

AWS – S3 [Simple Storage Service]

What is S3 bucket ?

Amazon Simple Storage Service (Amazon S3) is an object storage service that offers industry-leading scalability, data availability, security, and performance. You can use Amazon S3 to store and retrieve any amount of data at any time, from anywhere.

Features Of S3 bucket :

1. Scalability:

- Grows with you: Need to store a few photos or a few million? S3 scales up or down with your needs, effortlessly handling data from tiny to huge.

2. Durability and Availability:

- Super reliable: With 99.9% durability, S3 keeps your data safe and sound, storing it redundantly across multiple facilities.
- Always there: Access your data whenever you need it, thanks to S3's high availability.

3. Security:

- Locked down: S3 provides strong security features, including encryption for your data both in storage and transit.
- Access control: Use AWS Identity and Access Management (IAM) policies to control who can see or change your data.

4. Data Management:

- Versioning: Keep track of changes and restore previous versions of your data easily.
- Lifecycle Policies: Set rules to automatically move your data to cheaper storage options or delete it when you no longer need it.

- Event Notifications: Get notified or trigger actions when certain events happen in your storage buckets.

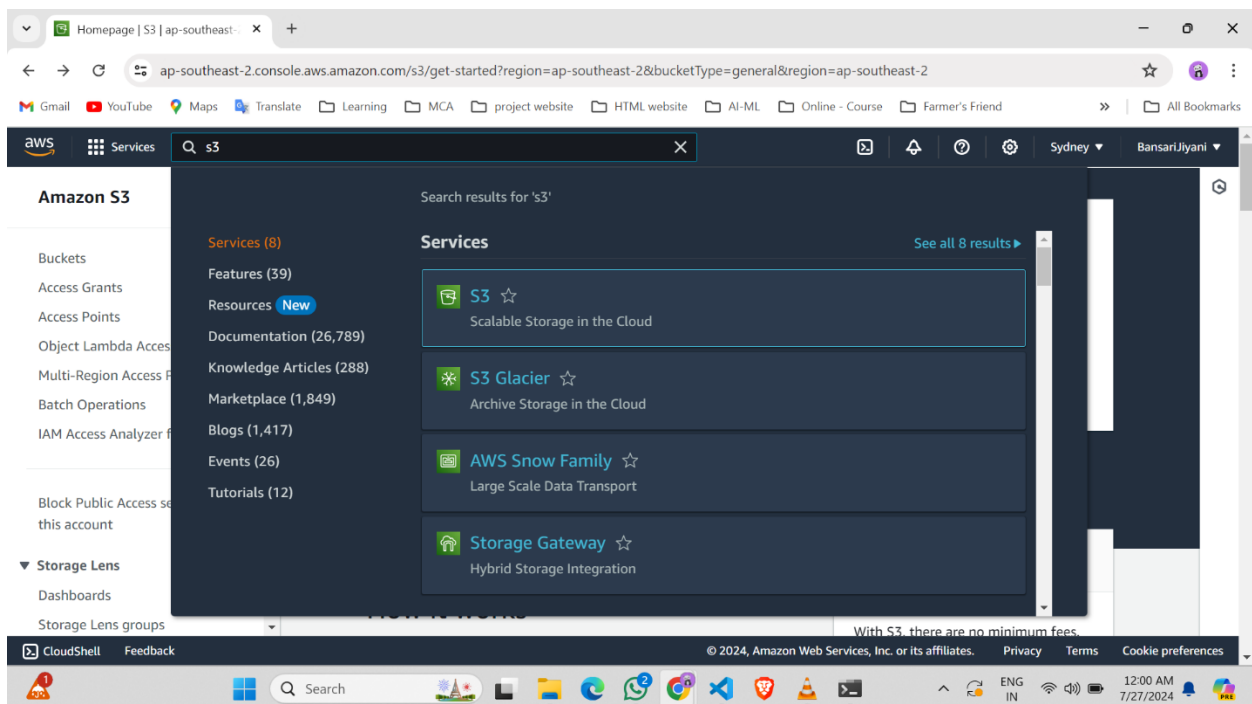
5. Storage Classes:

- S3 Standard: Ideal for everyday use with frequently accessed data.
- S3 Intelligent-Tiering: Automatically shifts your data between two access tiers to save money as access patterns change.
- S3 Standard-IA (Infrequent Access): Perfect for data you don't access often but need quick access to when you do.
- S3 One Zone-IA: A budget-friendly choice for non-critical data that doesn't require multiple zone redundancy.

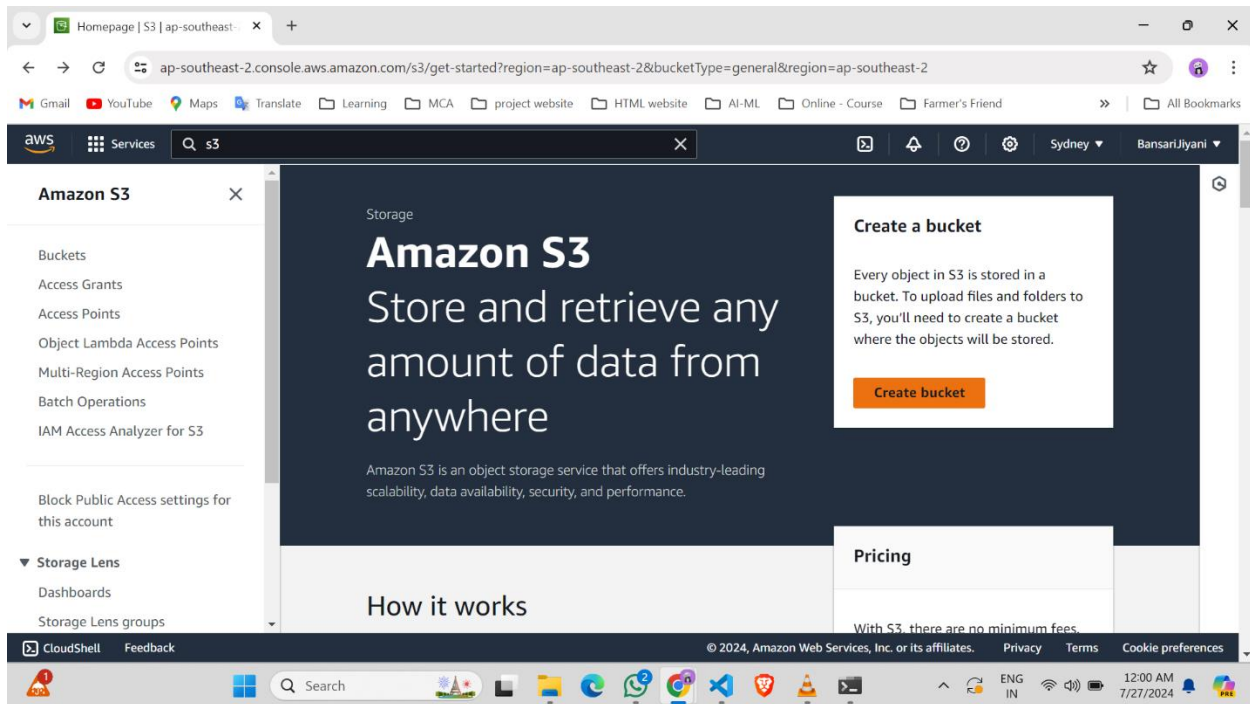
How to Create Bucket ?

Steps :

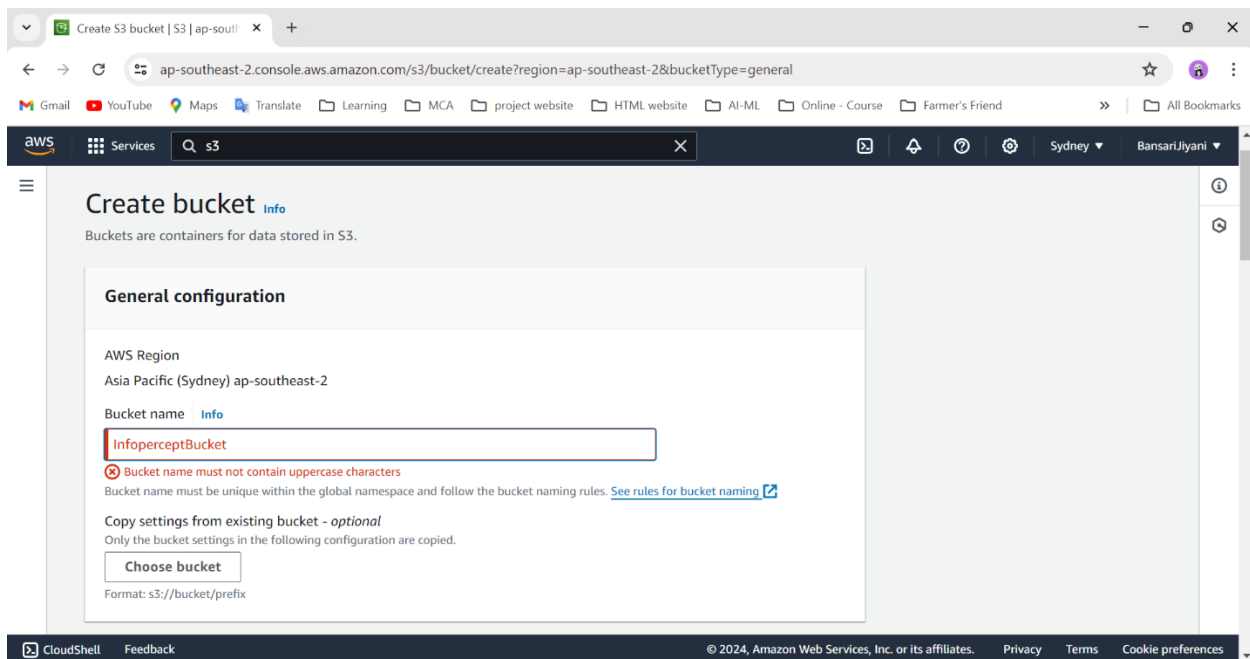
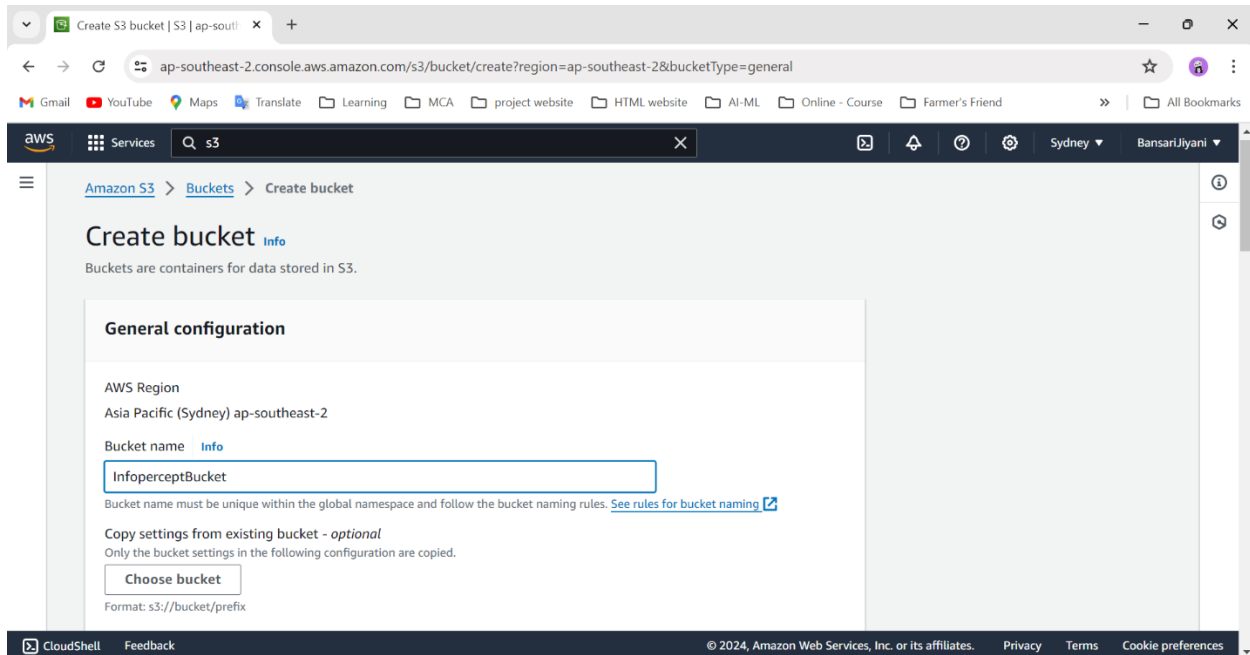
1. Sign in to the AWS Management Console and open the Amazon S3 console at <https://console.aws.amazon.com/s3/>
2. In the navigation bar on the top of the page, Search the s3 bucket.



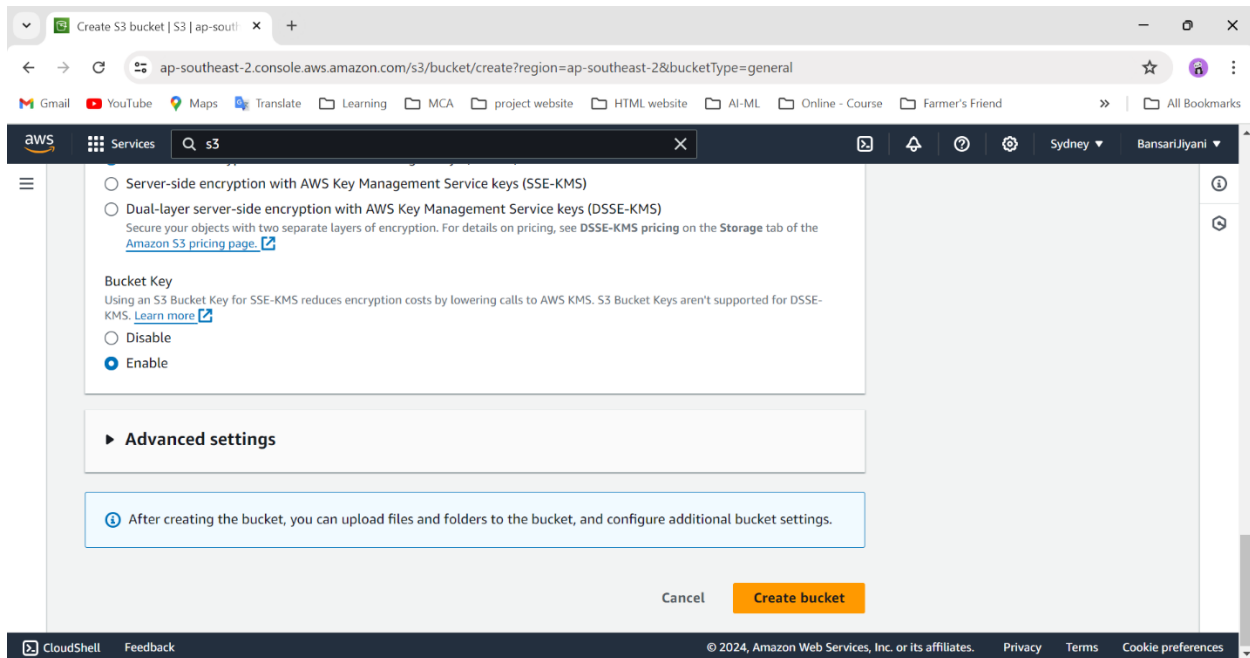
3. Click On the First S3 bucket and Redirect this page and Click on Create Bucket



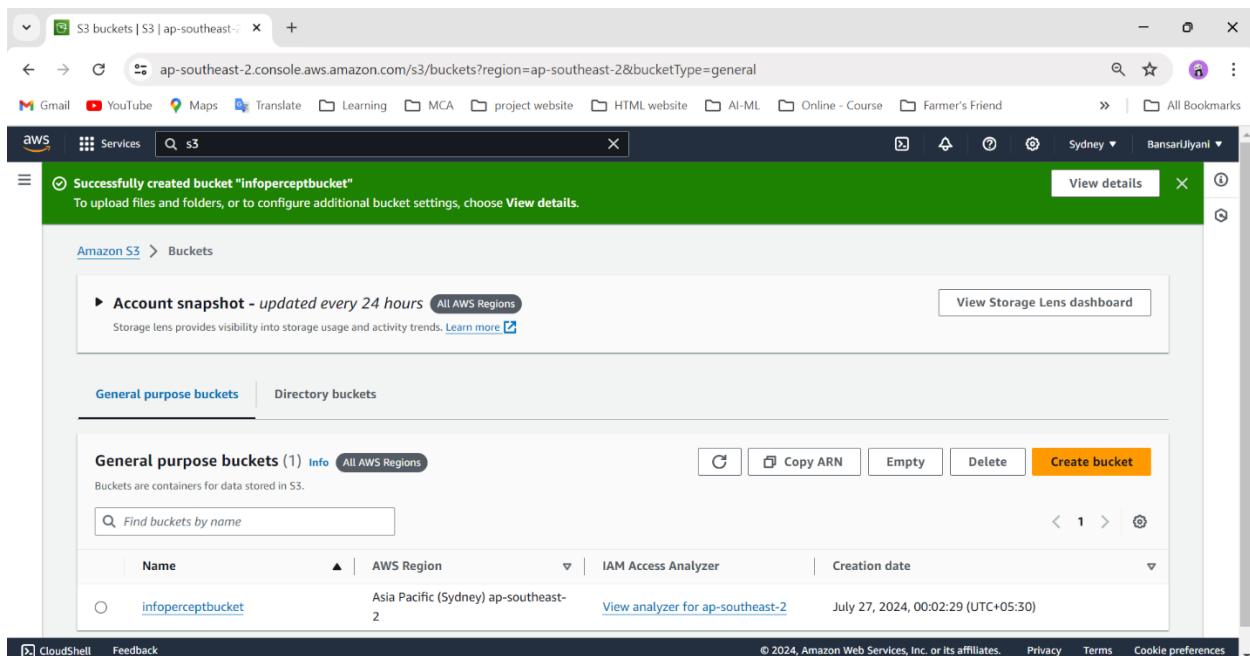
- ### 4. Give the bucket Name as per your choice and It must be unique and
- don't use capital Letters
 - between 3 and 63 characters long
 - Consist only of lowercase letters, numbers, dots (.), and hyphens (-). For best compatibility, we recommend that you avoid using dots (.) in bucket names, except for buckets that are used only for static website hosting.
 - Begin and end with a letter or number.



5. Click on to create bucket and your bucket is created successfully.



6. Now your bucket is created and we can upload image or files or folders in bucket for that click on Your bucket name.



7. Click on Upload.

The screenshot shows the AWS S3 console interface for a bucket named 'infoperceptbucket'. The breadcrumb navigation is 'Amazon S3 > Buckets > infoperceptbucket'. The bucket name 'infoperceptbucket' is displayed with an 'Info' link. Below the bucket name are tabs for 'Objects', 'Properties', 'Permissions', 'Metrics', 'Management', and 'Access Points'. The 'Objects' tab is active, showing a toolbar with buttons for 'Copy S3 URI', 'Copy URL', 'Download', 'Open', 'Delete', 'Actions', 'Create folder', and 'Upload'. A search bar labeled 'Find objects by prefix' is present. Below the search bar is a table with columns: 'Name', 'Type', 'Last modified', 'Size', and 'Storage class'. The table is empty, displaying the message 'No objects' and 'You don't have any objects in this bucket.' with an 'Upload' button.

The screenshot shows the 'Upload' page in the AWS S3 console for the 'infoperceptbucket'. The breadcrumb navigation is 'Amazon S3 > Buckets > infoperceptbucket > Upload'. The page title is 'Upload' with an 'Info' link. A text block explains: 'Add the files and folders you want to upload to S3. To upload a file larger than 160GB, use the AWS CLI, AWS SDK or Amazon S3 REST API. [Learn more](#)'. Below this is a dashed box with the text: 'Drag and drop files and folders you want to upload here, or choose **Add files** or **Add folder**.' Underneath is a section titled 'Files and folders (0)' with a 'Remove' button and 'Add files' and 'Add folder' buttons. A text line says 'All files and folders in this table will be uploaded.' There is a search bar 'Find by name' and a table with columns 'Name', 'Folder', and 'Type'. The table is empty, showing the message 'No files or folders' and 'You have not chosen any files or folders to upload.' Below the table is a 'Destination' section with the text 'Destination' and 's3://infoperceptbucket'.

- For upload the files or folder choose the file or folder option and upload files or folder from your PC.

The image displays two screenshots of the AWS S3 console's 'Upload' page. The top screenshot shows the initial state where no files are selected. The bottom screenshot shows the file 'bill_mongodb.py' selected for upload.

Top Screenshot: Initial Upload Page

- Header:** Amazon S3 > Buckets > infoperceptbucket > Upload
- Section: Upload** (with an 'info' link)
- Instructions:** Add the files and folders you want to upload to S3. To upload a file larger than 160GB, use the AWS CLI, AWS SDK or Amazon S3 REST API. [Learn more](#)
- Drag and Drop Area:** Drag and drop files and folders you want to upload here, or choose **Add files** or **Add folder**.
- Files and folders (0)** (with 'Remove', 'Add files', and 'Add folder' buttons)
 - Search: Find by name
 - Table Headers: Name, Folder, Type
 - Message: No files or folders. You have not chosen any files or folders to upload.
- Destination** (with an 'info' link)
 - Destination: s3://infoperceptbucket

Bottom Screenshot: Upload Page with File Selected

- Files and folders (1 Total, 4.8 KB)** (with 'Remove', 'Add files', and 'Add folder' buttons)
 - Search: Find by name
 - Table Headers: Name, Folder, Type
 - Table Content:

<input type="checkbox"/>	Name	Folder	Type
<input type="checkbox"/>	bill_mongodb.py	-	text/x-python
- Destination** (with an 'info' link)
 - Destination: s3://infoperceptbucket
 - Destination details**
Bucket settings that impact new objects stored in the specified destination.
 - Permissions**
Grant public access and access to other AWS accounts.
 - Properties**
Specify storage class, encryption settings, tags, and more.
- Buttons:** Cancel, Upload

9. Click on Upload.

The screenshot shows the AWS S3 console interface for uploading files. At the top, there's a header with the AWS logo, 'Services', a search bar containing 's3', and user information 'Sydney' and 'BansariJiyani'. Below the header, a message says 'Drag and drop files and folders you want to upload here, or choose Add files or Add folder.' There are three buttons: 'Remove', 'Add files', and 'Add folder'. A section titled 'Files and folders (1 Total, 4.8 KB)' contains a search bar 'Find by name' and a table with one file: 'bill_mongodb.py' of type 'text/x-python'. Below this is a 'Destination' section with 'Info' link, showing 'Destination: s3://infoconceptbucket'. There are expandable sections for 'Destination details', 'Permissions', and 'Properties'. At the bottom right are 'Cancel' and 'Upload' buttons.

Files and folders (1 Total, 4.8 KB)

All files and folders in this table will be uploaded.

Find by name

<input type="checkbox"/>	Name	Folder	Type
<input type="checkbox"/>	bill_mongodb.py	-	text/x-python

Destination Info

Destination

s3://infoconceptbucket

► Destination details

Bucket settings that impact new objects stored in the specified destination.

► Permissions

Grant public access and access to other AWS accounts.

► Properties

Specify storage class, encryption settings, tags, and more.

Cancel Upload

The screenshot shows the AWS S3 console interface during an upload process. A blue banner at the top indicates 'Uploading' with a progress bar at 0%. It shows 'Total remaining: 1 file: 4.8 KB(100.00%)', 'Estimated time remaining: calculating...', and 'Transfer rate: 0 B/s'. Below the banner is a warning: 'The information below will no longer be available after you navigate away from this page.' A 'Summary' section shows 'Destination: s3://infoconceptbucket', 'Succeeded: 0 files, 0 B (0%)', and 'Failed: 0 files, 0 B (0%)'. There are tabs for 'Files and folders' (selected) and 'Configuration'. Below the tabs, a section titled 'Files and folders (1 Total, 4.8 KB)' contains a search bar 'Find by name' and a table with one file: 'bill_mongo...' of type 'text/x-python', size '4.8 KB', and status 'In progress (10 -'. The footer is identical to the previous screenshot.

Uploading 0%

Total remaining: 1 file: 4.8 KB(100.00%)

Estimated time remaining: calculating...

Transfer rate: 0 B/s

ⓘ The information below will no longer be available after you navigate away from this page.

Summary

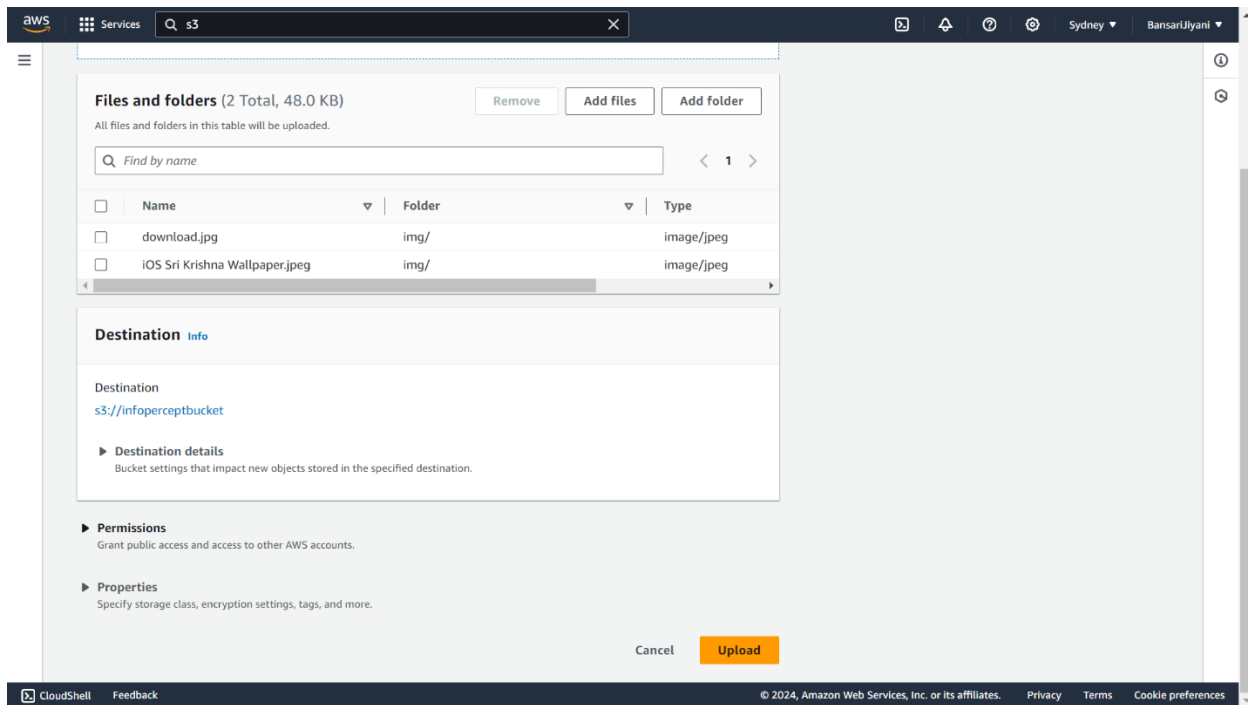
Destination	Succeeded	Failed
s3://infoconceptbucket	0 files, 0 B (0%)	0 files, 0 B (0%)

Files and folders Configuration

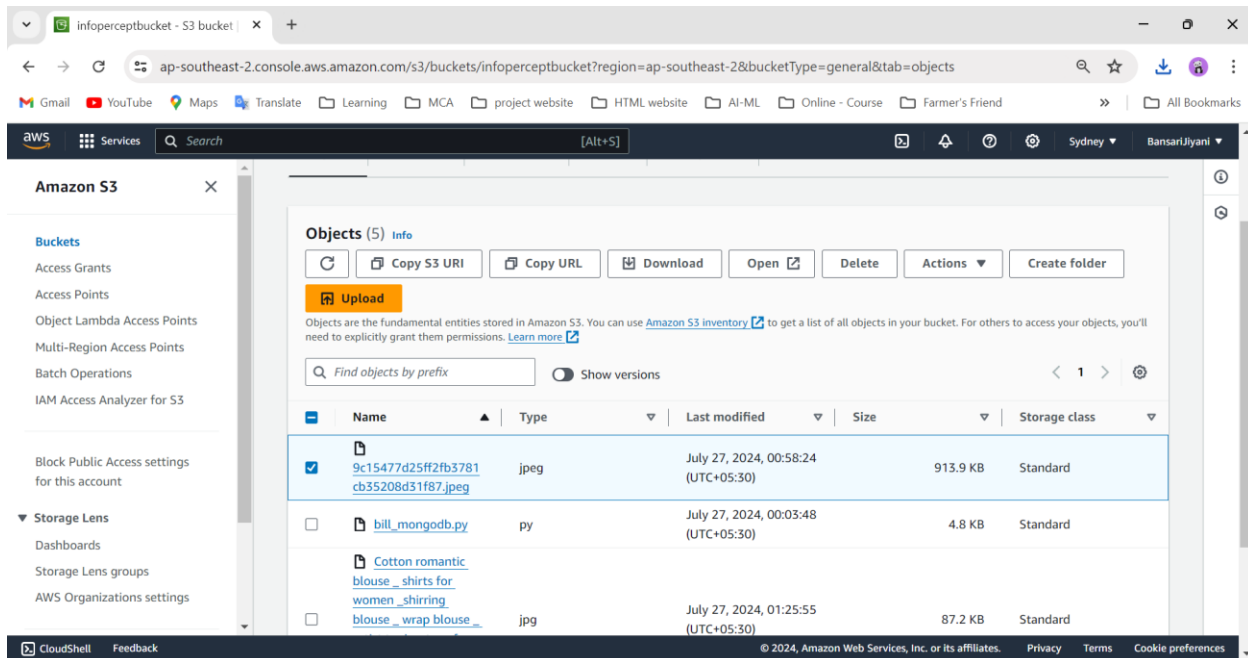
Files and folders (1 Total, 4.8 KB)

Find by name

Name	Folder	Type	Size	Status	Error
bill_mongo...	-	text/x-python	4.8 KB	In progress (10 -	

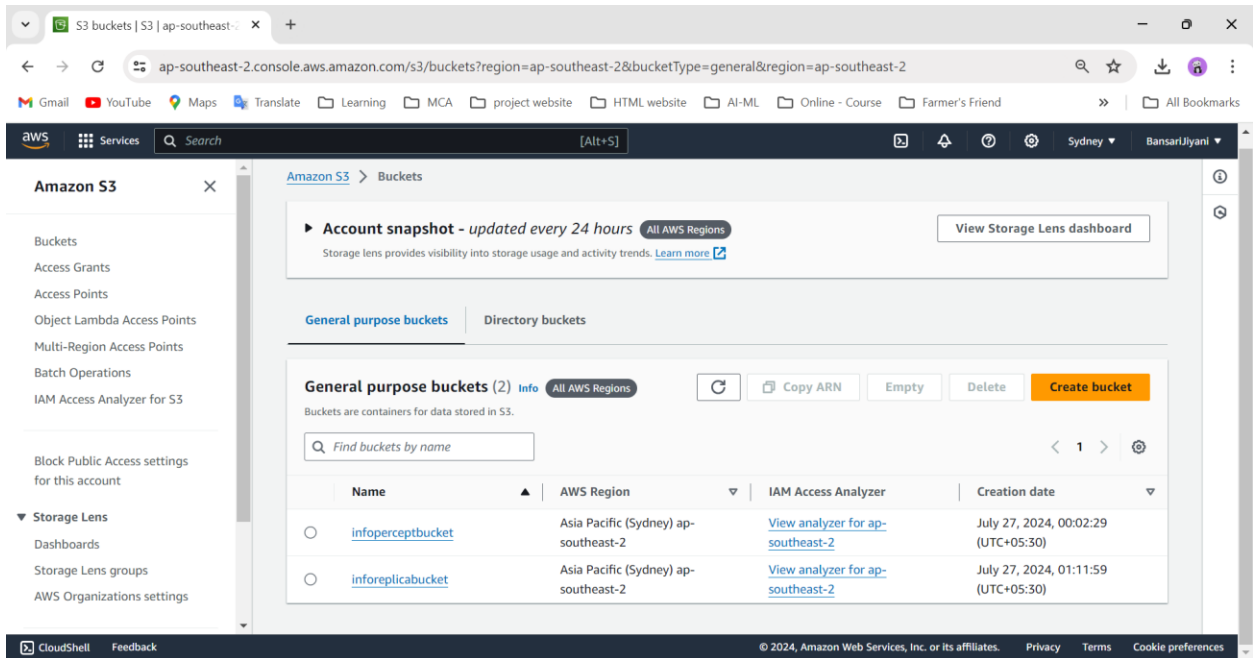


10. For download the file / object or any folder click on the check box and click on download.

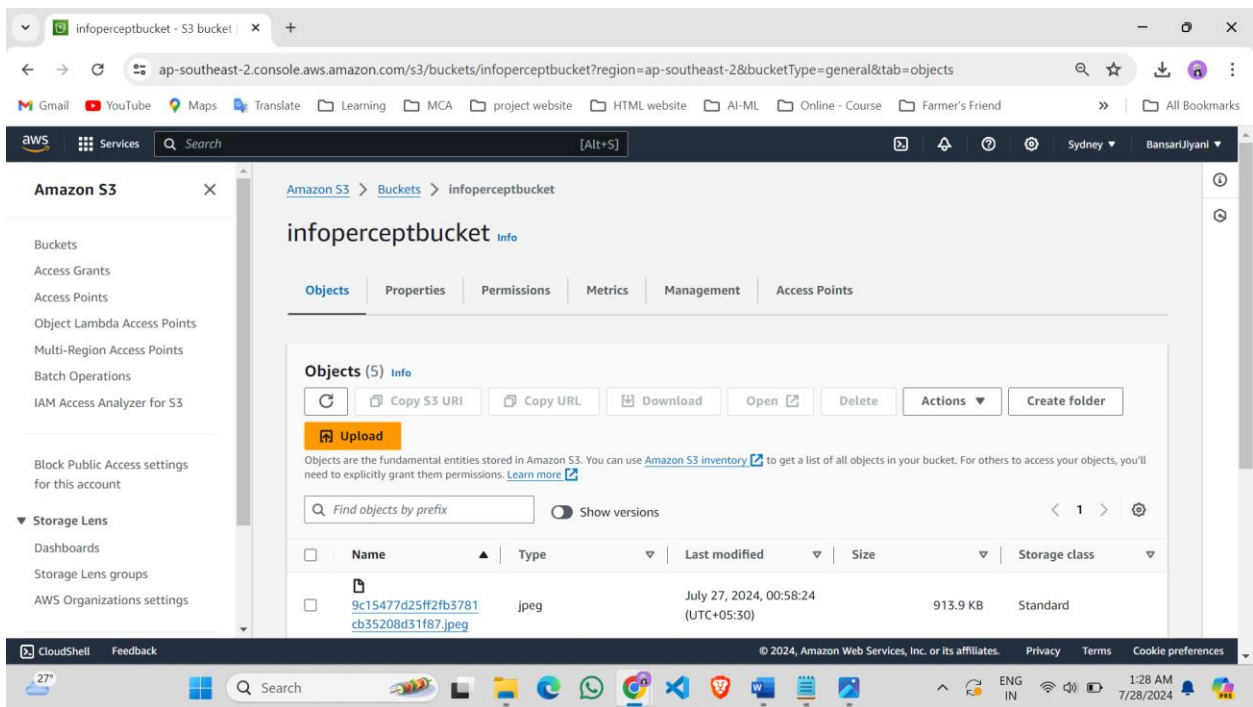


Create a Replicate Of Bucket :

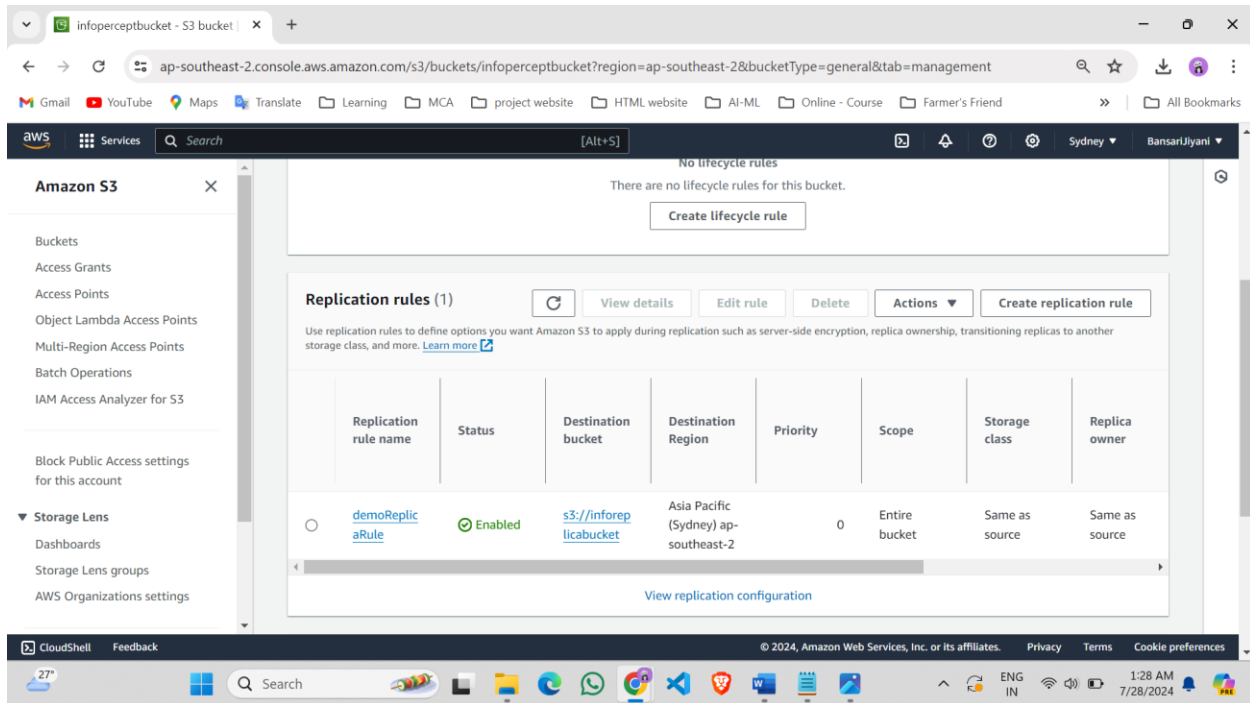
1. Create a another bucket



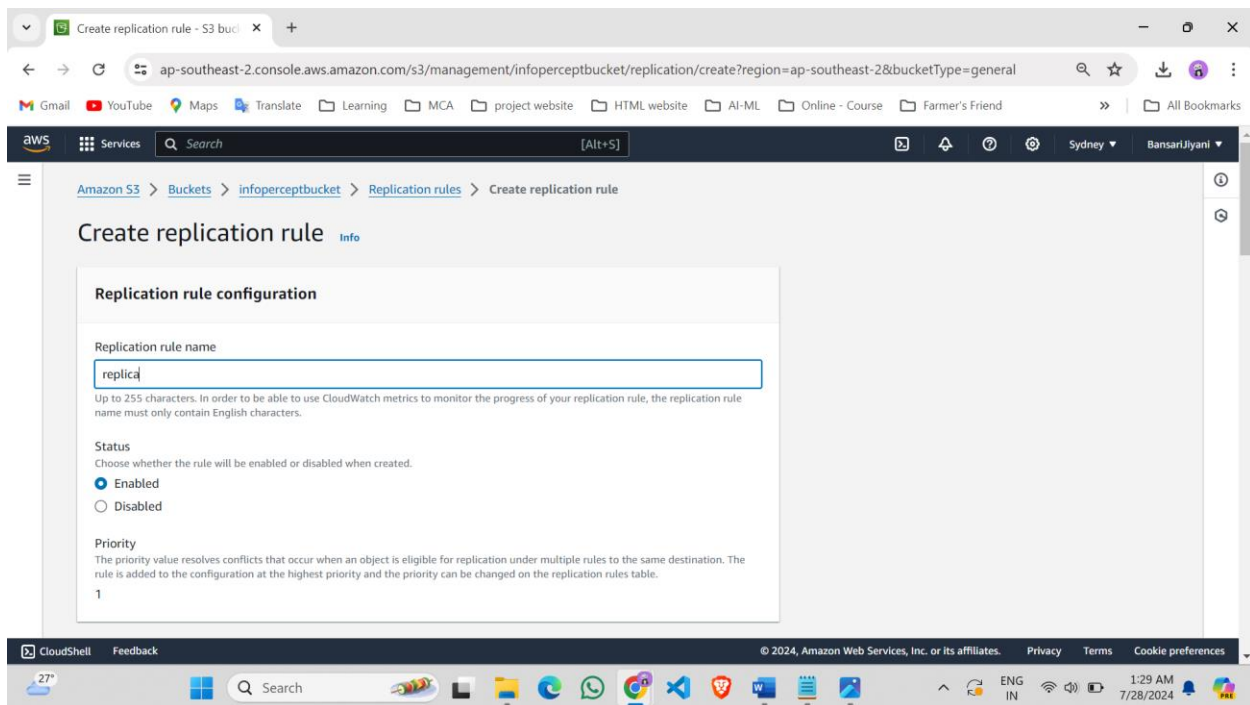
2. Go to original bucket and got to management.



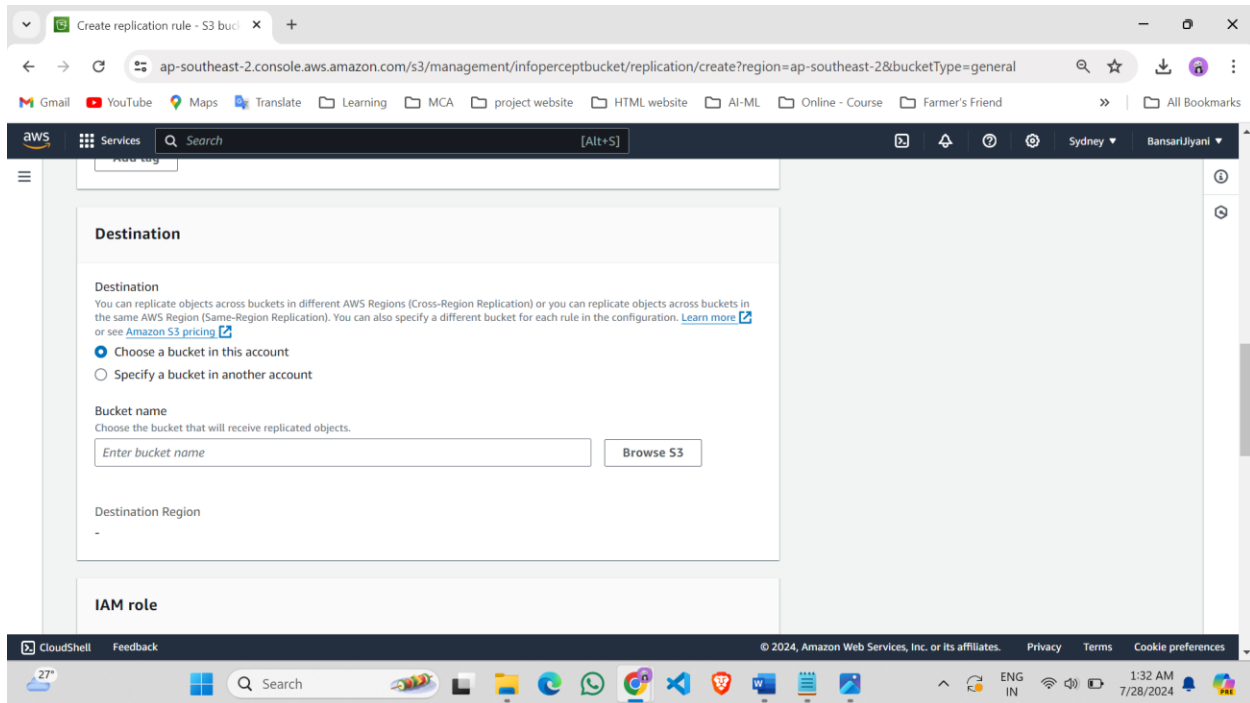
3. Create replication rule .



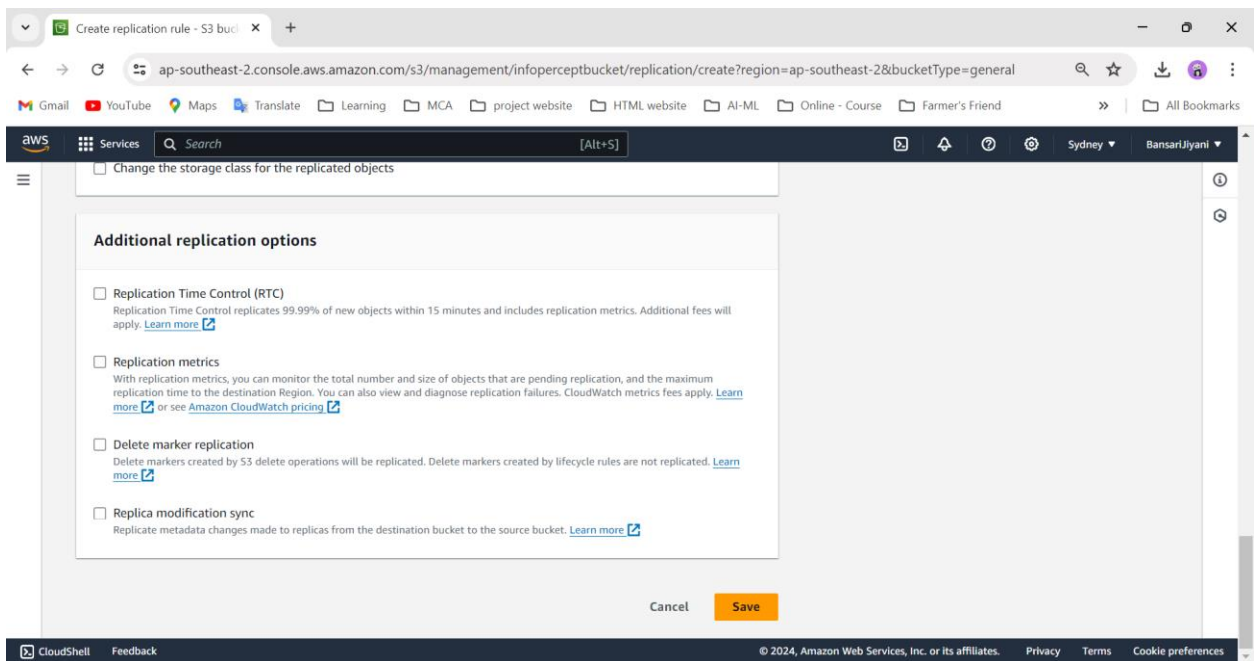
4. Give replication rule name



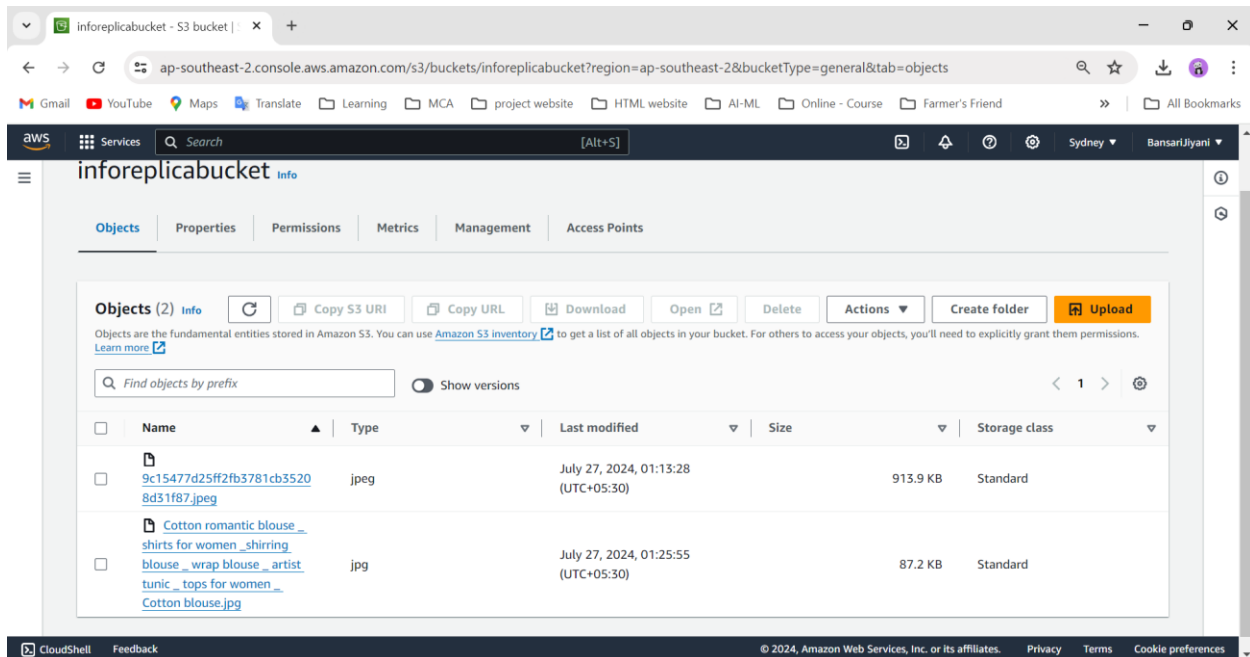
5. Give the Destination bucket name where we want to replicate this bucket



6. Save the changes.

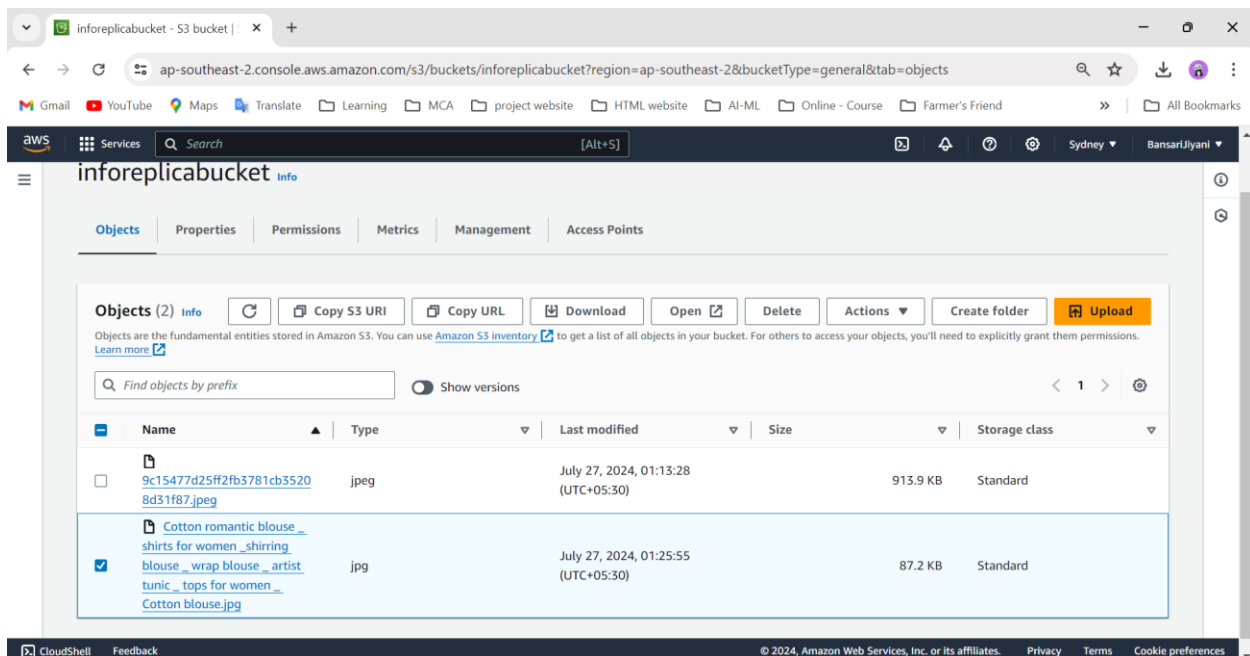


7. Now go to replica bucket and refresh the page and get the files of source bucket.

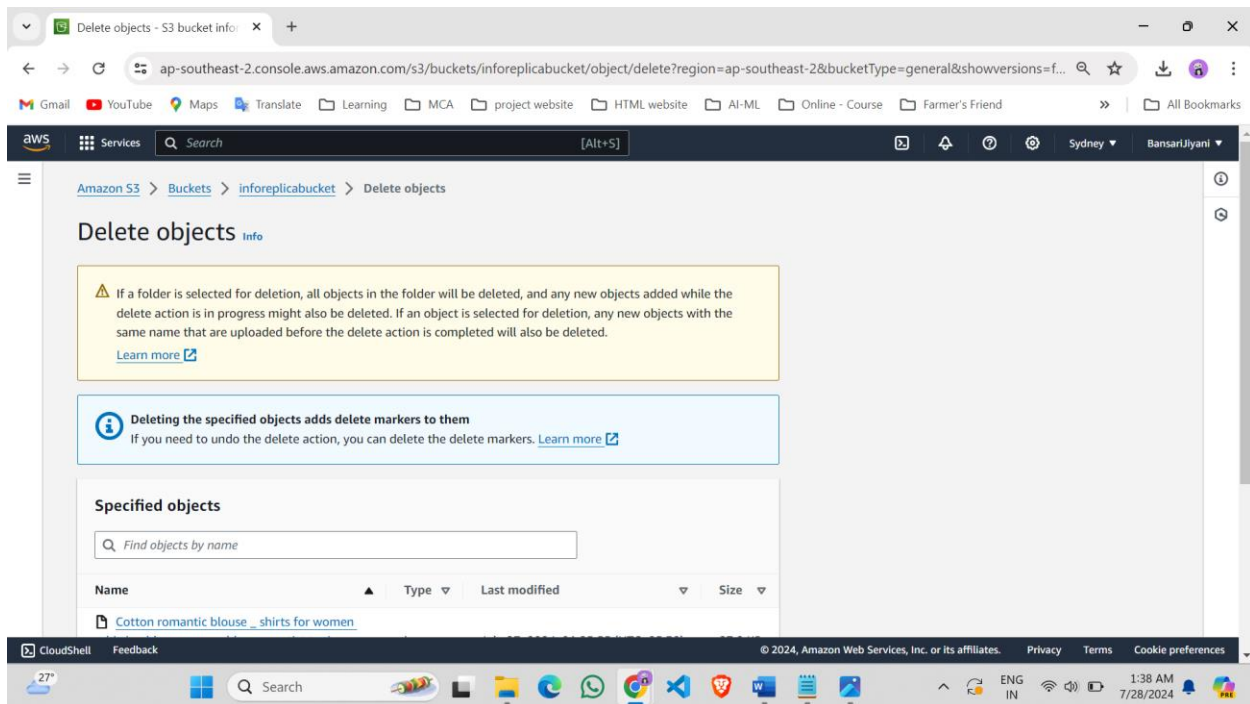


Delete the Object Of Bucket :

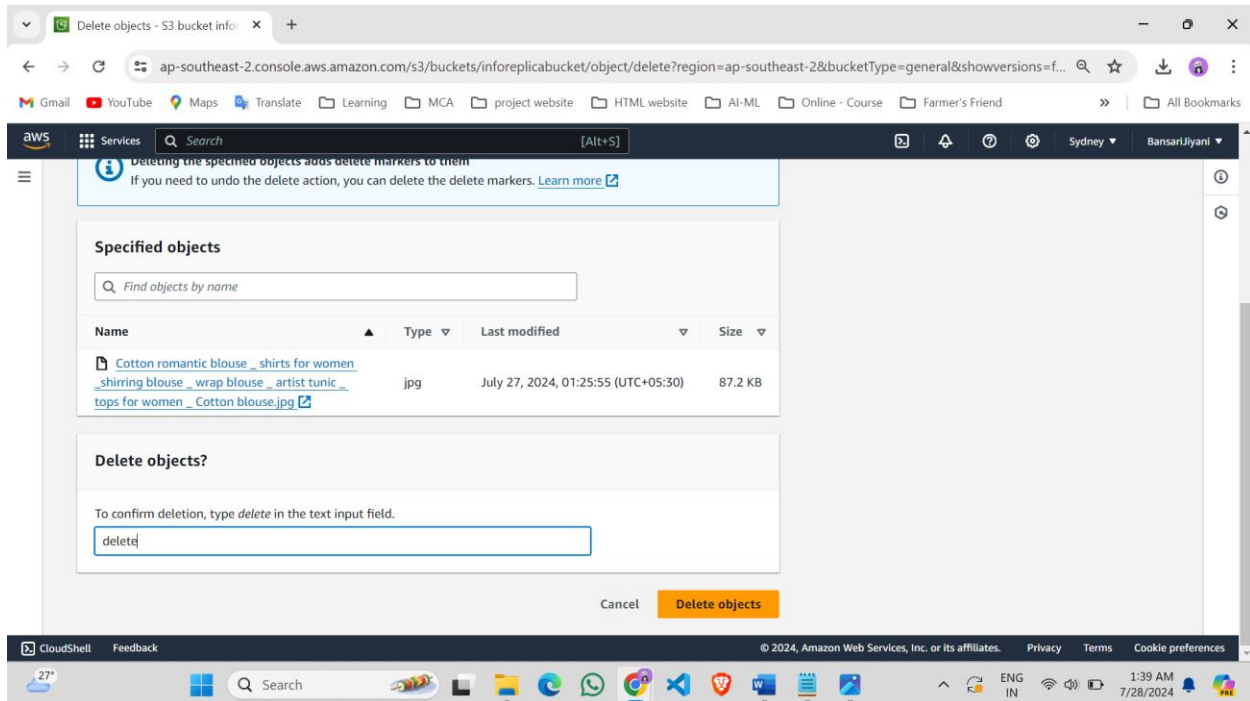
1. Click on the check box.



2. Click on delete Button. And get this screen.



3. Type here Delete.



4. And click on delete object and the object is deleted.

