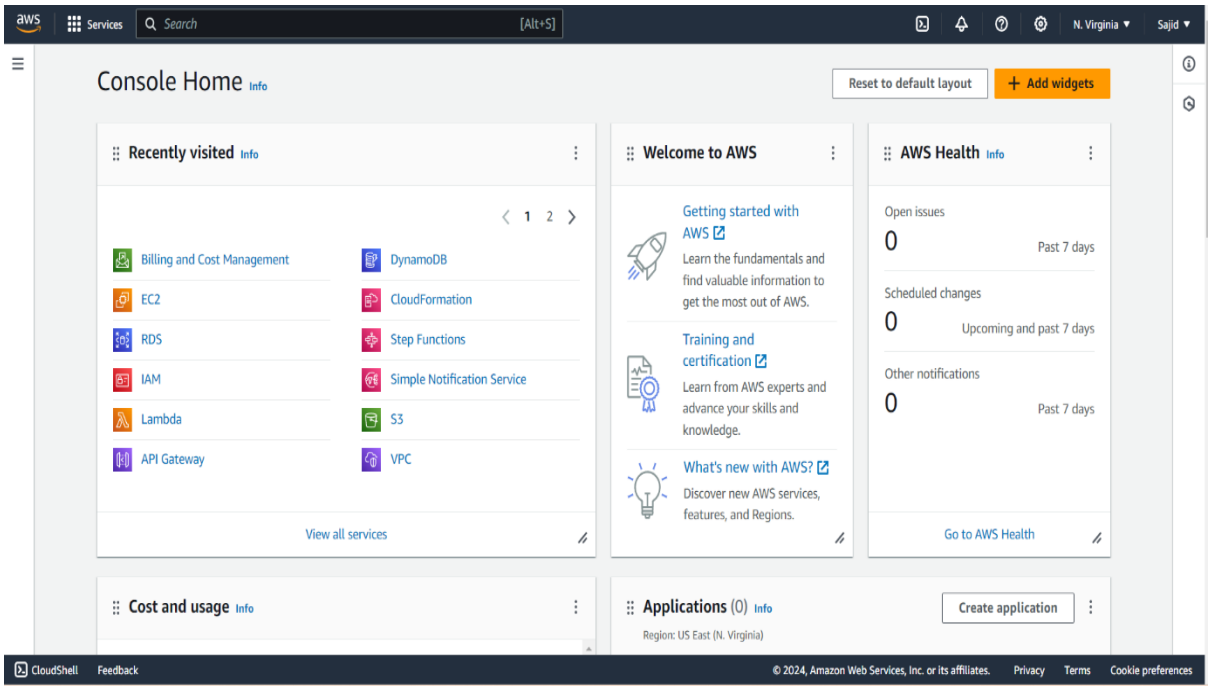
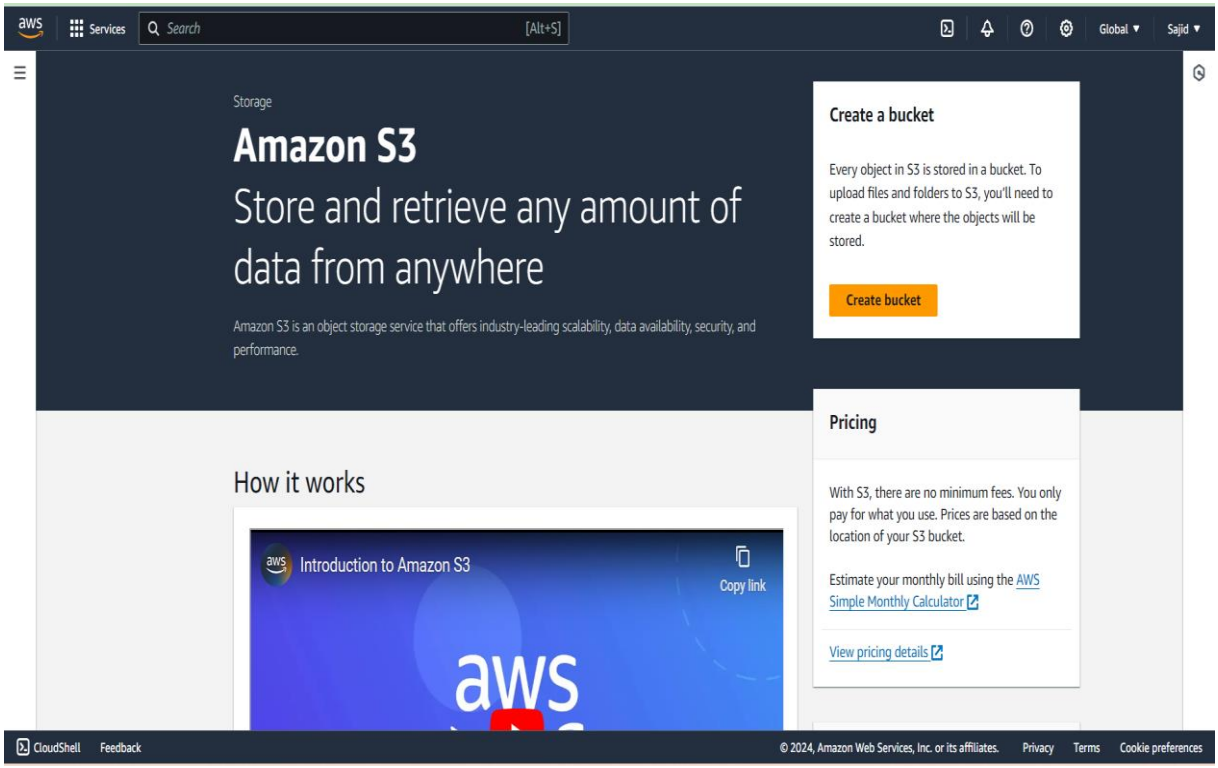
CONNECTING PYTHON Boto3 WITH AWS S3 BUCKET

-Sign in to the AWS Management console. After sign in, the screen appears is shown below:



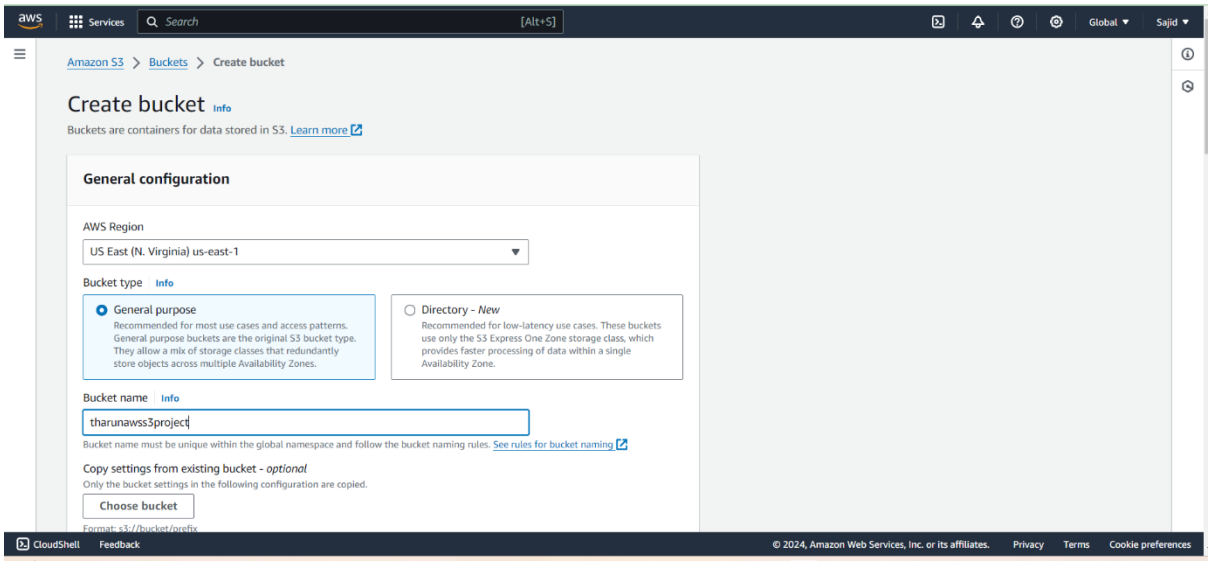
-Then move to the S3 services, which appears in console home. After clicking on S3, the screen appears is shown below:



-Next to create an S3 bucket, click on the "Create bucket". On clicking the "Create bucket" button, the screen appears is shown below:

-Enter the bucket name which should look like DNS address, and it should be resolvable. A bucket is like a folder that stores the objects. A bucket name should be unique. A bucket name should start with the lowercase letter, must not contain any invalid characters. It should be 3 to 63 characters long(tharunawss3project).

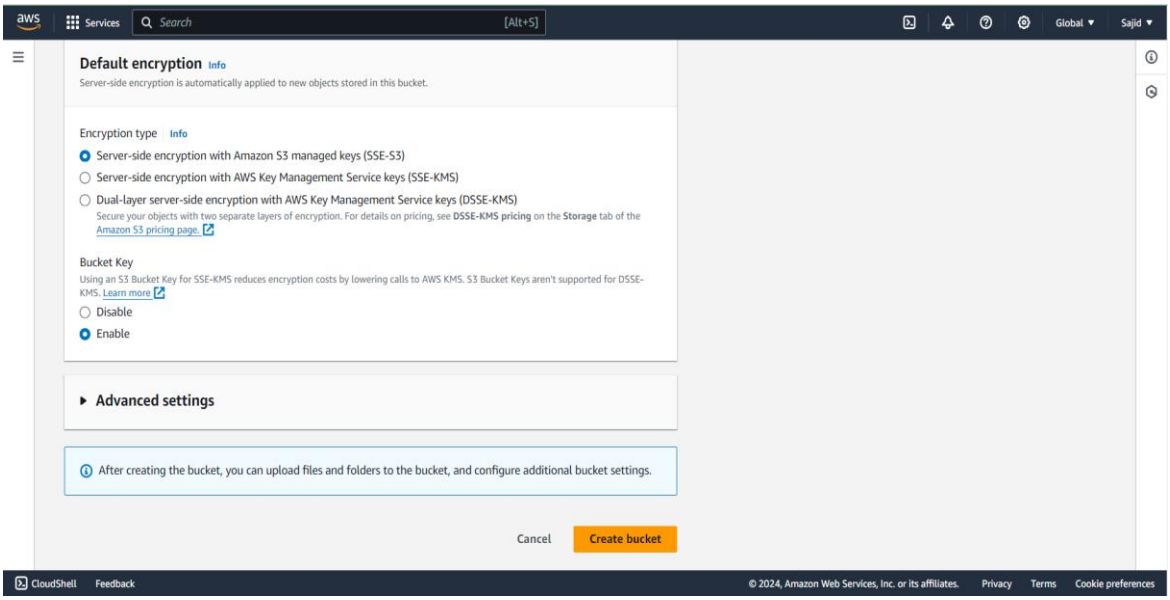
-Next, choose an AWS region nearest to your location or where you want your data to reside. In our case, it is (US East [N. Virginia]us-east-1).



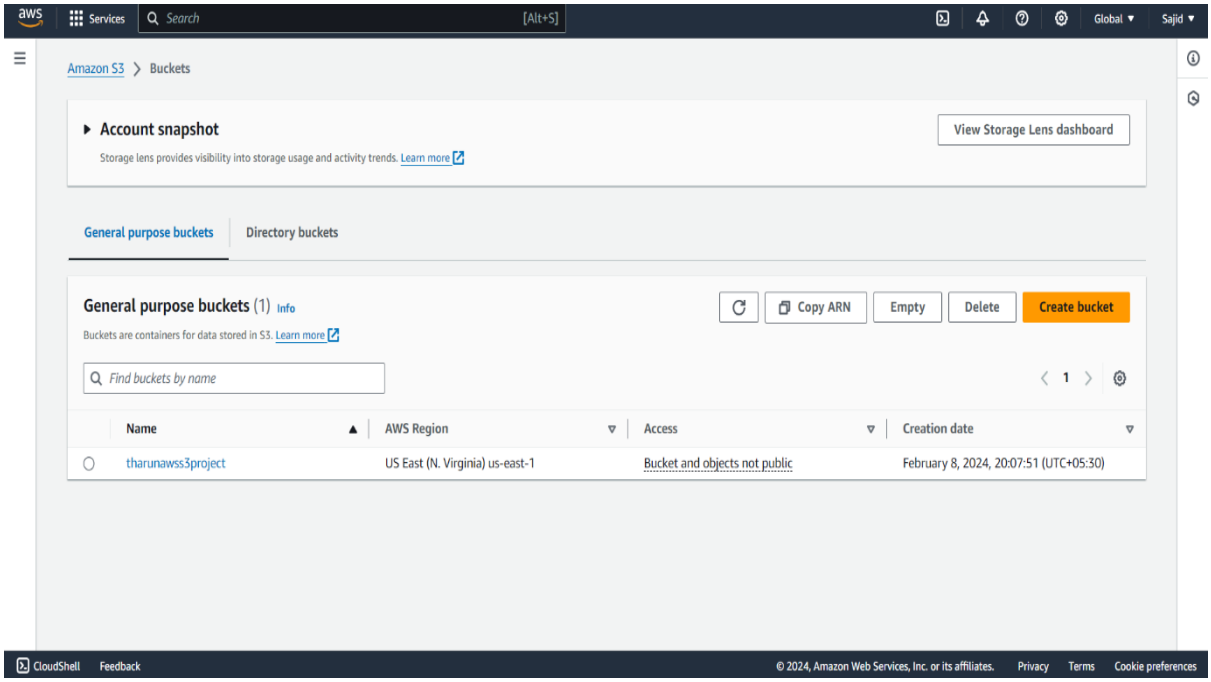
-Keep default settings of ACL and Public Access.

-Next the Bucket Versioning category, choose Enabled. Bucket versioning is helpful when you want to track any changes in the file made, intentionally or unintentionally. You can see the previous versions of a file, retrieve it, restore it or preserve it.

-Leave other advance settings as default.



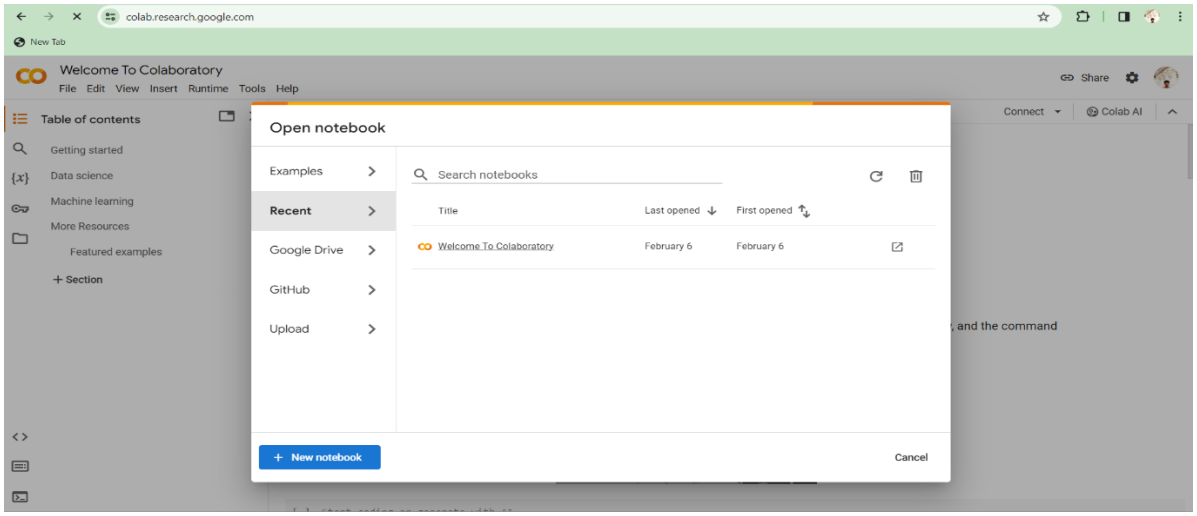
-Click on the "Create" button. Now, the bucket is created.



-Now, click on the “tharunawss3project" and don’t upload the files we can retrieve the data from python code.

-Then implementation of Boto3 in Python.

-Then now go to the google and open the GOOGLE COLAB to open Boto3.



-First, you need to install the boto3 module using pip, once the boto3 module is installed you can use it in your Python code.

-By using boto3 to list all the buckets in your AWS account.

-Boto3 is a powerful and versatile tool that can be used to automate, manage, and monitor various AWS resources and services.

-Then we first create a boto3 session by providing our AWS access key ID, secret access key, and AWS region.

-Then create an s3 client using the session and use the list buckets method to get a list of all the buckets in our account.

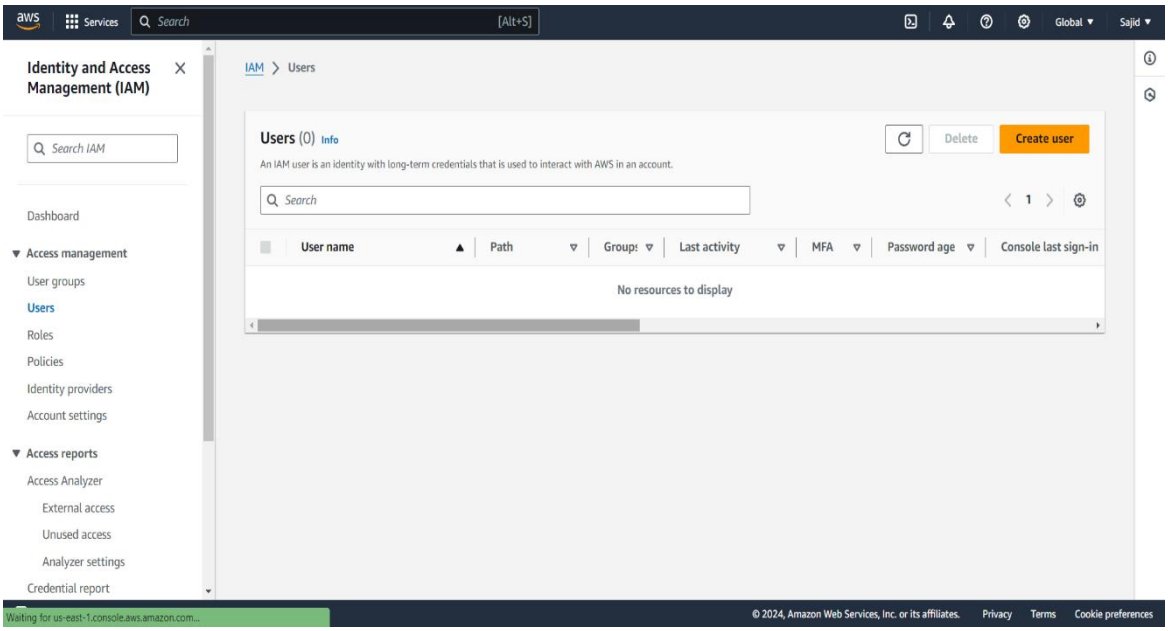
-After that iterate through the list of buckets and print their names.

-Note that you need to replace your_access_key_id, your_secret_access_key, and your aws_region with your actual AWS access key ID, secret access key, and AWS region.

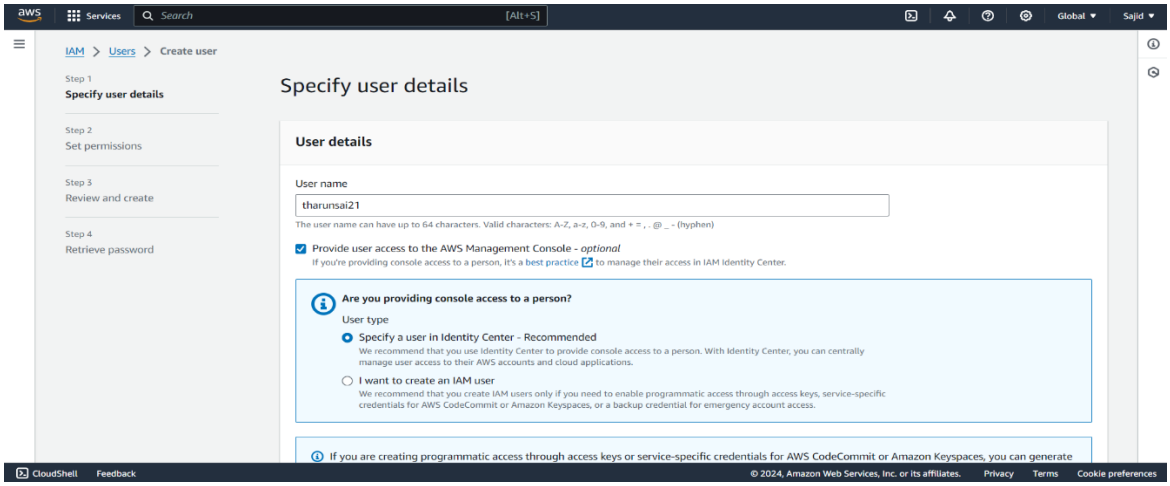
-And also make sure that the IAM user associated with the access key has the necessary permissions to access S3.

- For creation AWS access key ID, secret access key go to the AWS account and open the IAM user.

-Click on Create user.



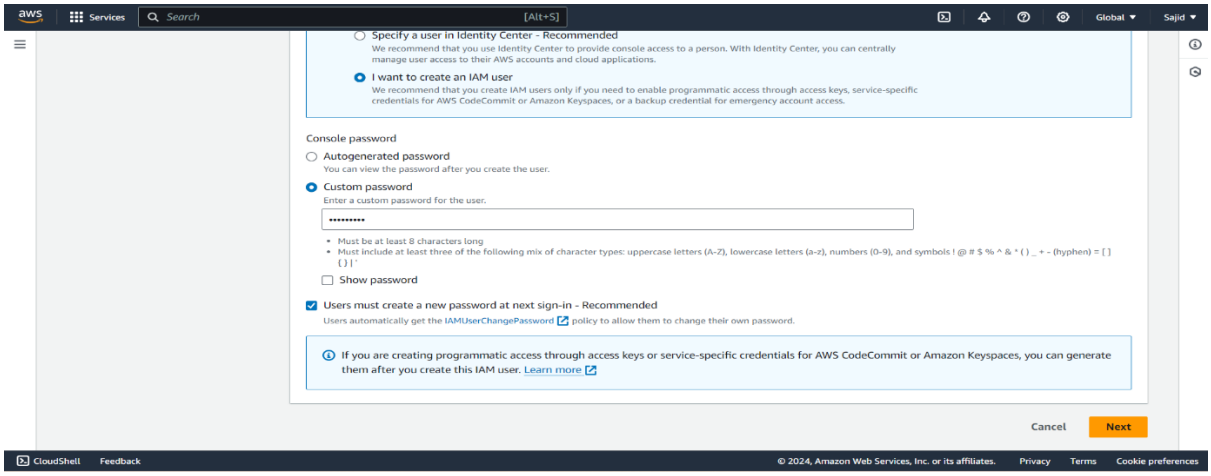
-Then enter the user name(tharunsai21).



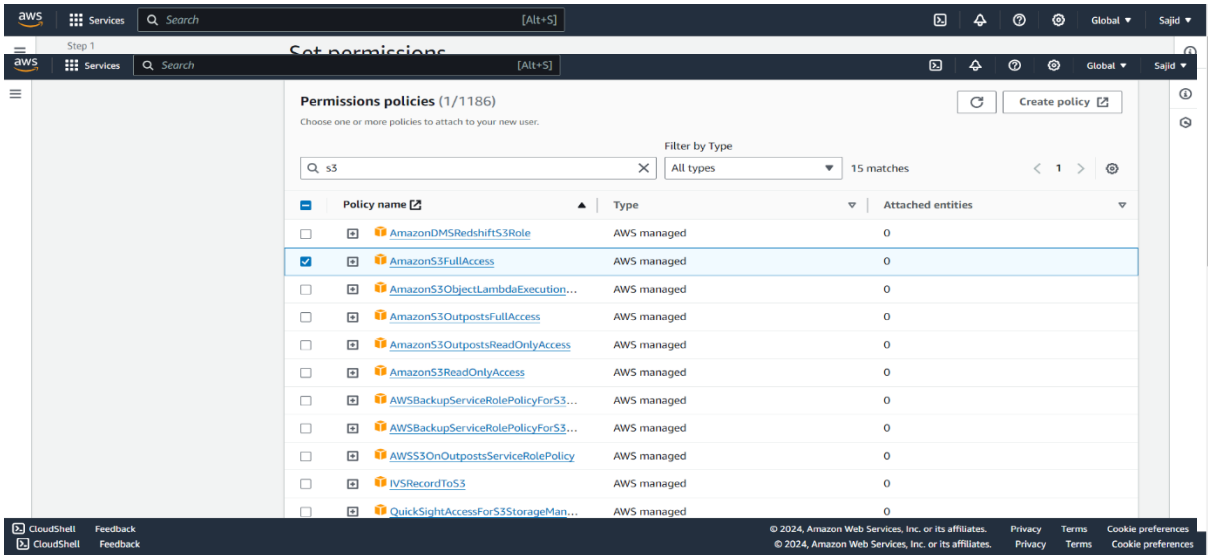
-Then select **I want to create an IAM user.**

-Then select **Custom password** and enter the password you want to create.

-After that click on “Next”.

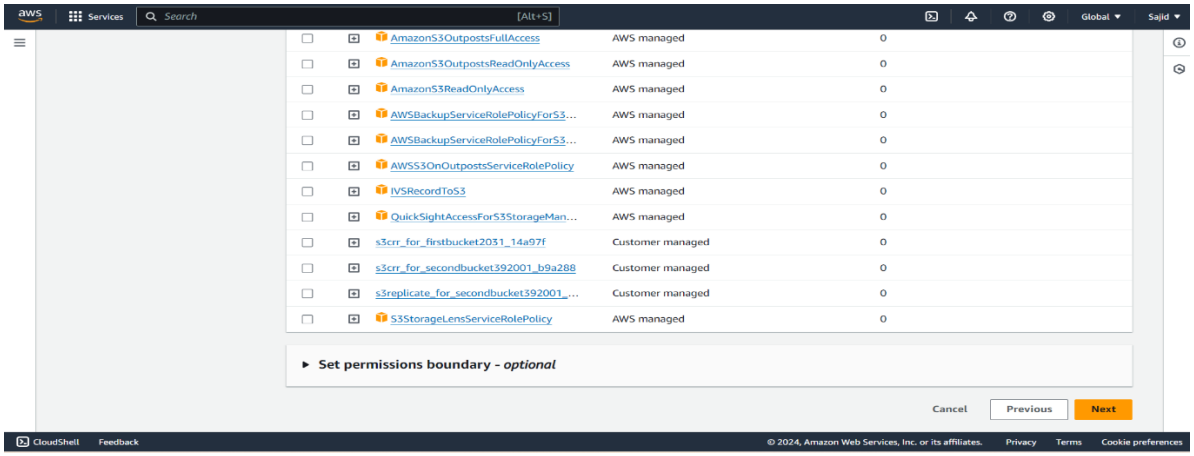


-After that Set the Permissions by selecting the Attach policies directly.



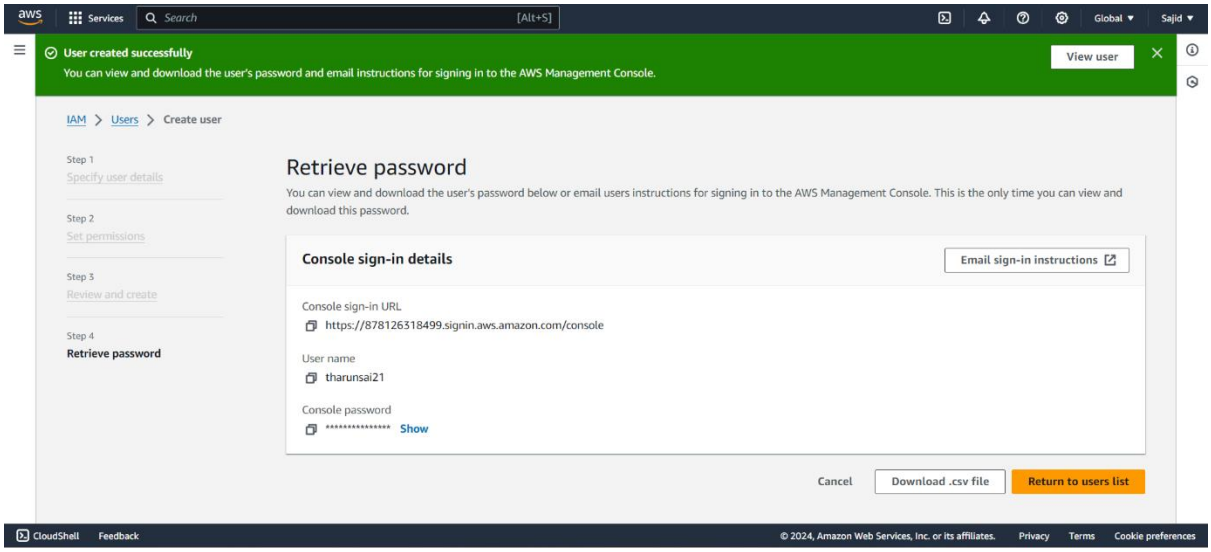
-And then search the policy to give the Full access of S3(**AmazonS3FullAccess**).

-After giving the policy click on “Next”.

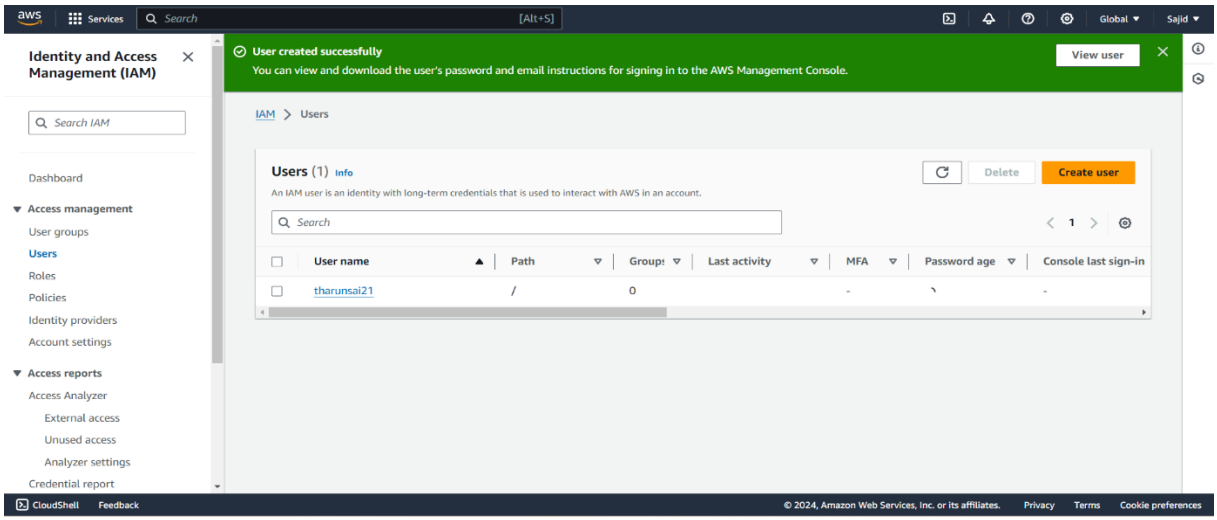


-After that you will get the details of user and policy you gave.

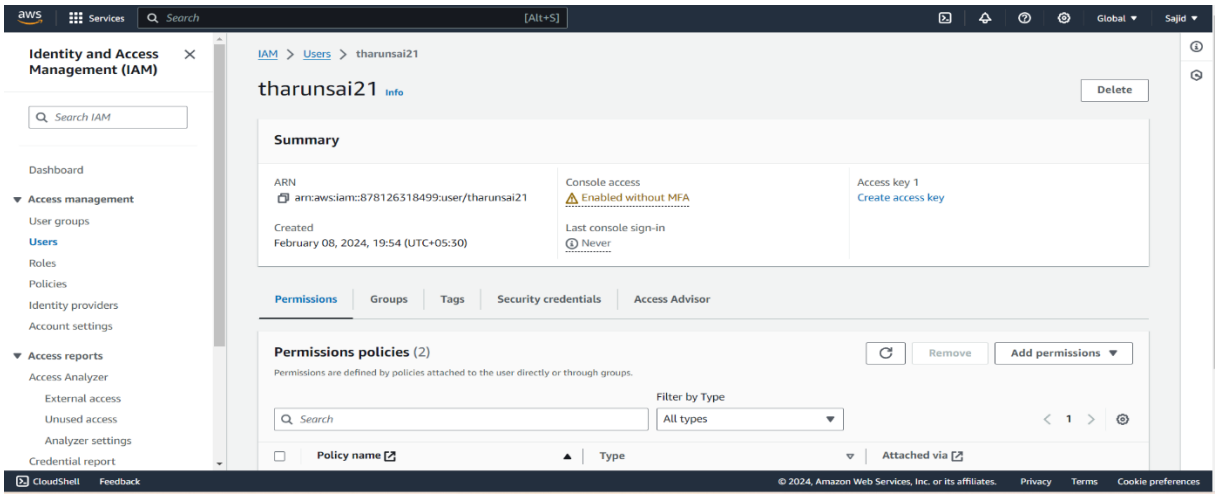
-Console sign-in details will display and click on Return to users list.



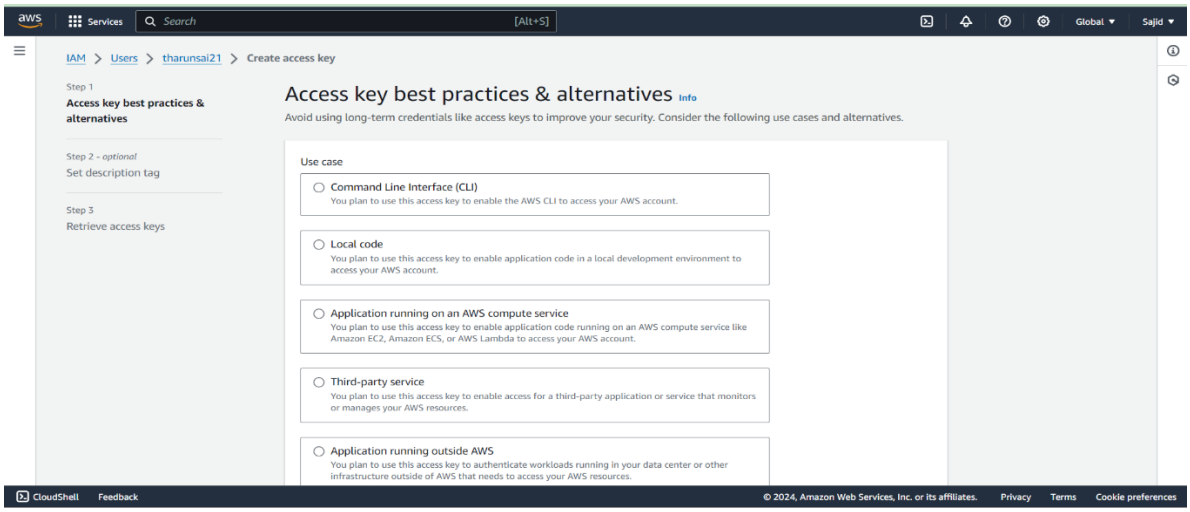
-Then Click on user name “tharunsai21”.



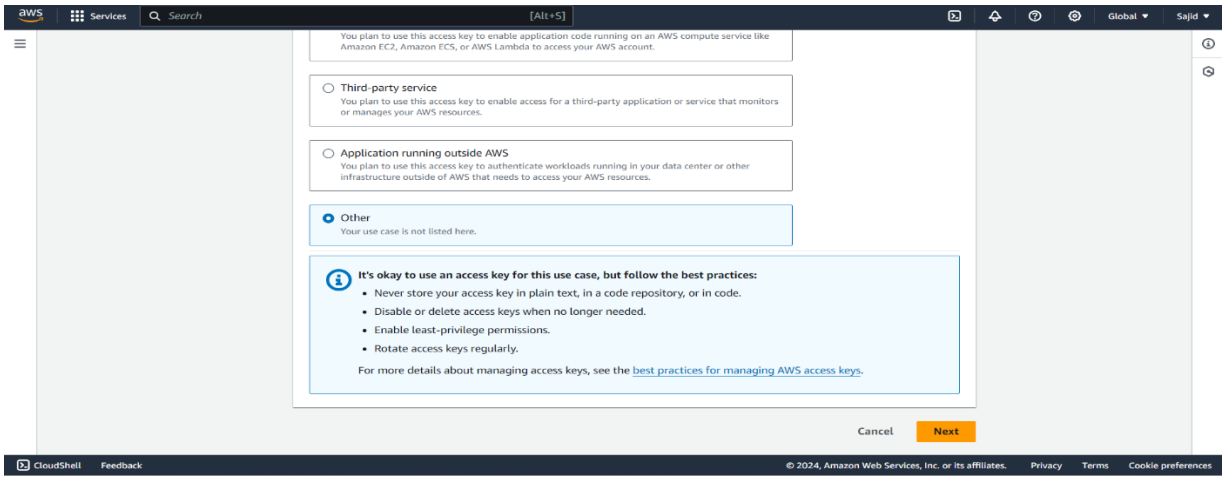
-It displays summary of users and click on **“Create access key”.**



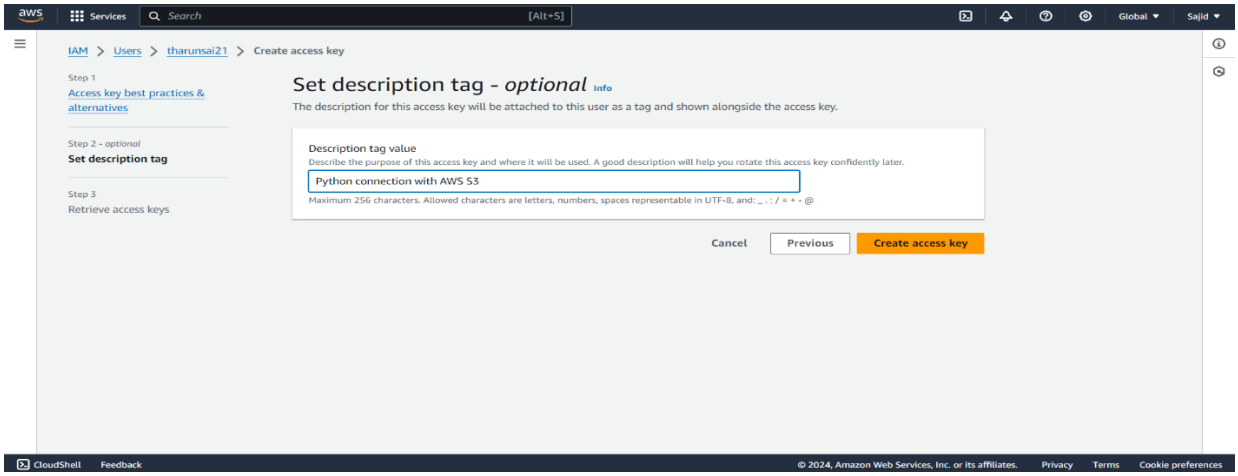
-After click on create select the Access key best practices & alternatives.



-Select Other and Click on Next button.

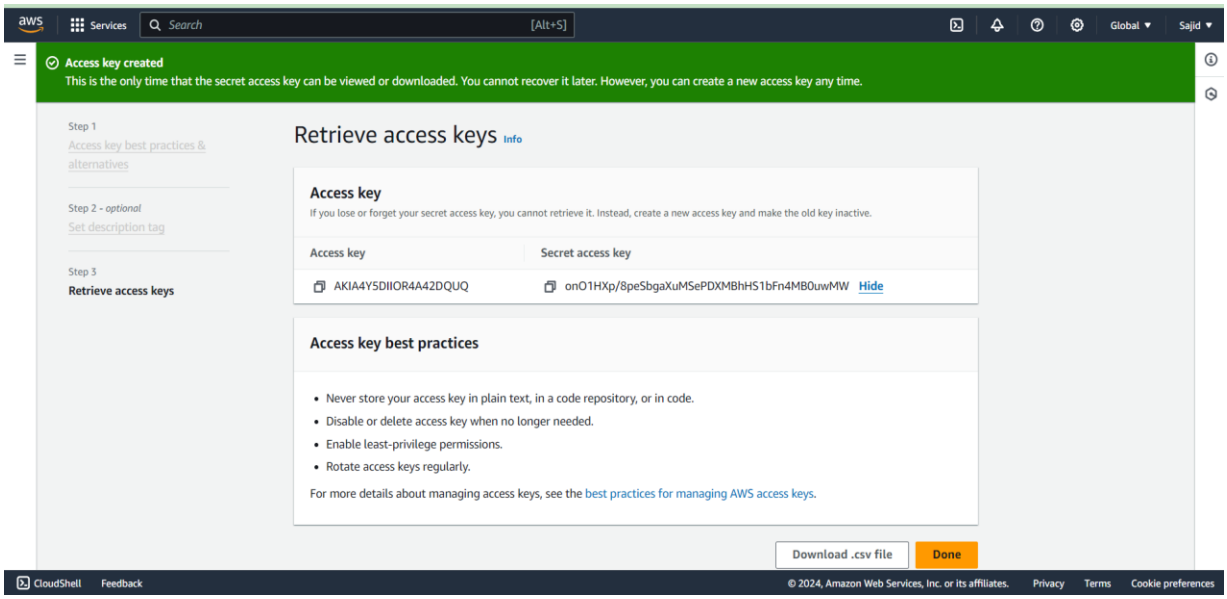


-After that Give the Description tag value as your wish(optional) “python connection with AWS S3”. Then click on Create access key.



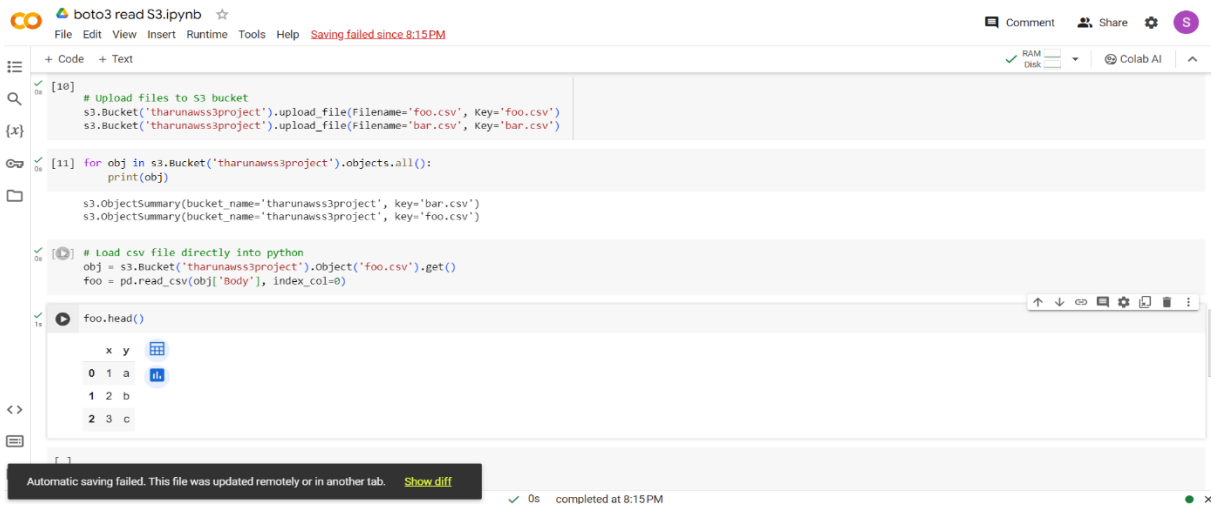
-After that you will get the Access key and Secret Access key.

-**Access key (AKIA4Y5DIIOR4A42DQUQ), Secret access key(on01HXp/8peSbgaXuMSePDXMB0uwMW)**.



-Apply this Access key (AKIA4Y5DIIOR4A42DQUQ), Secret access key(on01HXp/8peSbgaXuMSePDXMB0uwMW) and bucket name in the AWS boto3 Python.

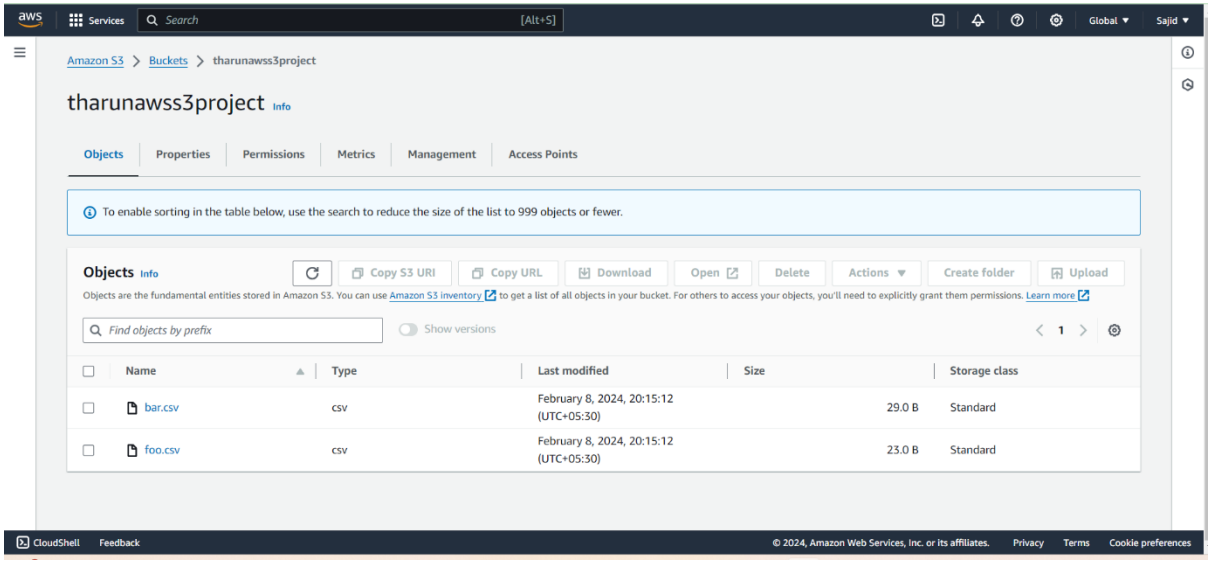
-Upload a files to the S3 bucket “tharunawss3project” using the following code.



-Files of bar and foo will be write as a code.

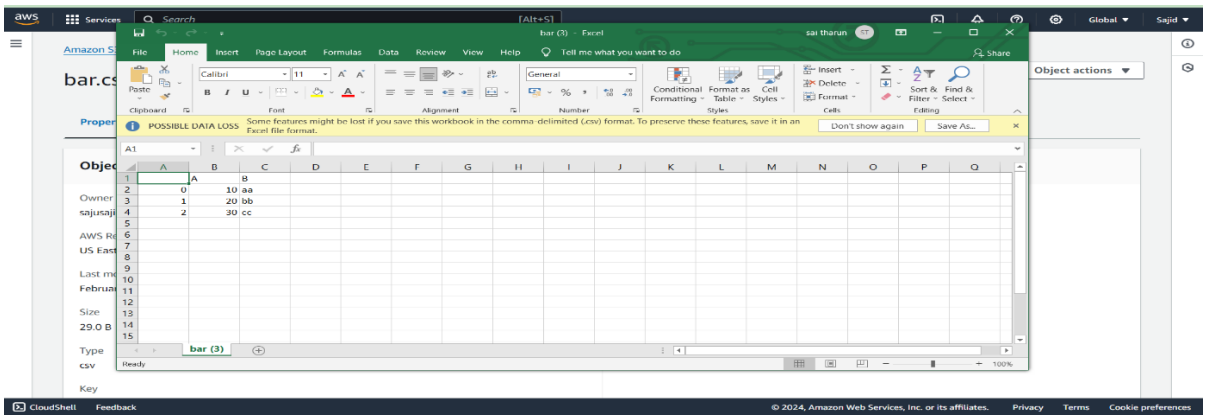
-Run all the code and open the S3 bucket.

-Then the files of bar and foo automatically upload in a bucket after running the code.

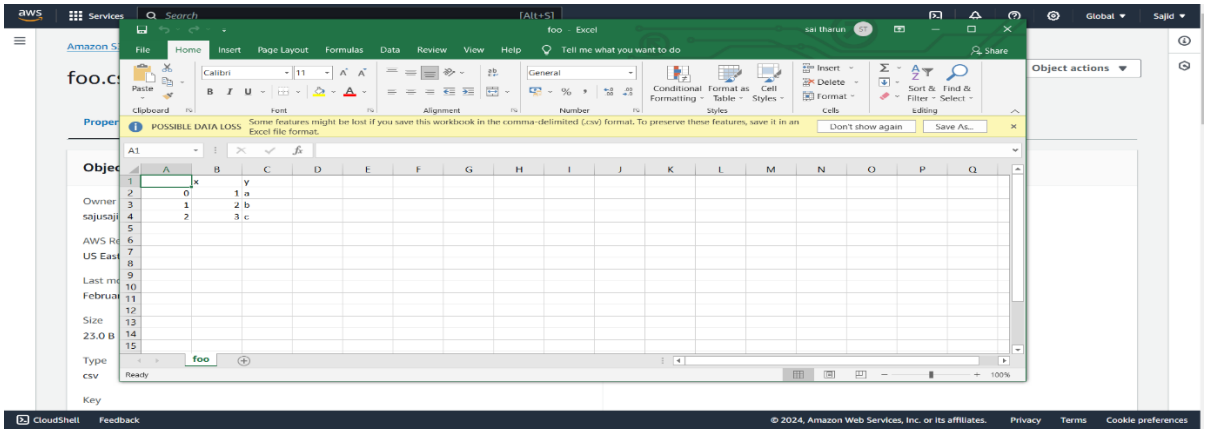


-Download and delete the files to the s3 bucket using the following code.

-Download the bar file by clicking on the **bar.csv.**



-Download the bar file by clicking on the **foo.csv.**



-By integrating the Python Boto3 with an AWS S3 Bucket you can retrieving/fetching the data or files, Download or Delete the files by using the code.

V SAI THARUN GOUD