it	maharashtra	-	-	05/09/2024
		Prospect	-	(19/09/2024)

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

The screenshot shows the results of the filtered report. The "New Accounts Report" is displayed under the "REPORT" section. The "Filters" sidebar shows the applied filter: "Rating equals Hot". The main area shows a table of account records:

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. On the left, there's a sidebar with 'Fields' and 'Filters'. The 'Filters' section has a dropdown set to 'Last Activity' with 'Aditya patil' selected, and a checkbox for 'Show Me My accounts'. Below that are 'Created Date' (All Time) and 'Rating' (equals Hot). The main area displays a preview of three account records:

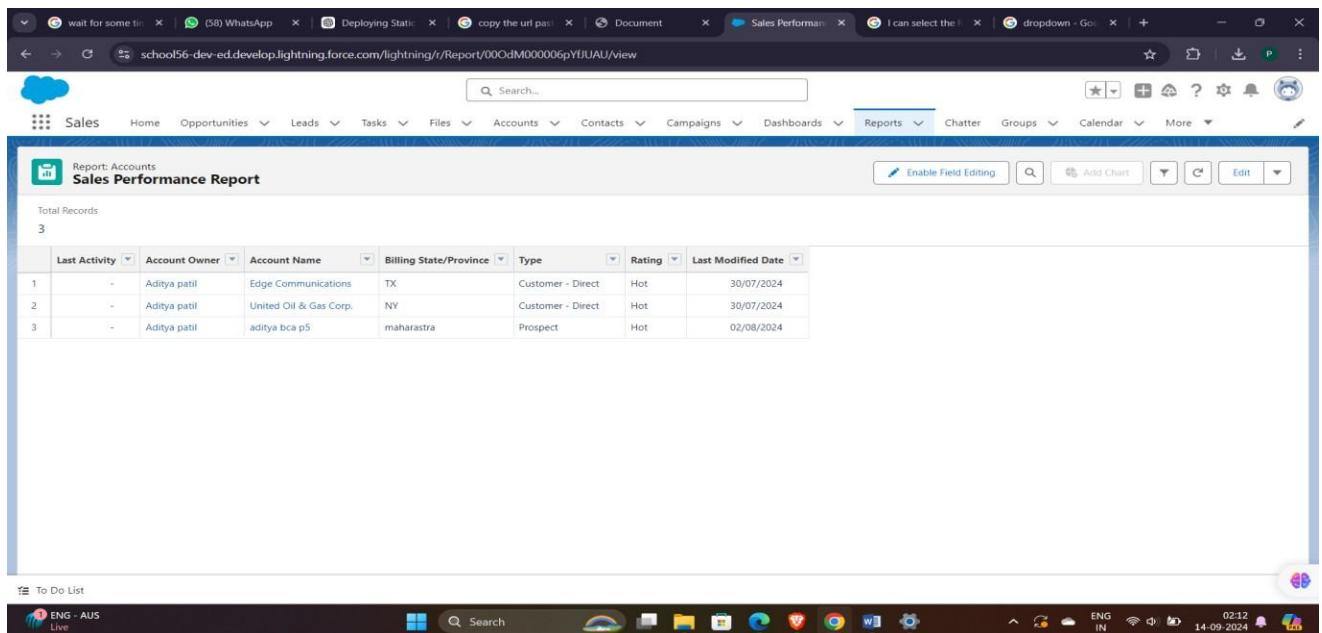
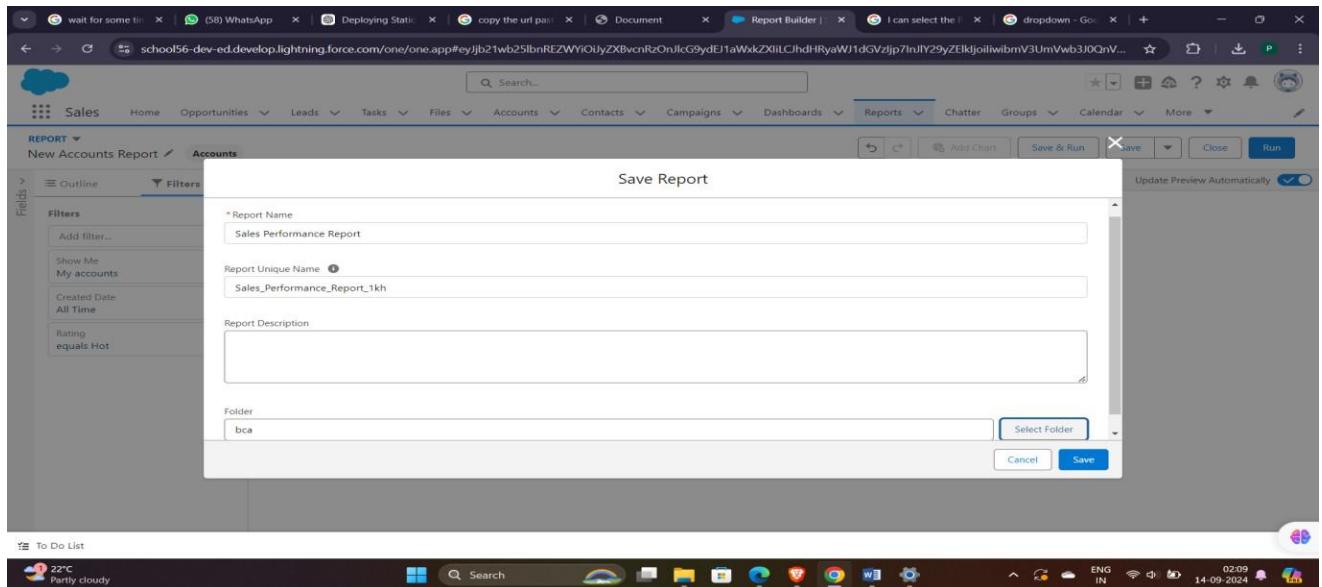
	Last Activity	Account Owner	Account Name	Billing State/Province	Type	Rating	Last Modified Date
1	- Aditya patil	Edge Communications	TX	Customer - Direct	Hot	30/07/2024	
2	- Aditya patil	United Oil & Gas Corp.	NY	Customer - Direct	Hot	30/07/2024	
3	- Aditya patil	aditya bca p5	maharastra	Prospect	Hot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

At the top right, there are buttons for 'Save & Run', 'Save', 'Close', and 'Run'. A checkbox 'Update Preview Automatically' is checked. The bottom of the screen shows a Windows taskbar with various icons and the 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 a 'Save Report' dialog box overlaid on the Report Builder interface. The dialog has fields for 'Report Name' (Sales Performance Report), 'Report Unique Name' (Sales\_Performance\_Report\_1kh), 'Report Description' (empty), and 'Folder' (bca). At the bottom right are 'Cancel' and 'Save' buttons. The background shows the same report preview as the previous screenshot.

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 left sidebar lists various apps under 'Sales' and 'Chatter'. The main area displays a table of account records. The table has columns for 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

The status bar at the bottom shows system information like battery level (10.60%), network connection, and the date (14-09-2024).

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

The screenshot shows the Salesforce App Launcher interface after searching for 'Dashboards'. The search results are displayed in the 'Items' section. The table data is identical to the previous screenshot:

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

The status bar at the bottom shows system information like battery level (10.60%), network connection, and the date (14-09-2024).

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

A screenshot of the Salesforce Lightning interface. The top navigation bar includes links for Home, Opportunities, Leads, Tasks, Files, Accounts, Contacts, Campaigns, Dashboards, Reports, Chatter, Groups, Calendar, and More. The left sidebar shows sections for Dashboards (Recent, Created by Me, Private Dashboards), Folders (All Folders, CRM), and Favorites. The main content area displays a table of existing dashboards:

	Dashboard Name	Description	Folder	Created By	Created On	Subscribed
1	Sales Dashboard	Sales Dashboard	Bca 1	Aditya patil	10/9/2024, 1:45 pm	
2	Sales Dashboard	Sales Dashboard	Bca 1	Aditya patil	3/9/2024, 3:57 pm	
3	Sales Dashboard	Sales Dashboard	Bca 1	Aditya patil	3/9/2024, 4:33 pm	
4	aaaa	aaaa	Bca 1	Aditya patil	3/9/2024, 4:29 pm	
5	Sales Dashboard	Sales Dashboard	Private Dashboards	Aditya patil	3/9/2024, 2:16 am	
6	Sales Dashboard	Sales Dashboard	Bca 1	Aditya patil	3/9/2024, 2:00 am	
7	Sales Dashboard	Sales Dashboard	Bca 1	Aditya patil	30/7/2024, 11:34 am	

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

A screenshot of the Salesforce Lightning interface showing a 'New Dashboard' modal dialog. The dialog contains the following fields:

- \*Name: Sales Performance Report Dashboard
- Description: (empty)
- Folder: Private Dashboards

At the bottom right of the dialog are two buttons: 'Cancel' and 'Create'.

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

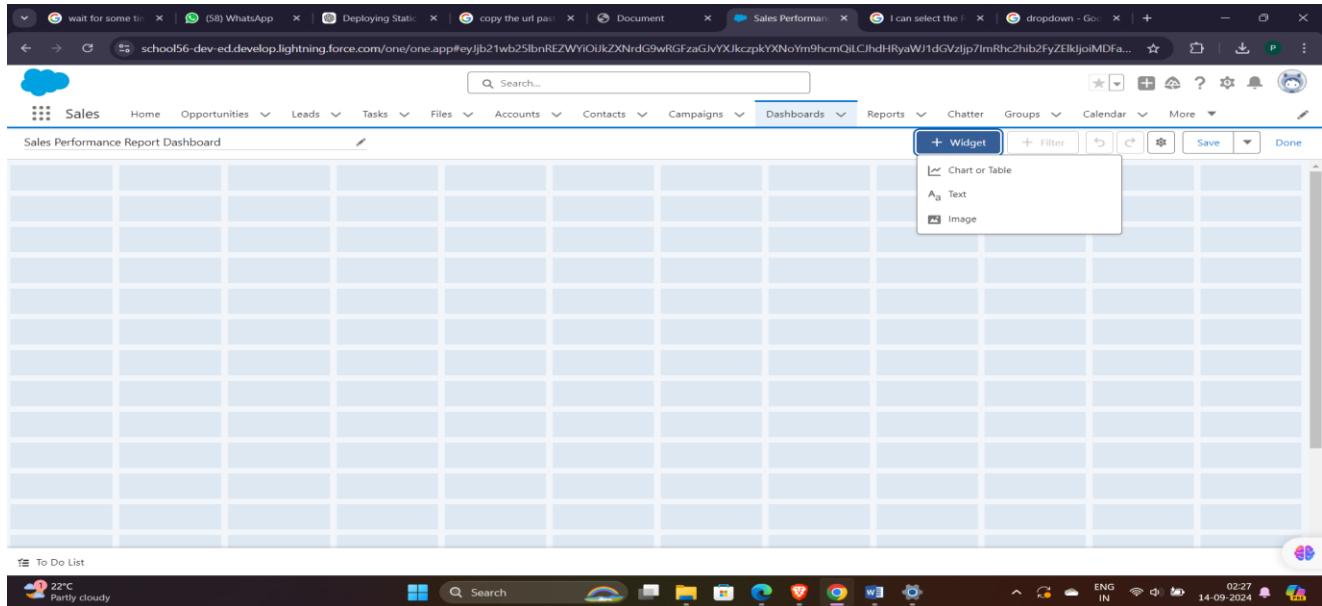
A screenshot of the Salesforce Lightning interface showing a 'New Dashboard' modal dialog. The dialog contains the following fields:

- \*Name: Sales Performance Report Dashboard
- Description: (empty)
- Folder: Private Dashboards

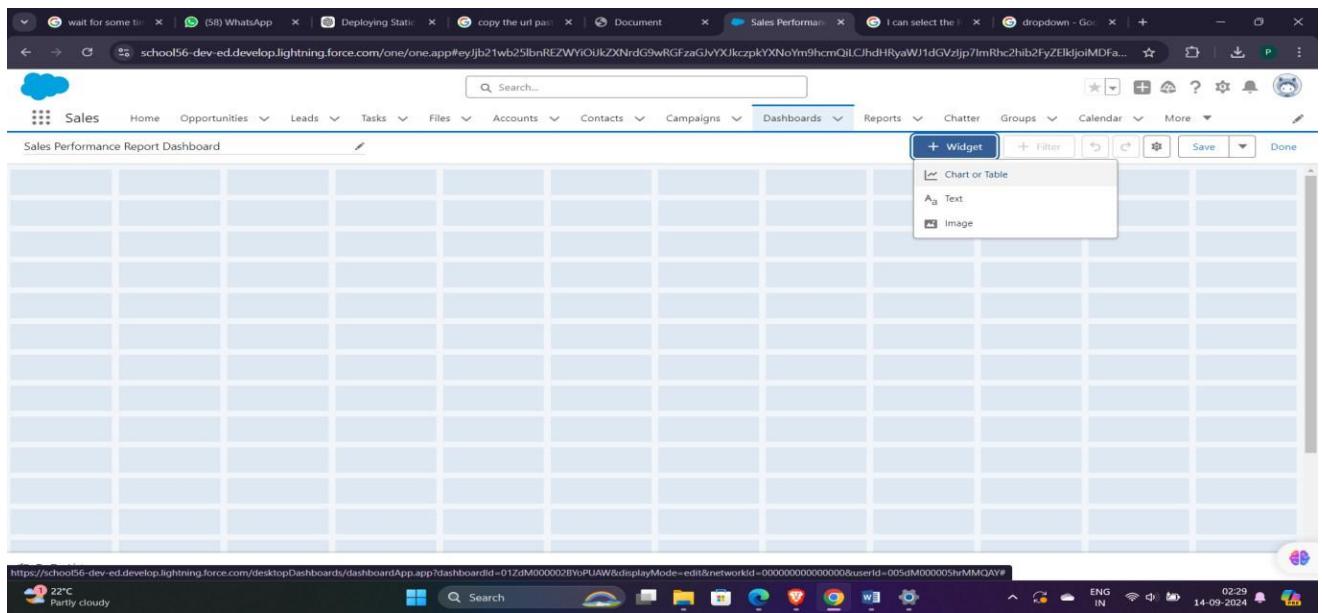
At the bottom right of the dialog, the 'Create' button is highlighted in blue, indicating it is the next step to be clicked.

## 6: Add Components to the Dashboard

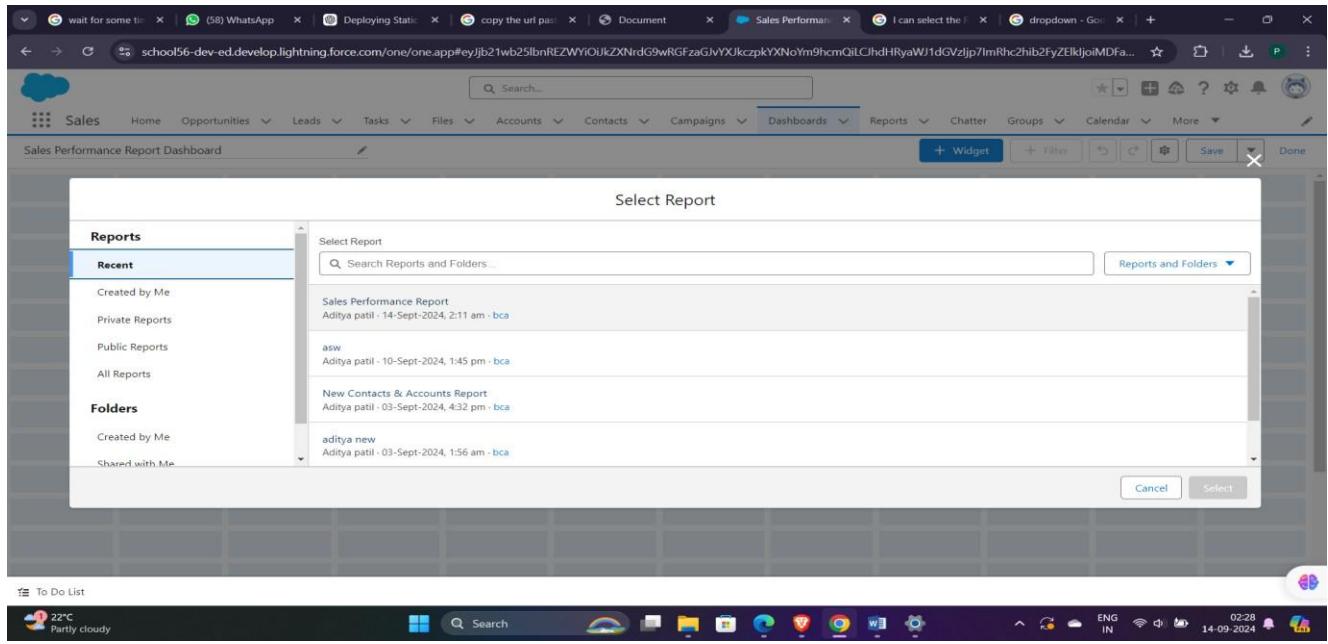
Step 1: Click on "Add Component" (top-right corner).



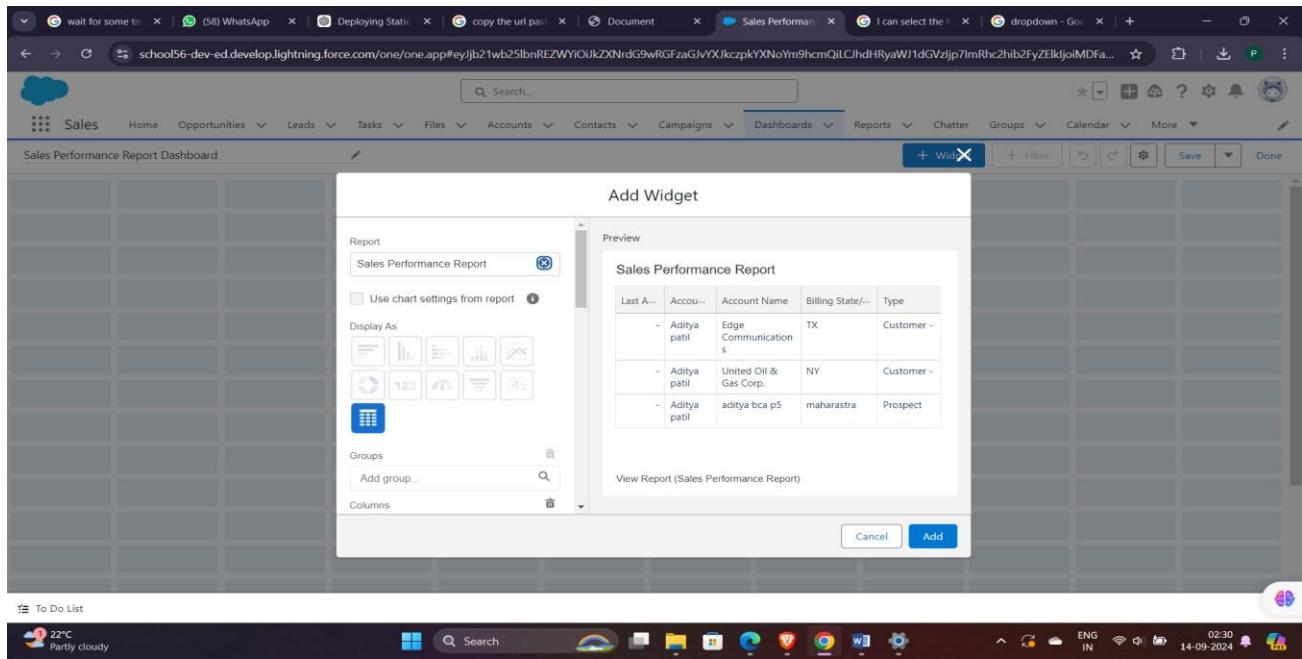
Step 2: Click on the Chart or Table



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)

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:

+ Widget

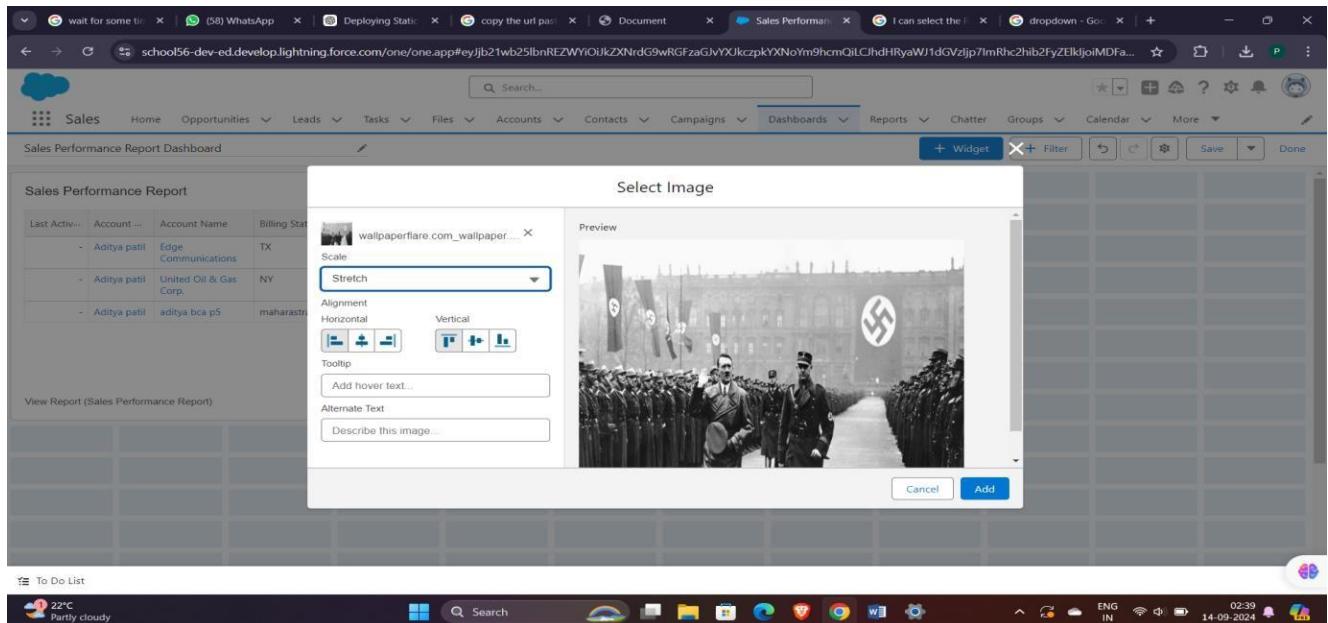
Chart or Table

Text

Image

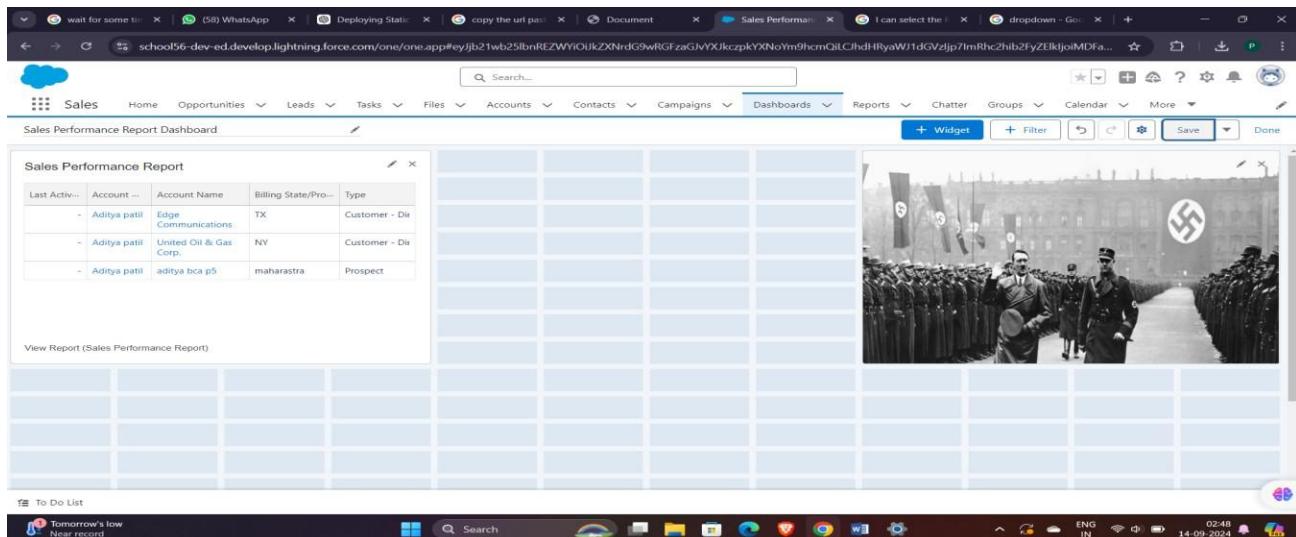
https://school56-dev-ed.develop.lightning.force.com/desktopDashboards/dashboardApp.app?dashboardId=012dM000002BwPUAW&displayMode=edit&networkId=0000000000000000&userId=005dM000005hMMQAY#

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

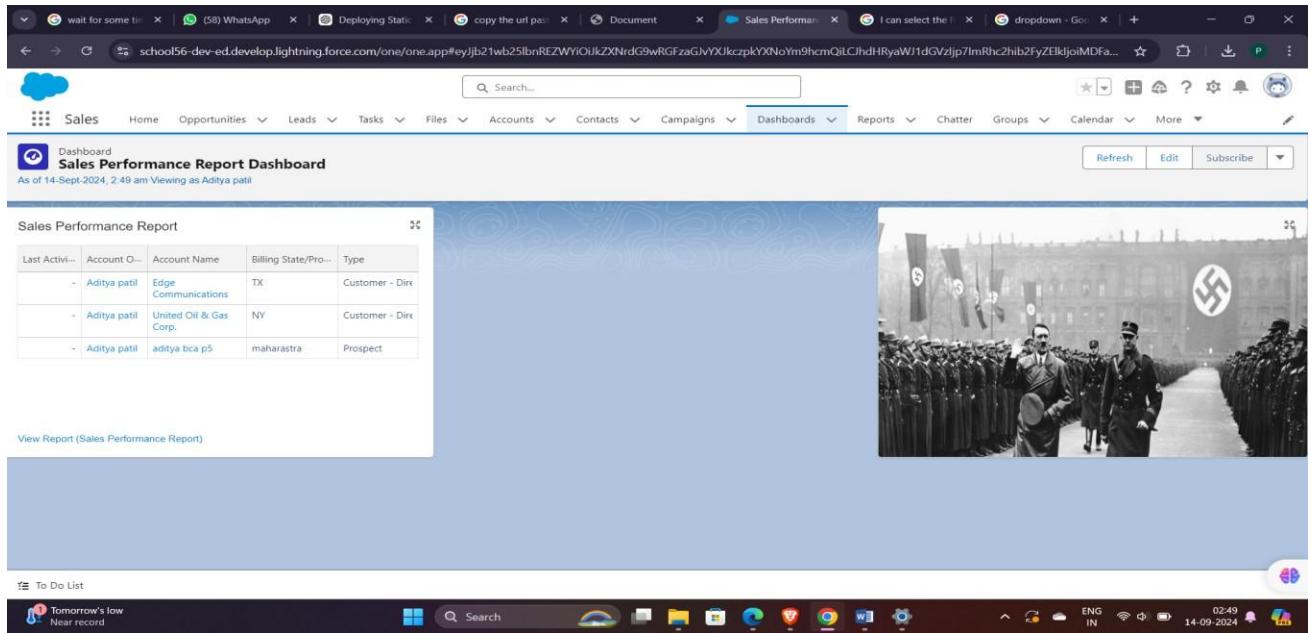


## 7: Save and View the Dashboard

**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.



## 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: Ms.Swati.S.Badhe**

**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:**

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**Title: Introduction to Amazon AWS S3:**

**Objective :**

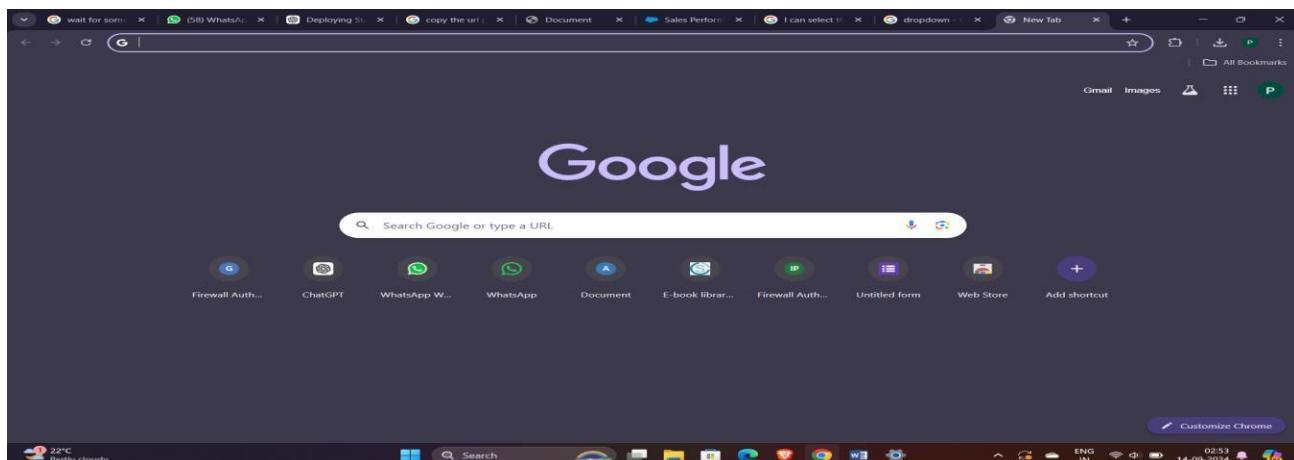
To learn how to host a simple static website using Amazon AWS Simple Storage Service (S3).

**Requirements:**

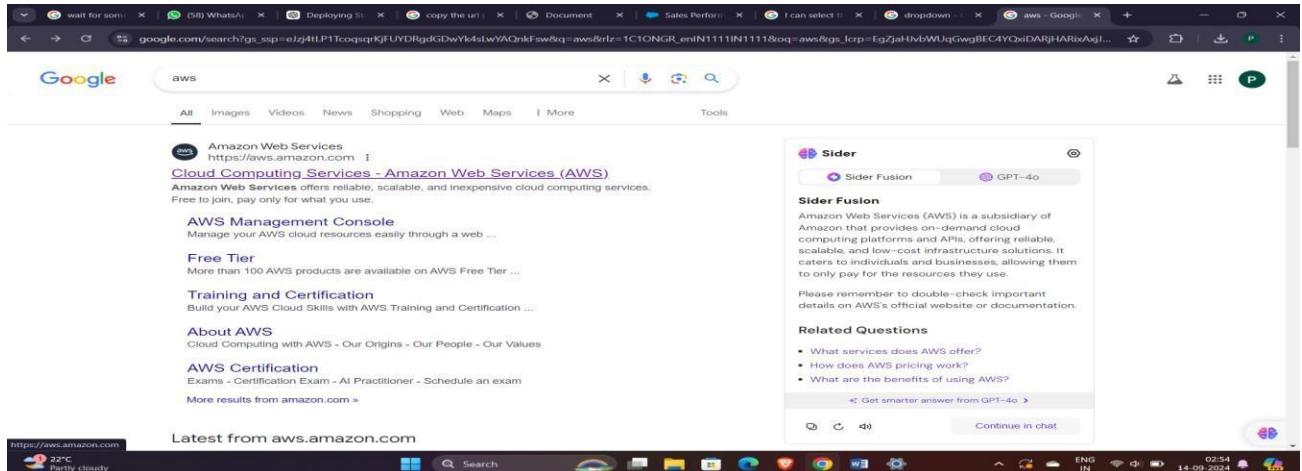
- 1) An Amazon Web Services (AWS) account
- 2) A simple static website (HTML, CSS, JS files)
- 3) Basic understanding of AWS Management Console

**Step-by-Step Instructions:**

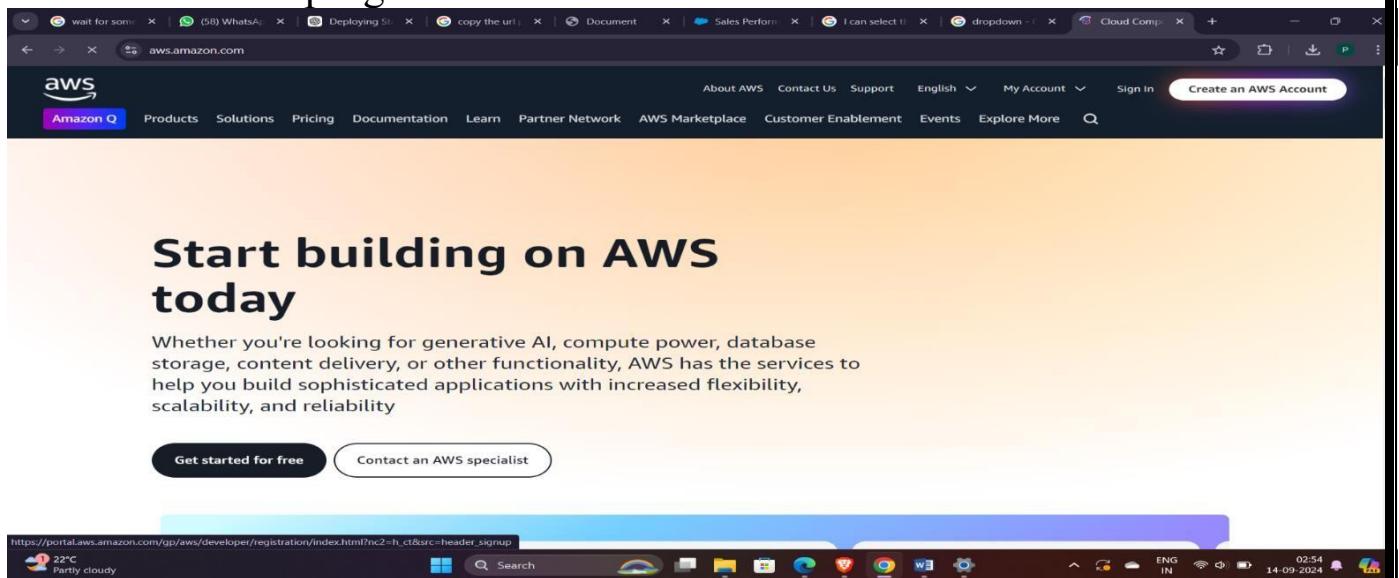
Step 1: Go to Google.



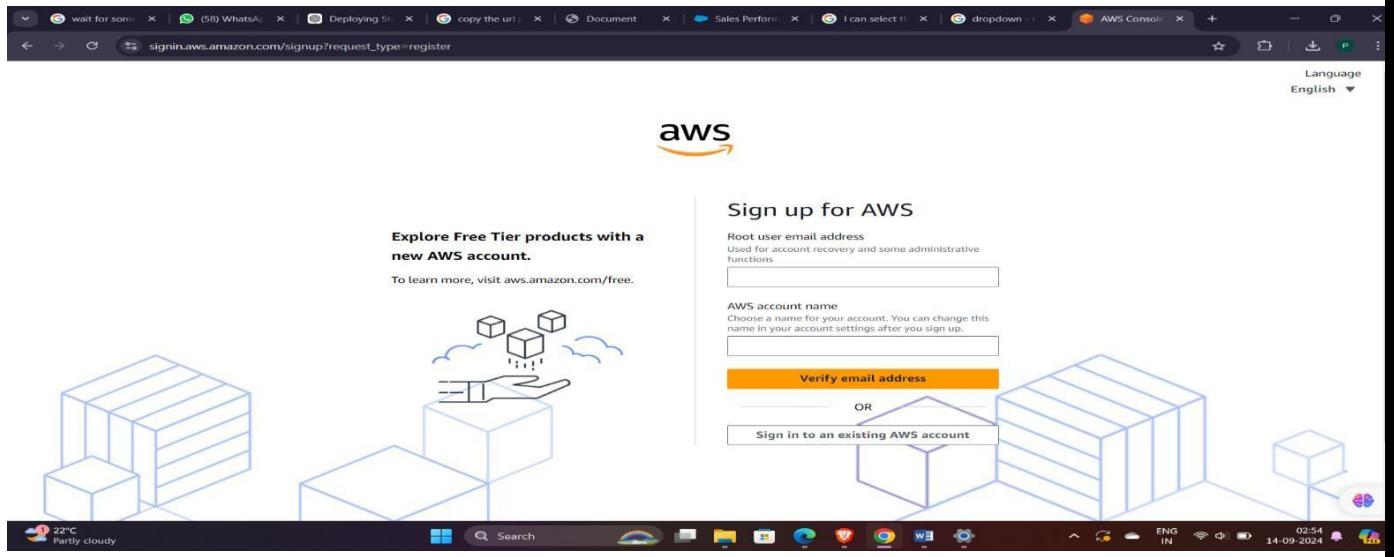
Step 2: Search for the official AWS website (or directly go to [aws.amazon.com](https://aws.amazon.com)).



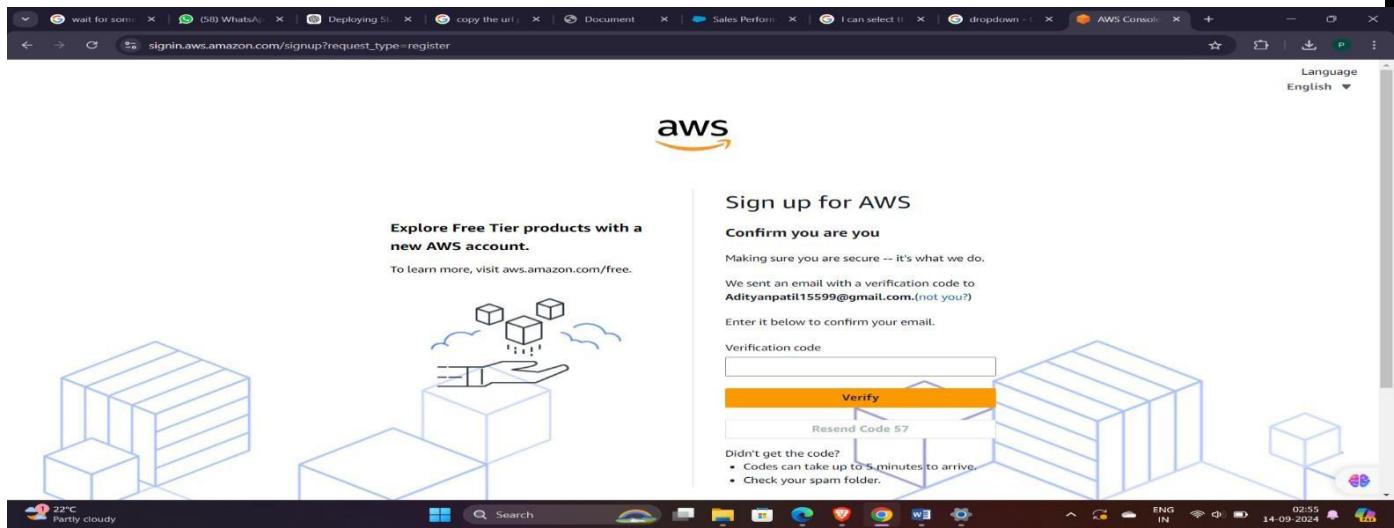
Step 3: Once you're on the official AWS website, click on "Create an AWS account" at the top right.



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



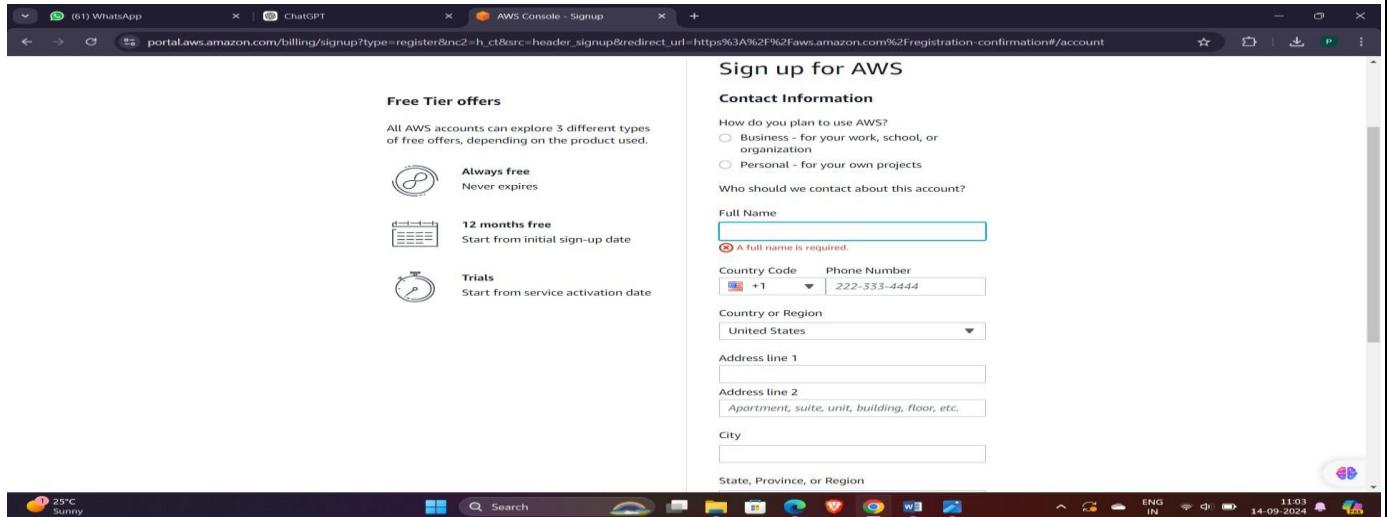
Step 5: Enter the verification code that you received in your email.



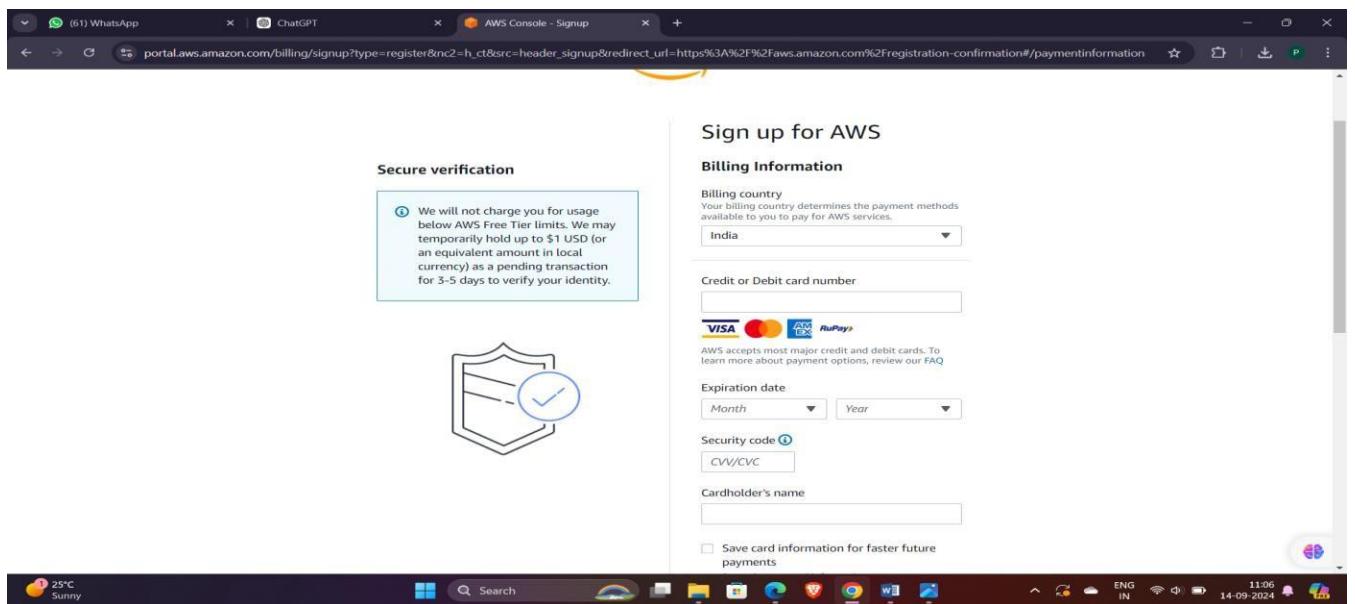
Step 6 : Set a password for your AWS account and confirm it by entering it again.



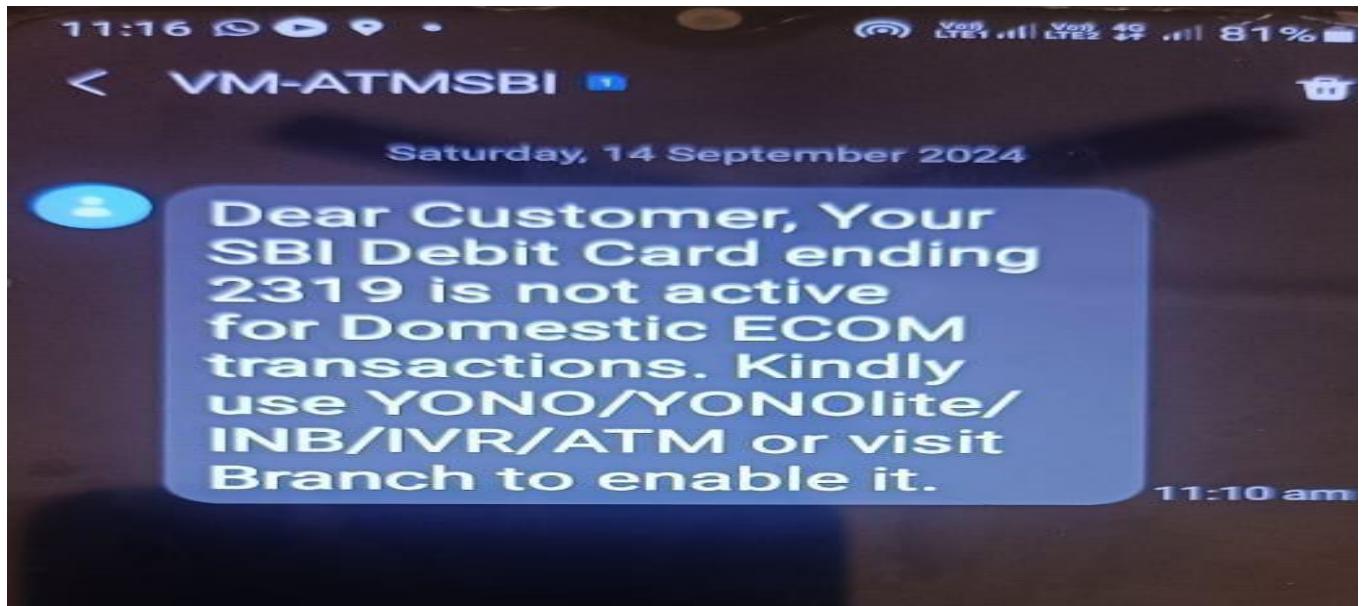
Step 7 : Fill in your contact information (full name, phone number, address, etc.).



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.



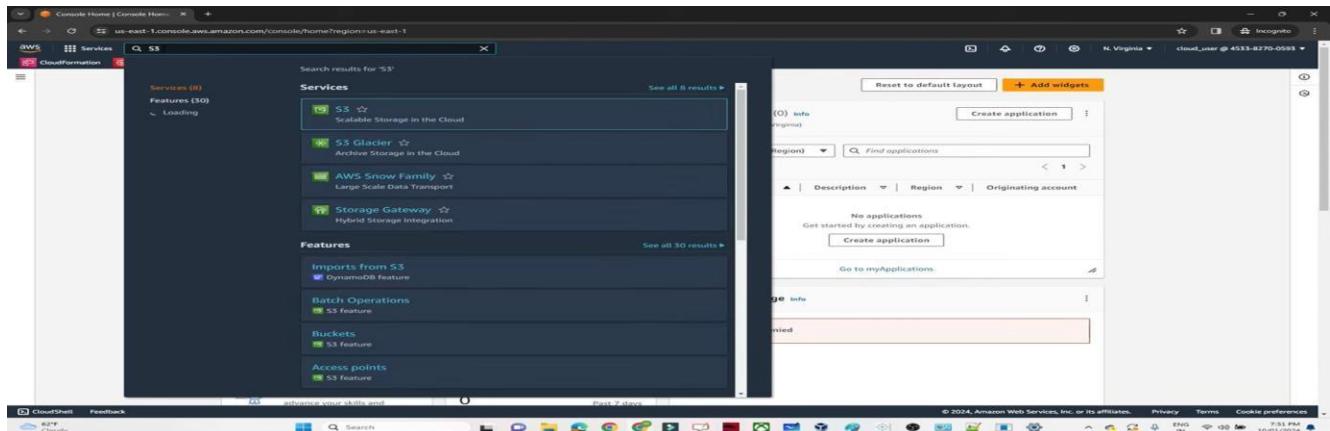
## (If you can enter the AWS cloud)

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

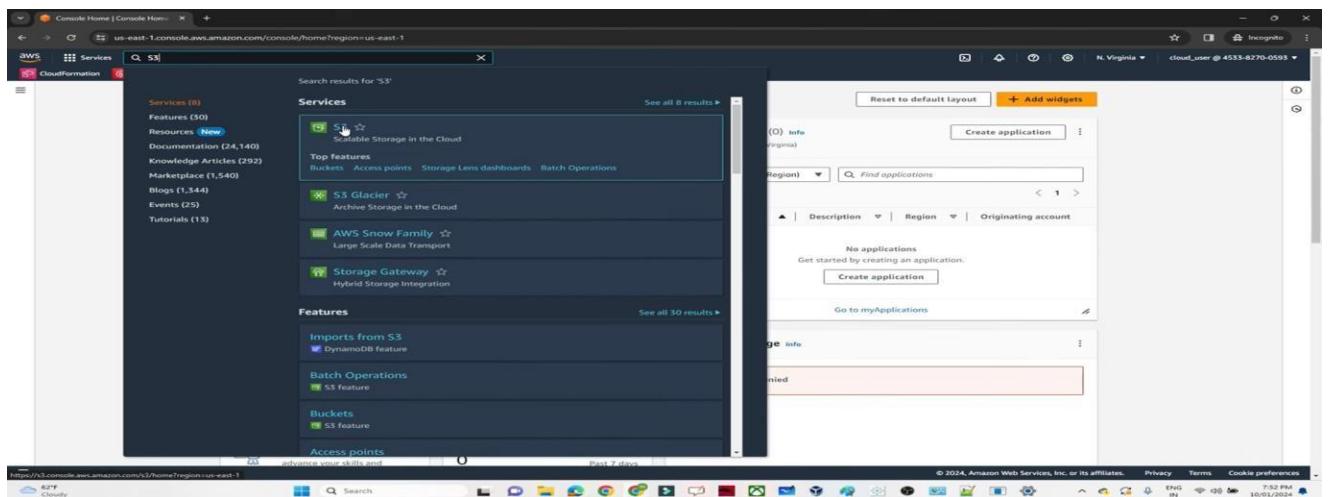
Step 1: Now you are in the AWS Management Console (Dashboard).

Console Home | Console Home - +  
us-east-1.console.aws.amazon.com/console/home?region=us-east-1  
AWS Services Search [Alt+S]  
N. Virginia cloud\_user @ 4533-8270-0593  
CloudFormation Secrets Manager IAM API Gateway CloudFront Route 53  
Console Home Info  
Recently visited Info  
S3 Athena  
EC2 CloudTrail  
EC2 Image Builder Route 53  
IAM CloudFront  
Amazon Redshift API Gateway  
Secrets Manager Systems Manager  
View all services  
Applications (0) Info Region: US East (N. Virginia)  
us-east-1 (Current Region) Find applications  
Name Description Region Originating account  
No applications Get started by creating an application.  
Create application  
Welcome to AWS Info  
Getting started with AWS Learn the fundamentals and find valuable information to get the most out of AWS.  
Training and certification Learn from AWS experts and advance your skills and  
AWS Health Info  
Open issues 0 Past 7 days  
Scheduled changes 0 Upcoming and past 7 days  
Other notifications 0 Past 7 days  
Cost and usage Info  
Access denied  
CloudShell Feedback 62°F Cloudy Search Privacy Terms Cookie preferences © 2024, Amazon Web Services, Inc. or its affiliates. ENG IN 7:51 PM 10/01/2024

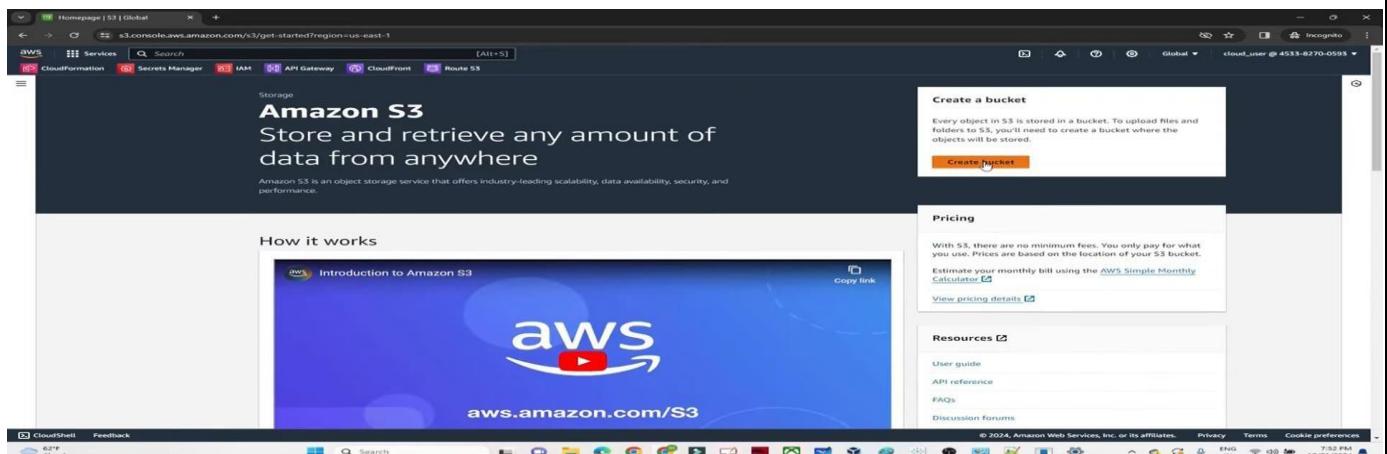
Step 2: In the search bar at the top left, type S3



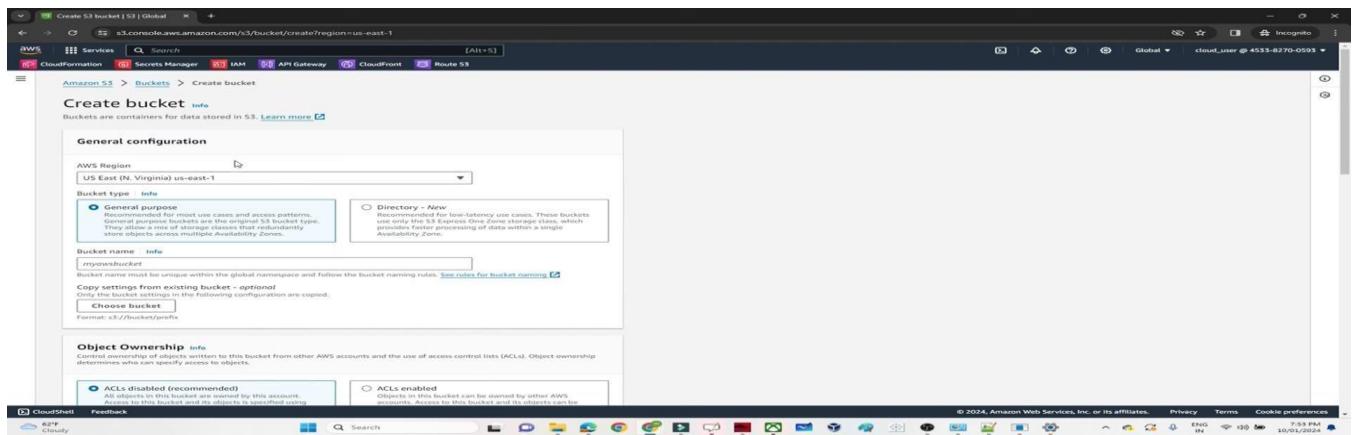
Step 3: select S3 from the dropdown.



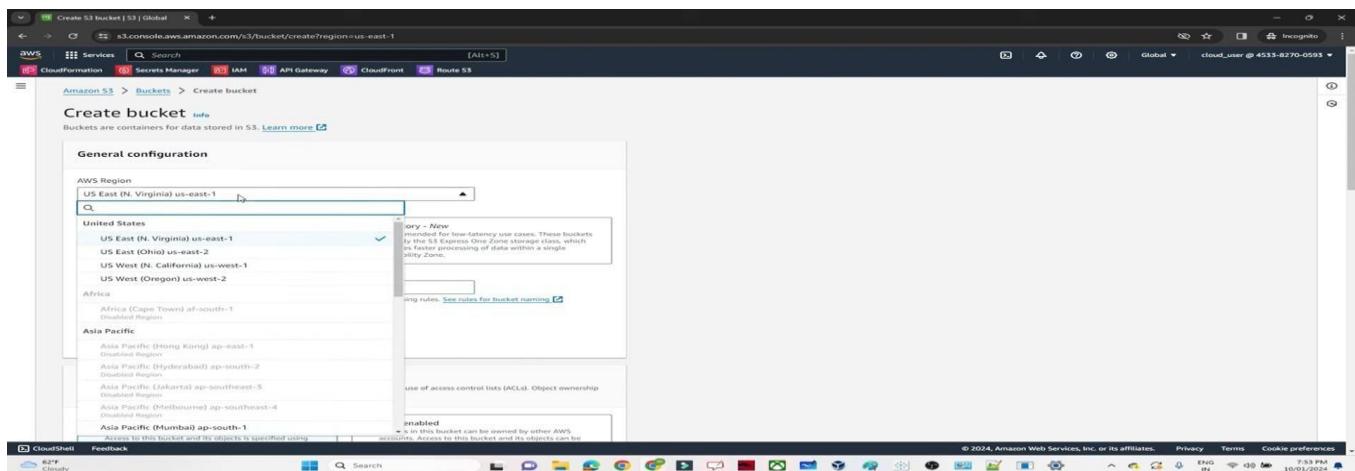
Step 4: On the Amazon S3 page, click on "Create bucket".



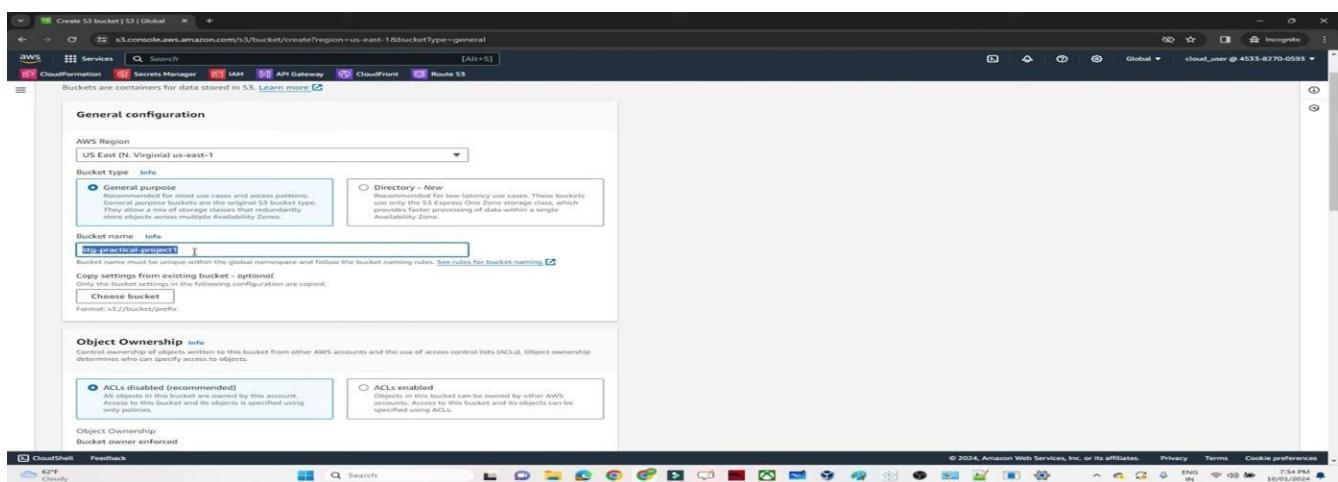
## Step 5: In the Create bucket page,



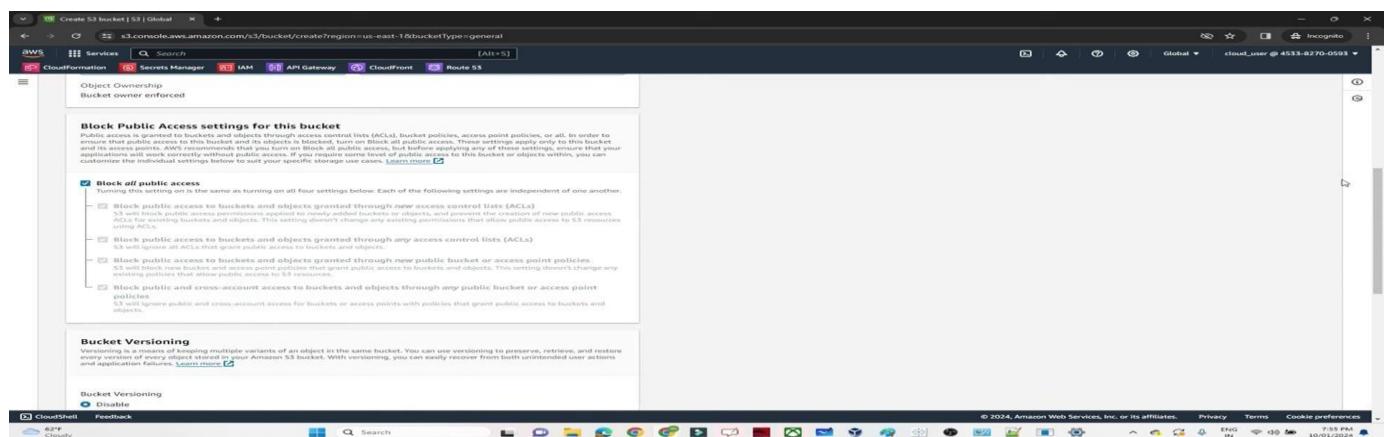
## Step 6: choose an AWS Region (select the region closest to you),



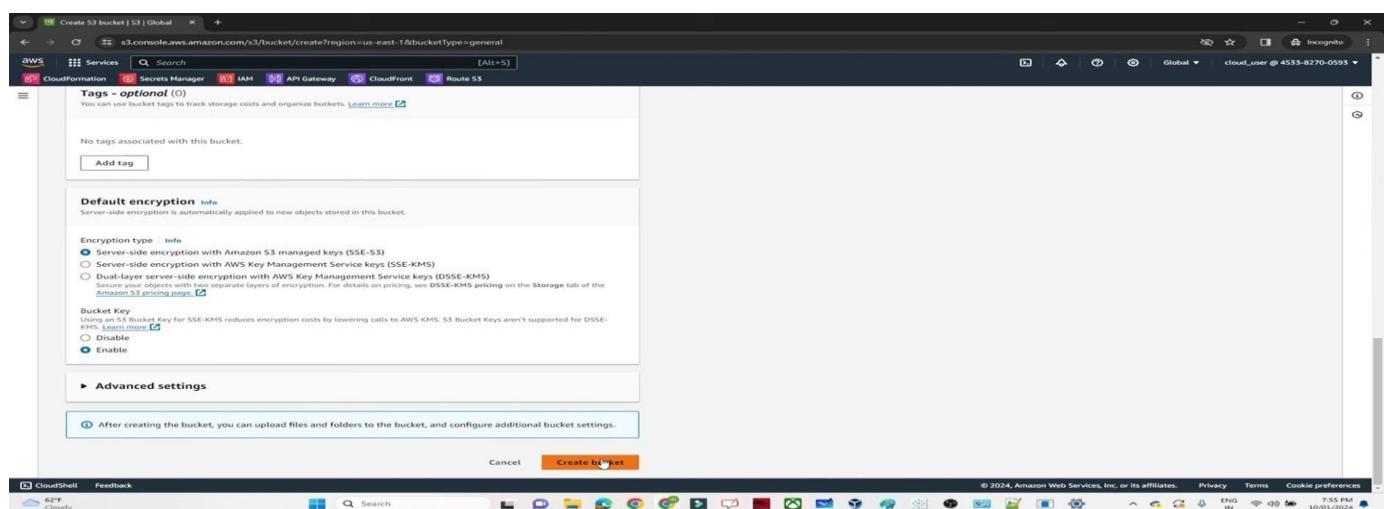
## Step 7: Enter a name for your bucket (make sure it is globally unique).



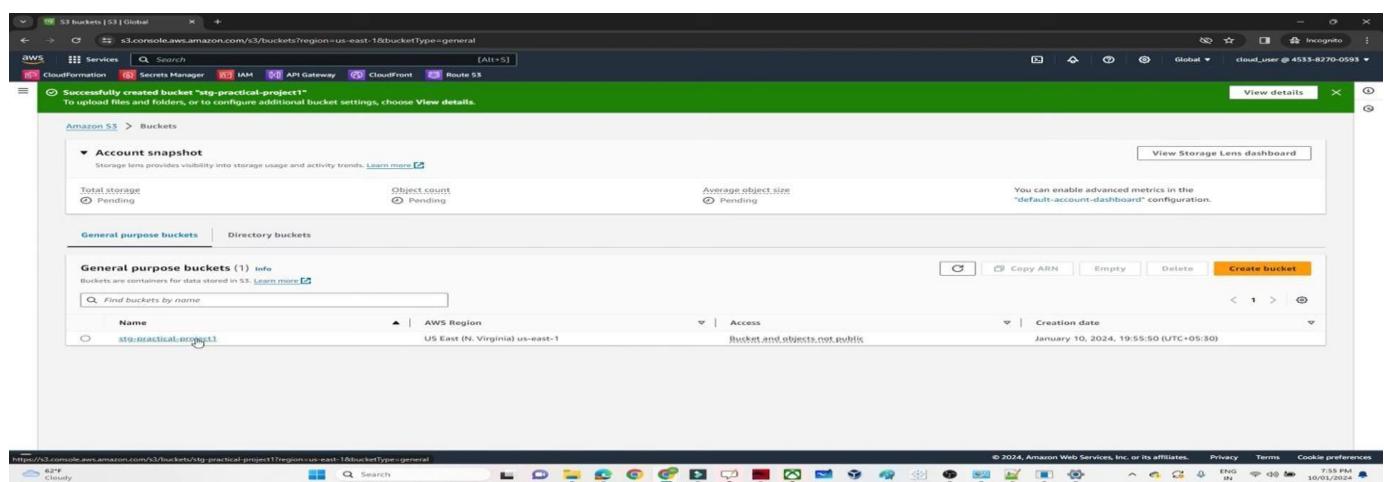
Step 8: Scroll down to the Block Public Access section. Uncheck the box to allow public access (if you want your site to be publicly accessible).



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.

General purpose buckets (1) [Info](#)  
Buckets are containers for data stored in S3. [Learn more](#)

Find buckets by name

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

[C](#) [Copy ARN](#) [Empty](#) [Delete](#) [Create bucket](#)

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

Objects (0) [Info](#)  
Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

Find objects by prefix

Name	Type	Last modified	Size	Storage class
No objects You don't have any objects in this bucket.				

[Upload](#)

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

Files and folders (0)  
All files and folders in this table will be uploaded.

Find by name

Name	Folder	Type	Size
No files or folders You have not chosen any files or folders to upload.			

[Remove](#) [Add files...](#) [Add folder](#)

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

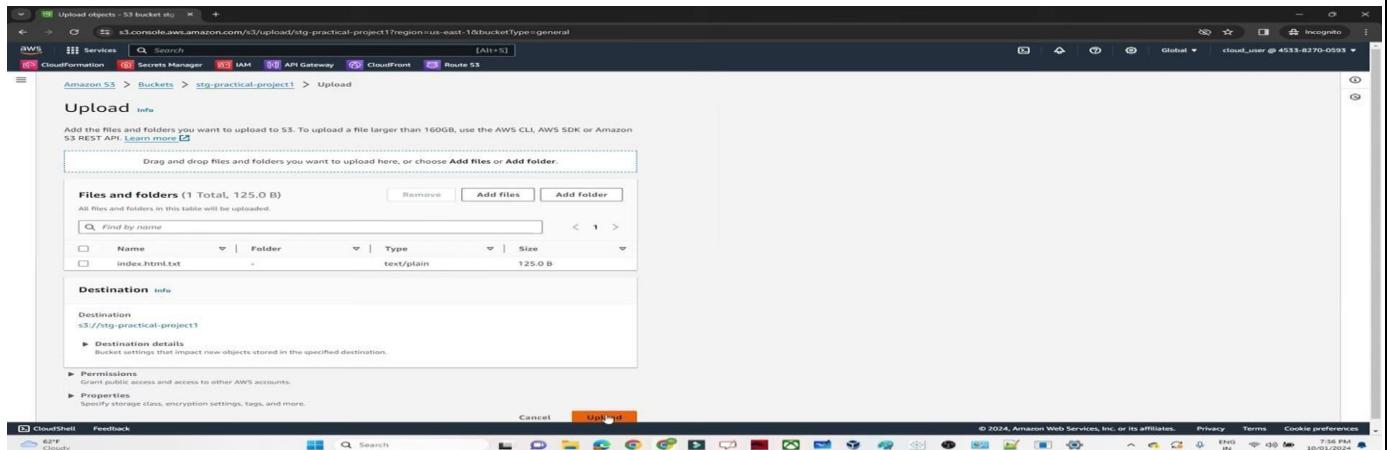
Open

Name	Date modified	Type	Size
index.html	10/01/2024 7:36 PM	Text Document	1 KB

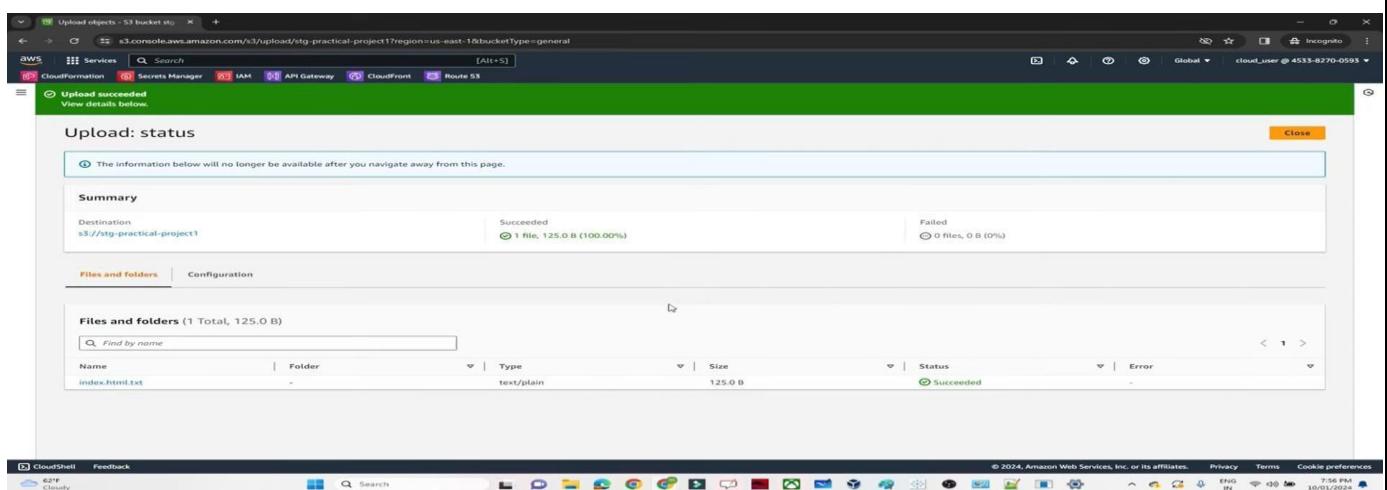
No files or folders  
You have not chosen any files or folders to upload.

**Destination info**  
Destination: [stg-practical-project1](#)  
Destination details: Bucket settings that impact new objects stored in the specified destination.  
Permissions: Grant public access and access to other AWS accounts.

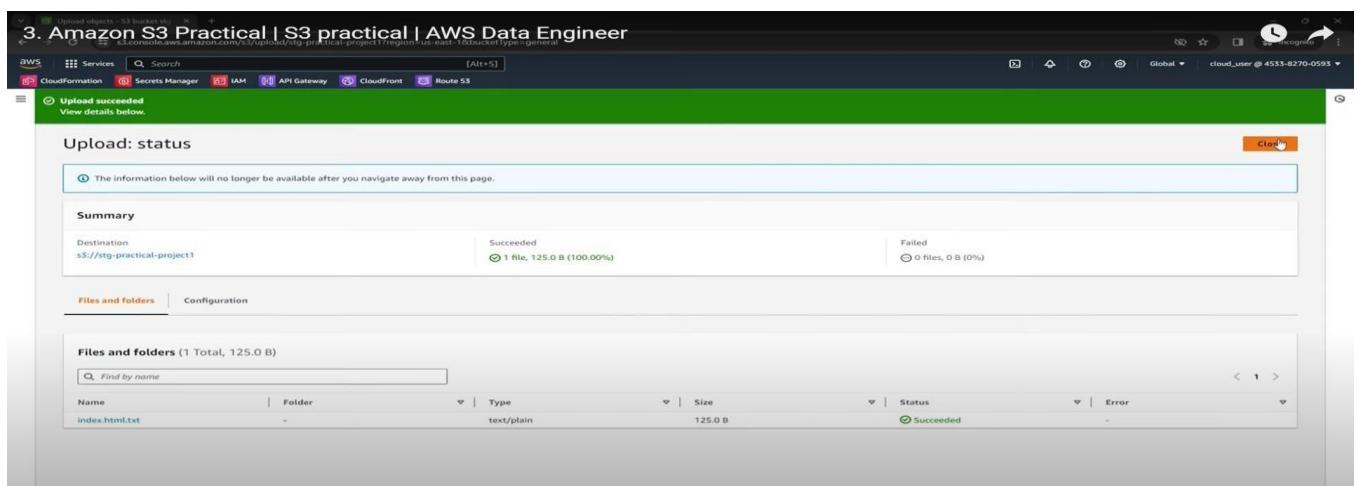
Step 15: Click "Upload" to upload the files to your bucket.



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. A single file, 'index.html.txt', is listed. The file is publicly accessible, as indicated by the red 'Publicly accessible' status bar at the top of the objects list.

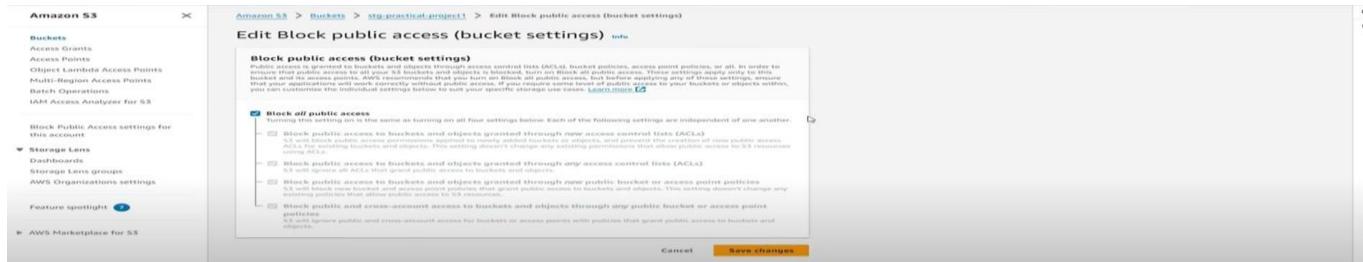
## Step 19: Go to the "Permissions" tab in your bucket settings.

The screenshot shows the AWS S3 console with the bucket 'stg-practical-project1'. The 'Permissions' tab is selected. The 'Publicly accessible' status bar is red, indicating the bucket is set to public access. The objects list shows the same file as before.

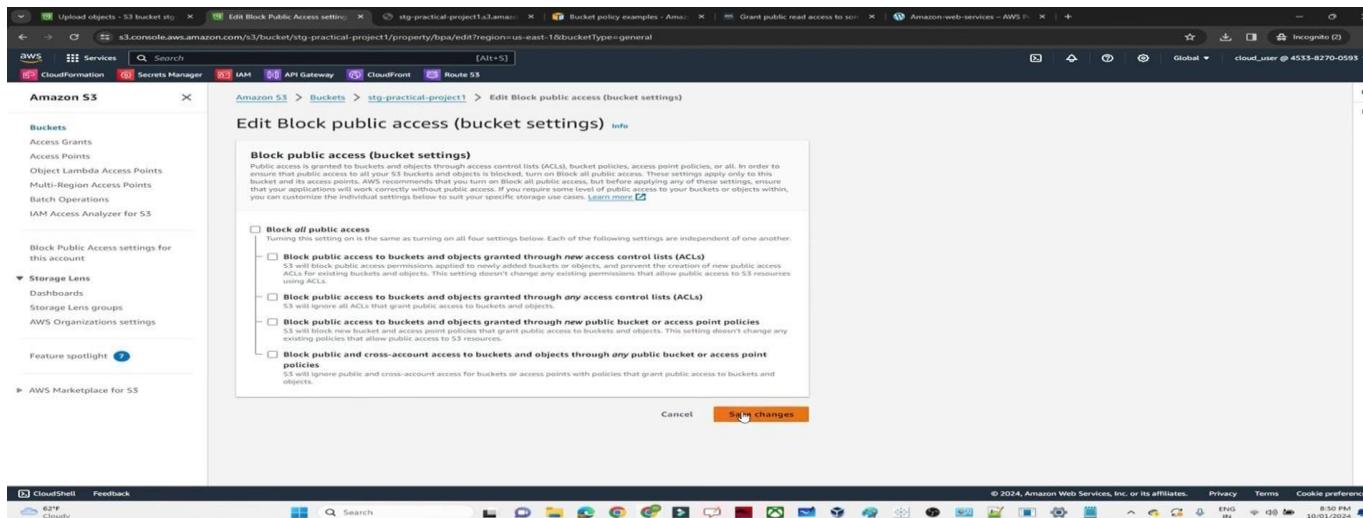
## Step 20: Scroll down to the Bucket Policy section and click "Edit".

The screenshot shows the AWS S3 console with the bucket 'stg-practical-project1'. The 'Bucket Policy' section is open. The 'Edit' button is visible in the top right corner of the policy editor.

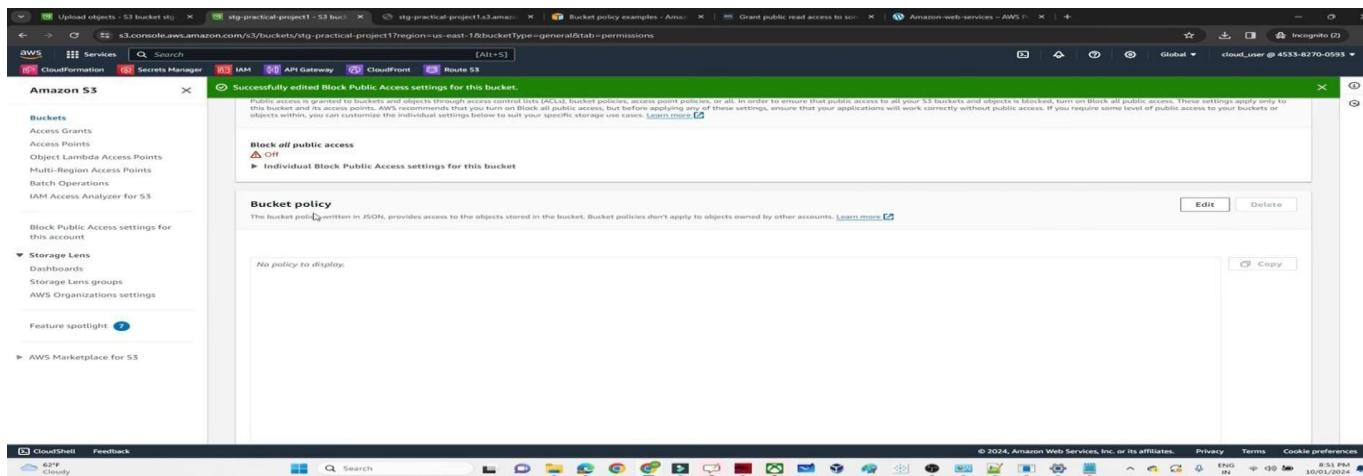
Step 21: By default, access is private. You need to add a bucket policy to make the files public



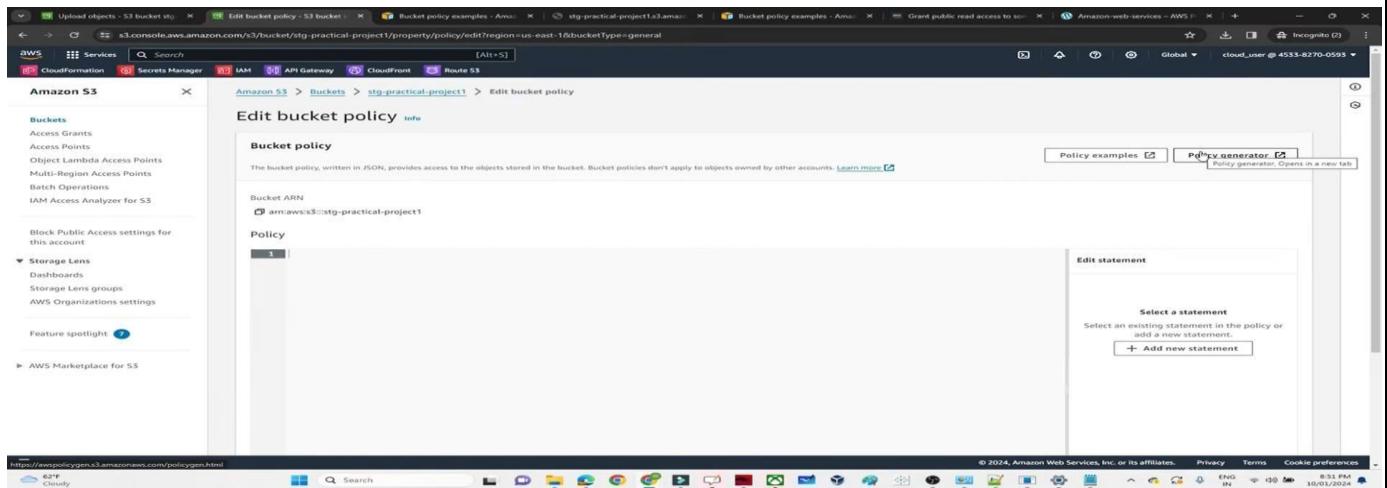
Step 22: Click on the save Changes



Step 23: Bucket policy

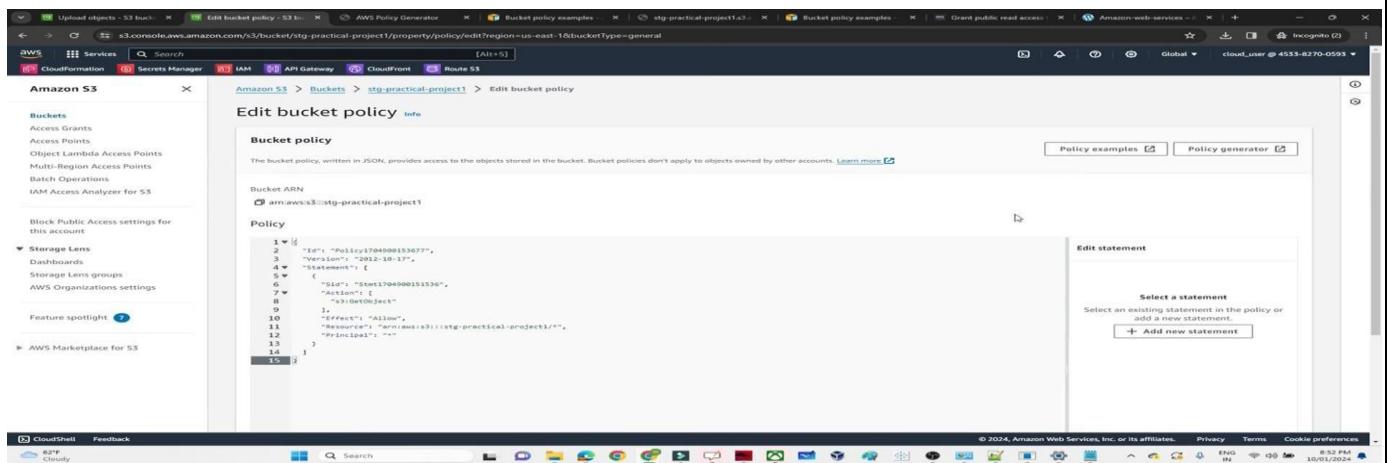


## Step 24: Click on Edit

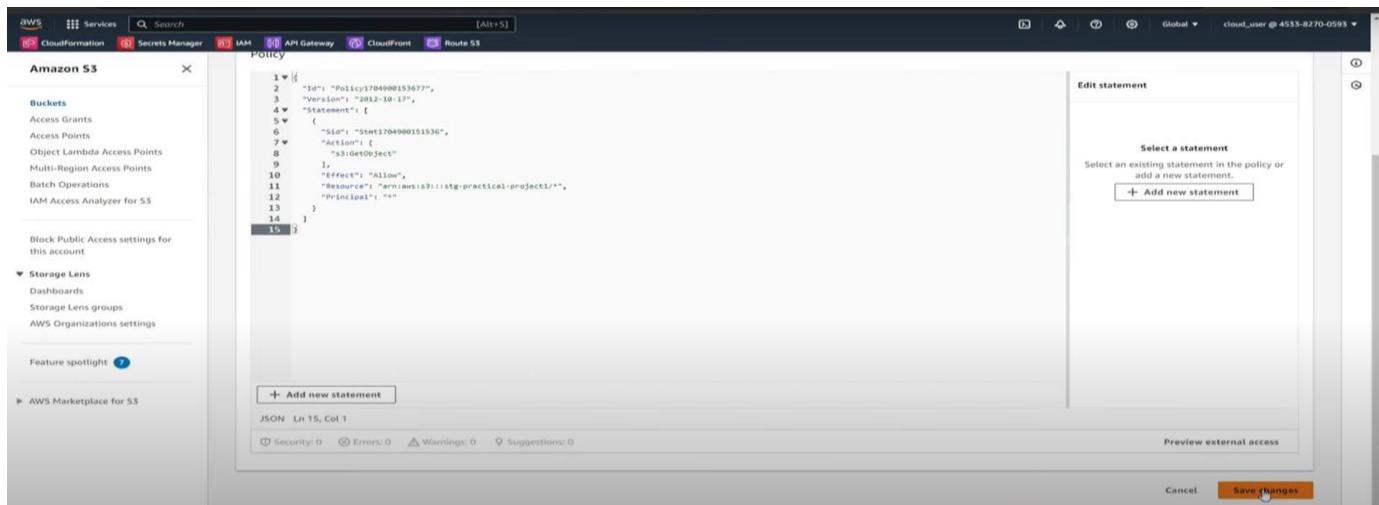


## Step 25: Generate the policy: Paste the following code into the Bucket Policy editor:

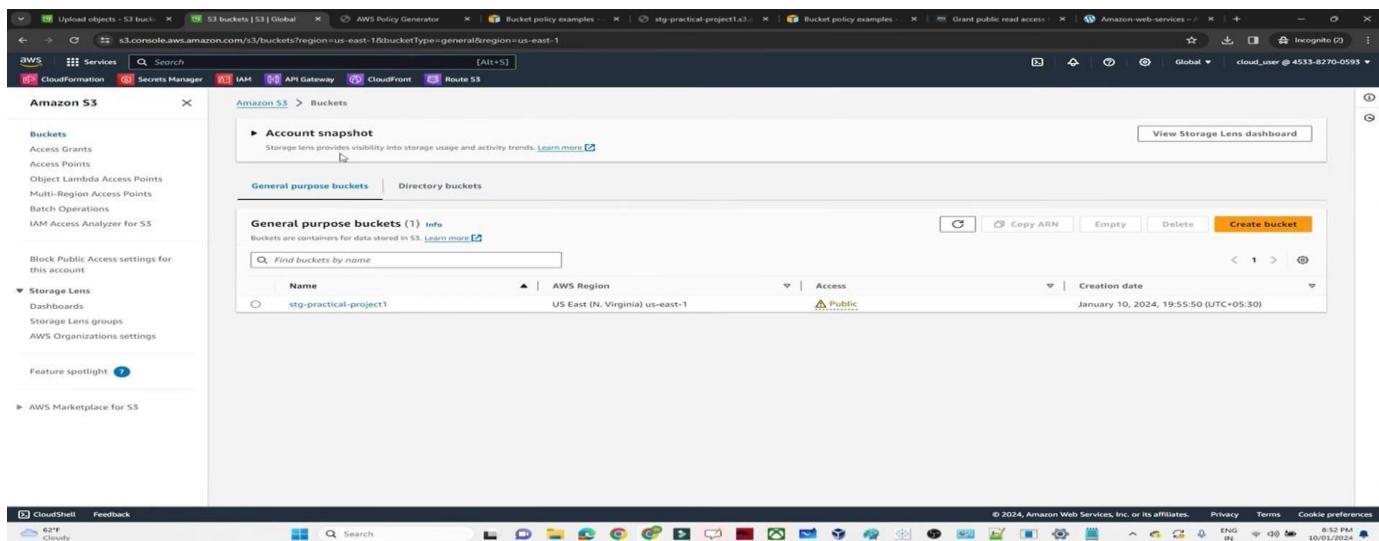
```
{  
    "Version": "2012-10-17",  
    "Statement": [  
        {  
            "Effect": "Allow",  
            "Principal": "*",  
            "Action": "s3:GetObject",  
            "Resource": "arn:aws:s3:::your-bucket-name/*"  
        }  
    ]  
}
```



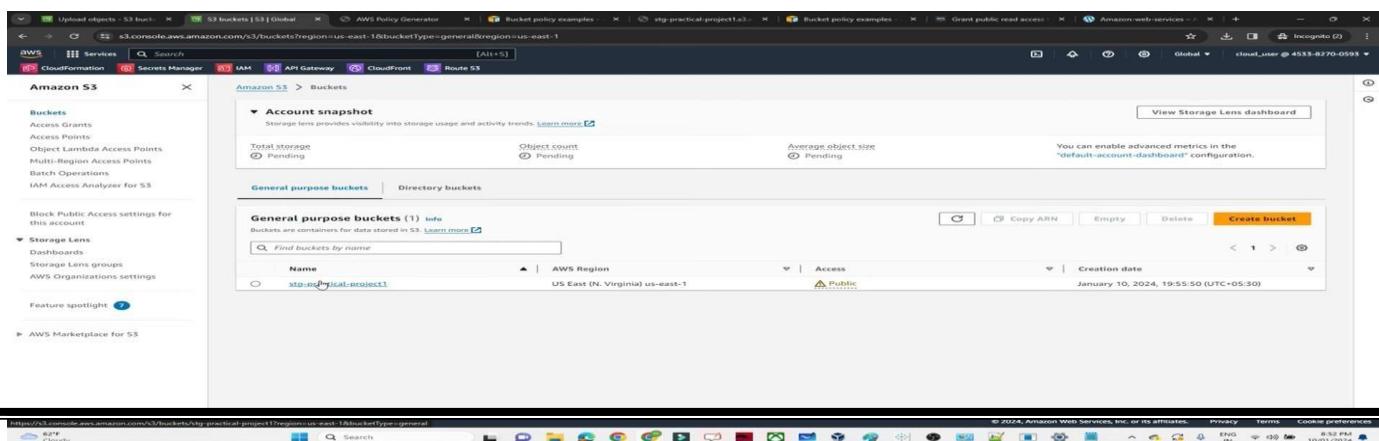
## Step 26: Click on the Save Changes



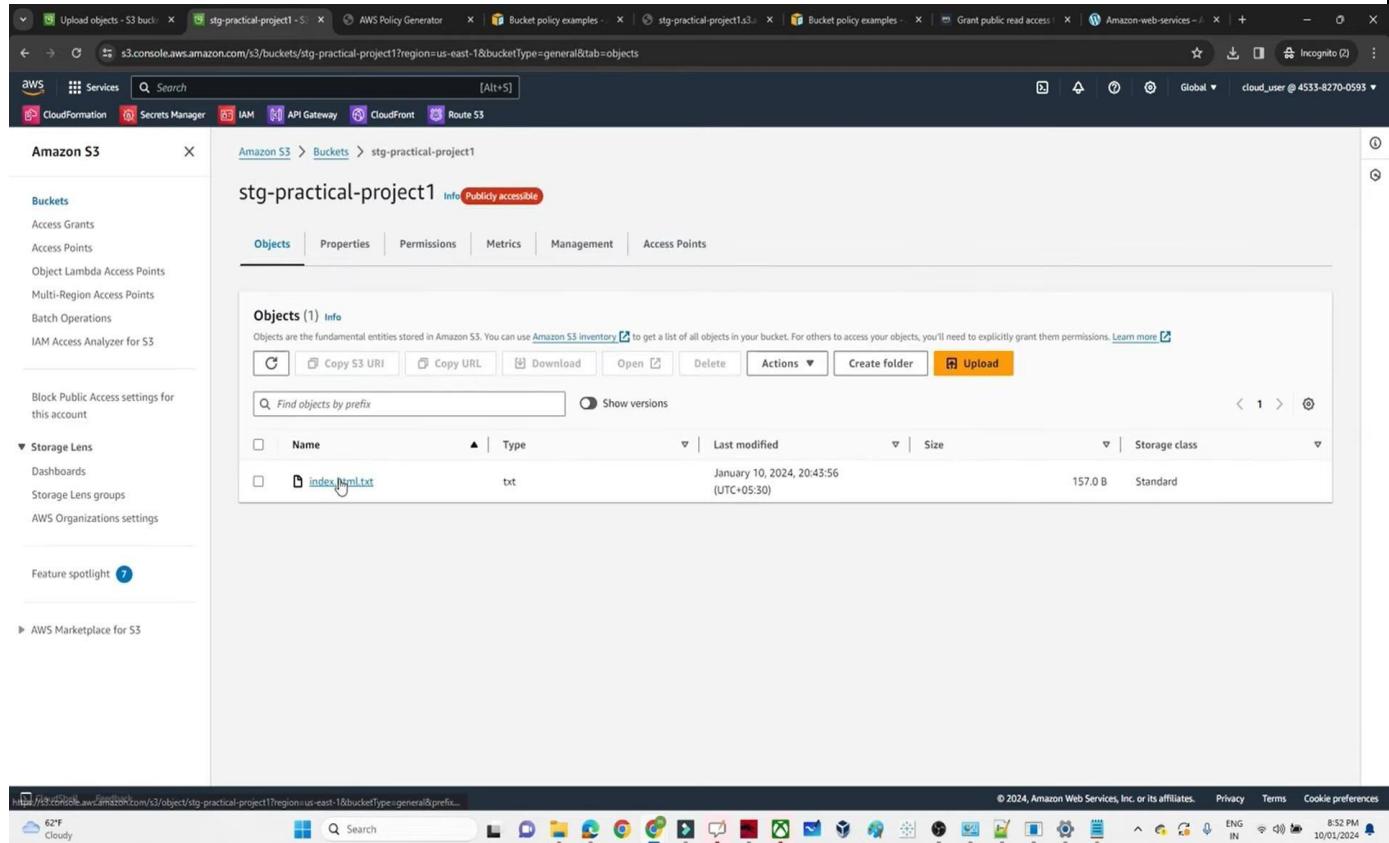
## Step 27: Back in the bucket page



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

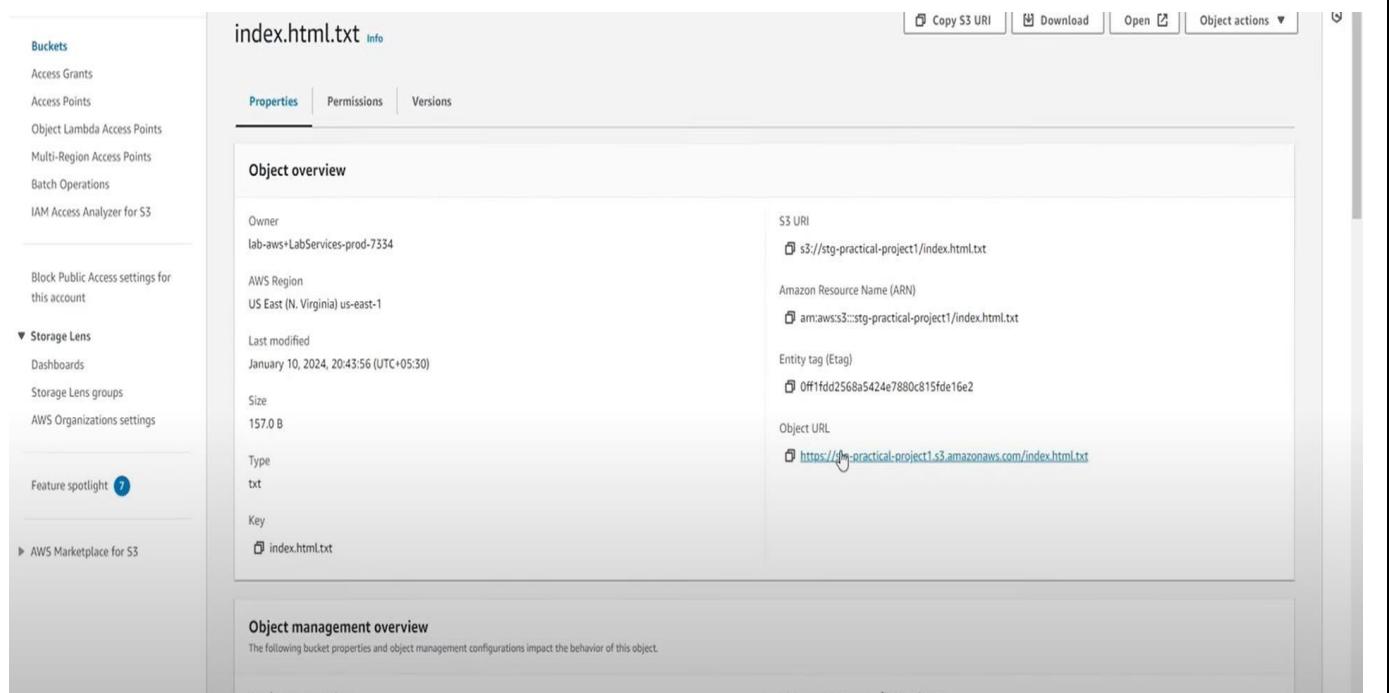


## Step 29: Click on the upload the files on your bucket.



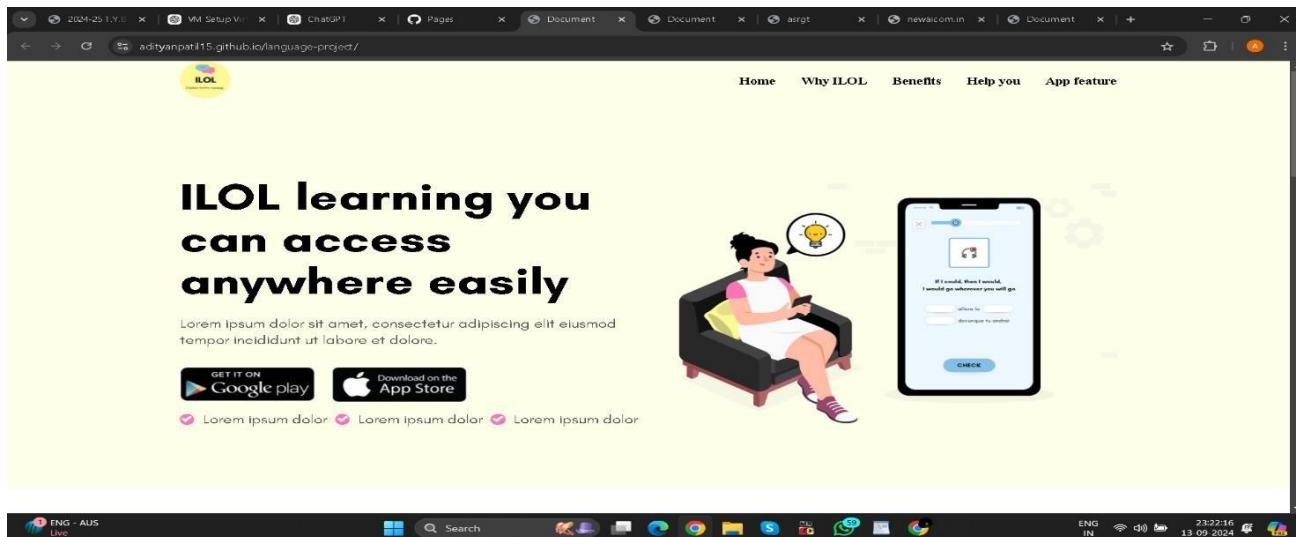
The screenshot shows the AWS S3 console interface. On the left, there's a sidebar with various AWS services like CloudFormation, Secrets Manager, IAM, API Gateway, CloudFront, and Route 53. The main area shows a bucket named 'stg-practical-project1' which is 'Publicly accessible'. Under the 'Objects' 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. The 'Standard' storage class is selected. At the top of the objects list, there are several buttons: 'Copy S3 URI', 'Copy URL', 'Download', 'Open', 'Delete', 'Actions', and 'Upload'. The 'Upload' button is highlighted with a yellow border. Below the objects list is a search bar labeled 'Find objects by prefix' and a 'Show versions' toggle switch.

## 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 is titled 'index.html.txt' and shows the 'Properties' tab selected. In the 'Object overview' section, there are several details: 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 of these details, there are corresponding values: S3 URI (s3://stg-practical-project1/index.html.txt), Amazon Resource Name (ARN) (arn:aws:s3:::stg-practical-project1/index.html.txt), Entity tag (Etag) (0ff1ffd2568a5424e7880c815fde16e2), and Object URL (https://stg-practical-project1.s3.amazonaws.com/index.html.txt). The 'Object URL' value is highlighted with a yellow border. At the top of this section, there are buttons for 'Copy S3 URI', 'Download', 'Open', and 'Object actions'.

## 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.

**Submitted By:**

**Checked By: Ms.Swati.S.Badhe**

**Sign:**

**Name:**

**Roll No:**