

Advance Devops Lab 12

Aim: To create a Lambda function which will log "An Image has been added" once you add an object to a specific bucket in S3

Theory:

Objective: To create a serverless Lambda function that triggers whenever an object is added to a specific S3 bucket and logs a message indicating that an image has been added.

Prerequisites:

- An AWS account with necessary permissions to create Lambda functions and access S3 buckets.
- An S3 bucket created and configured.

Steps:

1. Create an S3 Bucket:

- Log in to your AWS Management Console.
- Navigate to the S3 service.
- Click on "Create bucket".
- Provide a unique bucket name and select your desired region.
- Configure any necessary permissions or tags.
- Click "Create bucket".

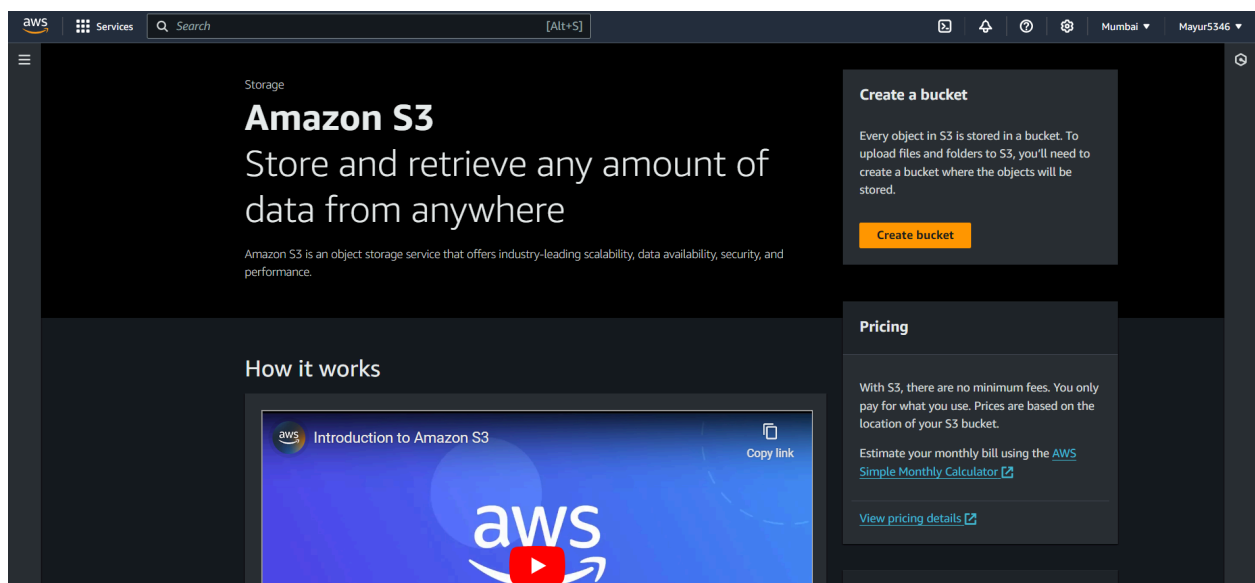
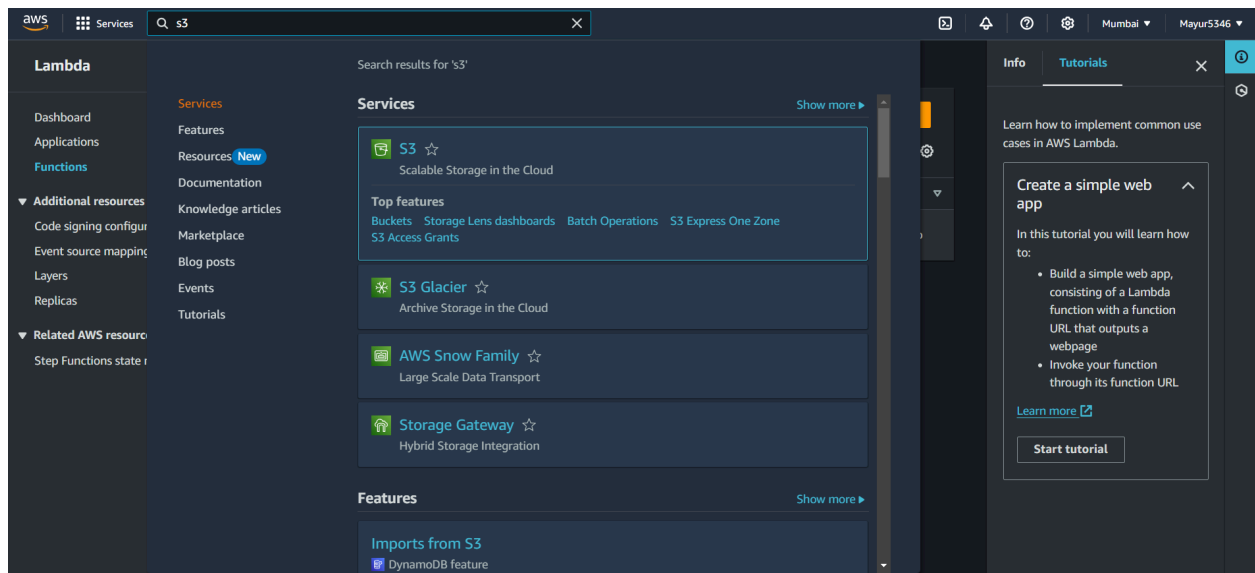
2. Create a Lambda Function:

- Navigate to the Lambda service.
- Click "Create function".
- Choose "Author from scratch".
- Provide a function name and select your desired runtime (e.g., Python 3.9).
- Click "Create function".

3. Configure Trigger:

- In the "Triggers" tab, click "Add trigger".
- Select "S3" as the event source.
- Choose the S3 bucket you created earlier.
- Select the desired event type (e.g., "Object Created").
- Click "Add".

Steps:



aws

Services

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Amazon S3

Buckets

Create bucket

Create bucket

info

Buckets are containers for data stored in S3.

General configuration

AWS Region

Asia Pacific (Mumbai) ap-south-1

Bucket name

Info

my-image-bucket-mayur

Bucket name must be unique within the global namespace and follow the bucket naming rules. [See rules for bucket naming](#)

Copy settings from existing bucket - optional

Only the bucket settings in the following configuration are copied.

Choose bucket

Format: s3://bucket/prefix

Object Ownership

info

Control ownership of objects written to this bucket from other AWS accounts and the use of access control lists (ACLs). Object ownership determines who can specify access to objects.

☒ ACLs disabled (recommended)

All objects in this bucket are owned by this account.

☐ ACLs enabled

Objects in this bucket can be owned by other AWS

aws

Services

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Amazon S3

Buckets

Successfully created bucket "my-image-bucket-mayur"

To upload files and folders, or to configure additional bucket settings, choose [View details](#).

Account snapshot - updated every 24 hours

All AWS Regions

Storage lens provides visibility into storage usage and activity trends. [Learn more](#)

View Storage Lens dashboard

General purpose buckets

Directory buckets

General purpose buckets (1)

info

All AWS Regions

Buckets are containers for data stored in S3.

Find buckets by name

Name

my-image-bucket-mayur

AWS Region

Asia Pacific (Mumbai) ap-south-1

IAM Access Analyzer

[View analyzer for ap-south-1](#)

Creation date

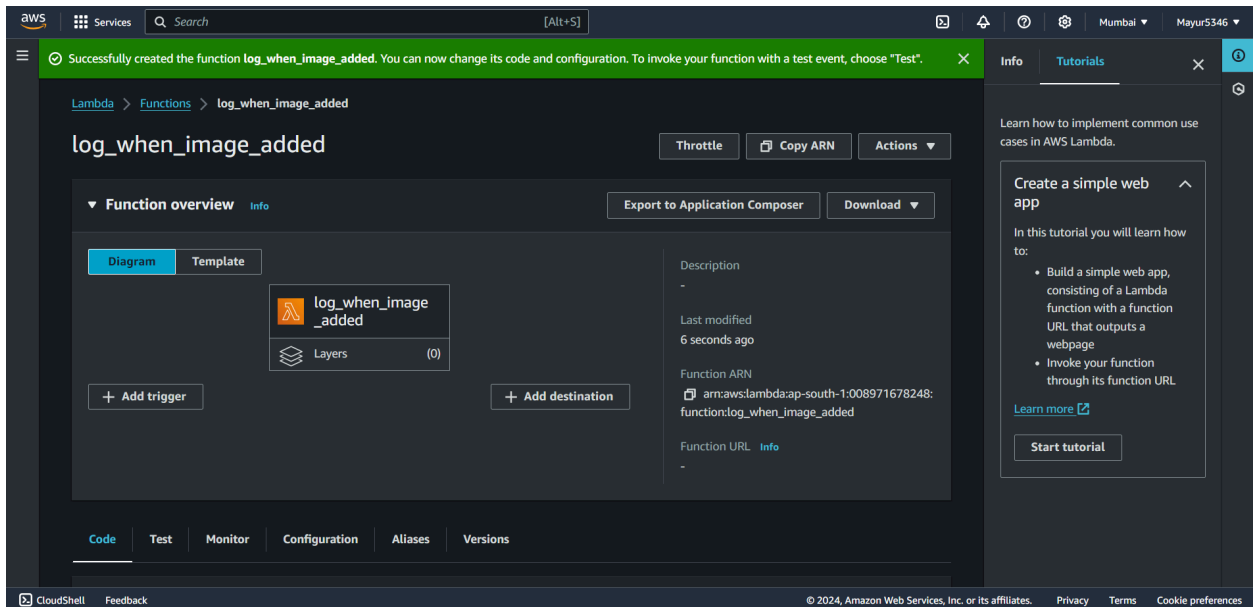
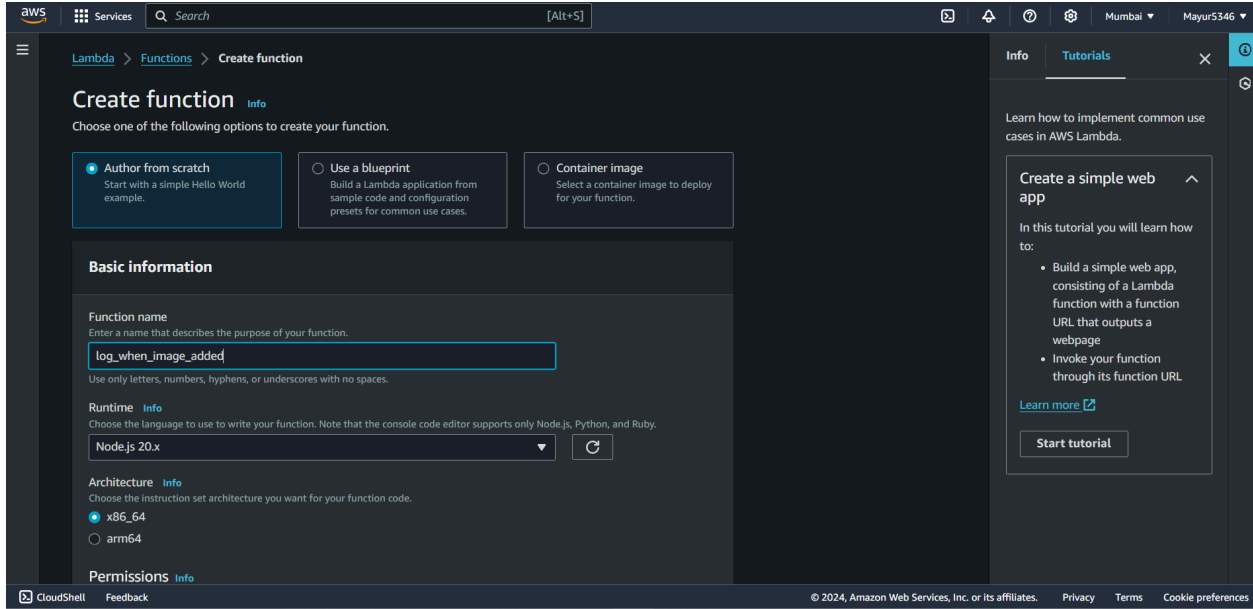
October 8, 2024, 14:26:13 (UTC+05:30)

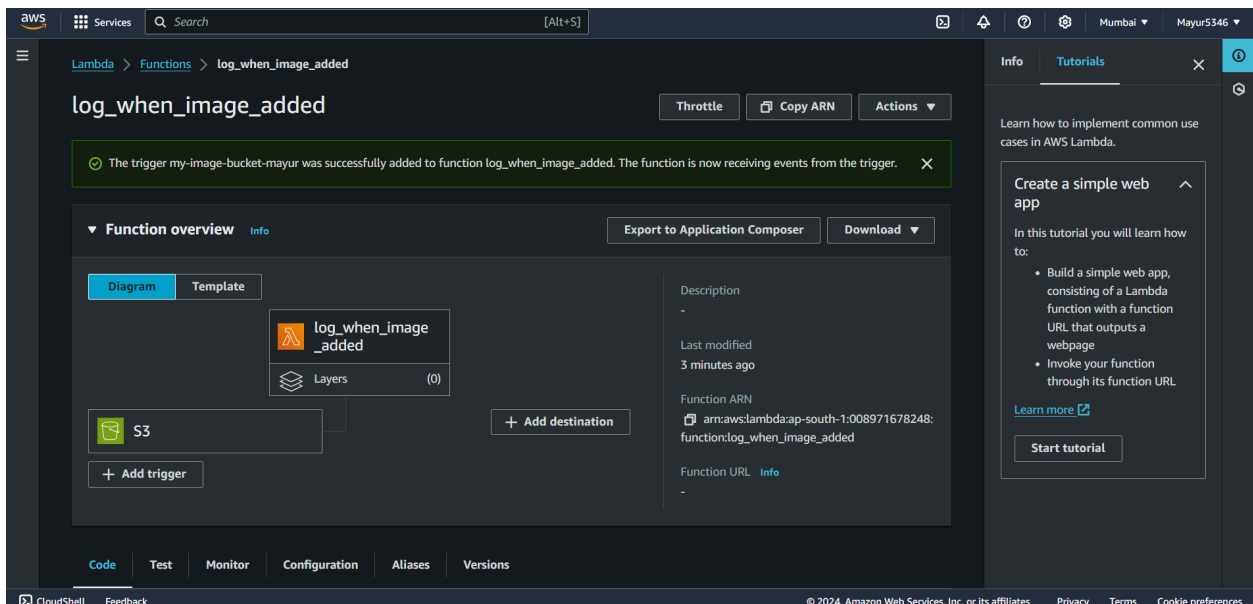
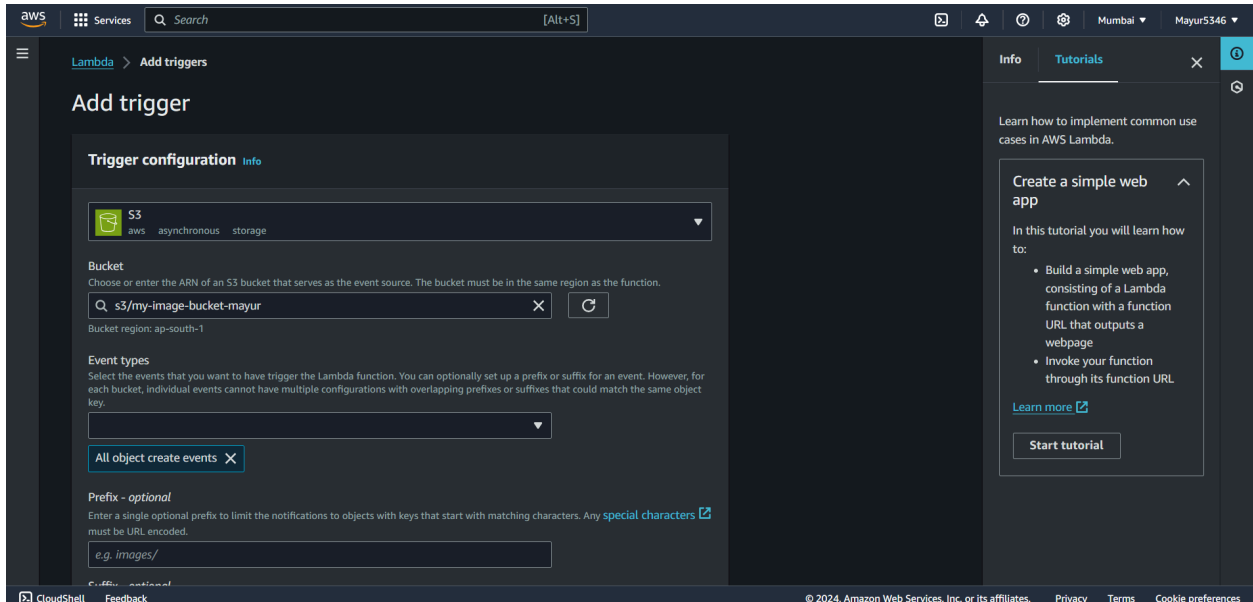
Copy ARN

Empty

Delete

Create bucket





Write Lambda Function Code:

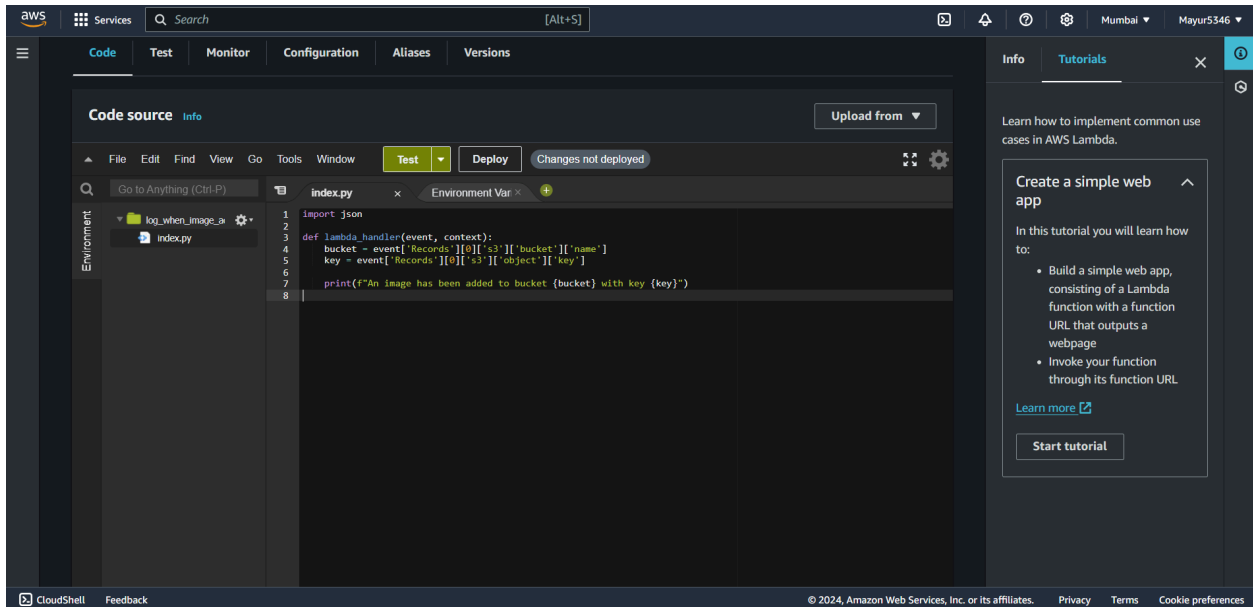
```
import json
```

```
def lambda_handler(event, context):
```

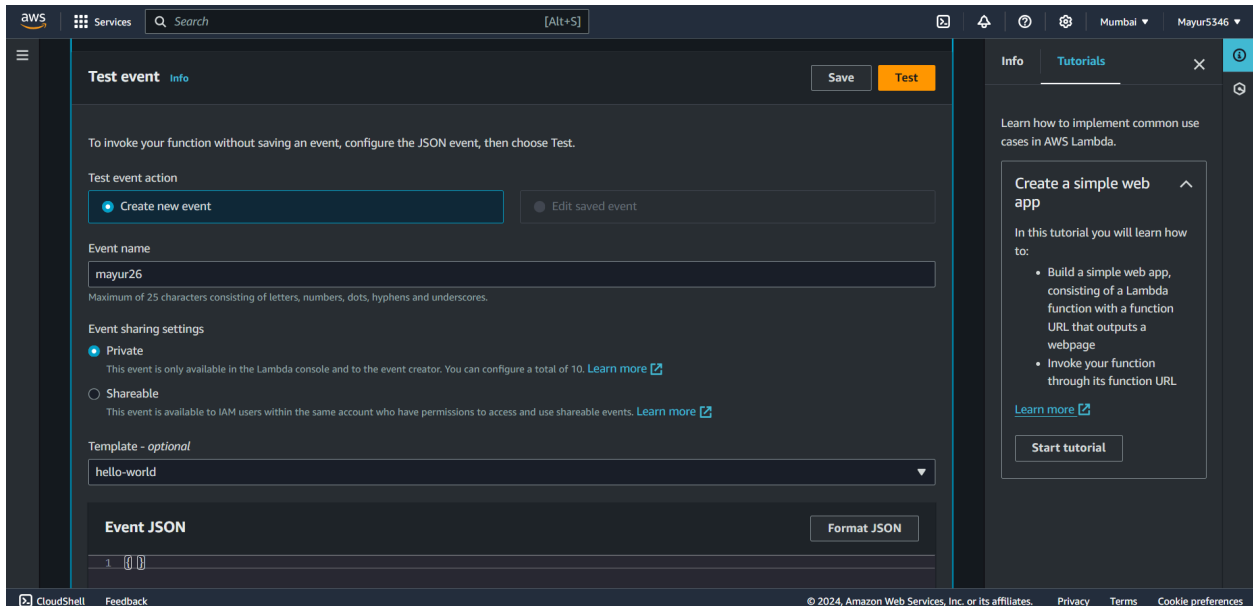
```
    bucket = event['Records'][0]['s3']['bucket']['name']
```

```
    key = event['Records'][0]['s3']['object']['key']
```

```
    print(f'An image has been added to bucket {bucket} with key {key}')
```



Add test event: Provide a test event payload (e.g., an empty JSON object).



Deploy it.

Test the Function:

aws

Services

Search

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Amazon S3

Buckets

Access Grants

Access Points

Object Lambda Access Points

Multi-Region Access Points

Batch Operations

IAM Access Analyzer for S3

Block Public Access settings for this account

Storage Lens

Dashboards

Storage Lens groups

AWS Organizations settings

Feature spotlight

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AWS Marketplace for S3

Amazon S3

Account snapshot - updated every 24 hours

All AWS Regions

View Storage Lens dashboard

General purpose buckets

Directory buckets

General purpose buckets (1)

Info

All AWS Regions

Refresh

Copy ARN

Empty

Delete

Create bucket

Buckets are containers for data stored in S3.

Find buckets by name

Name	AWS Region	IAM Access Analyzer	Creation date
<input type="radio"/> my-image-bucket-mayur	Asia Pacific (Mumbai) ap-south-1	View analyzer for ap-south-1	October 8, 2024, 14:26:13 (UTC+05:30)

CloudShell

Feedback

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Upload objects - S3 bucket my- x

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ap-south-1.console.aws.amazon.com/s3/upload/my-image-bucket-ajay?region=ap-south-1&bucket=

Amazon S3

Buckets

my-image-bucket-ajay

Upload

Upload

Info

Add the files and folders you want to upload to S3. To upload a file larger than 160GB, use the AWS CLI, AWS S3 REST API. [Learn more](#)

Drag and drop files and folders you want to upload here, or choose [Add files](#) or [Add folder](#)

Files and folders (0)

Remove

Add files

All files and folders in this table will be uploaded.

Find by name

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

Destination

Info

Destination

s3://my-image-bucket-ajay

CloudShell

Feedback

File Explorer

Home

Share

View

Picture Tools

This PC

Pictures

Quick access

Desktop

Downloads

Documents

Pictures

Music

Program Files

Videos

OneDrive

This PC

Network

Camera Roll

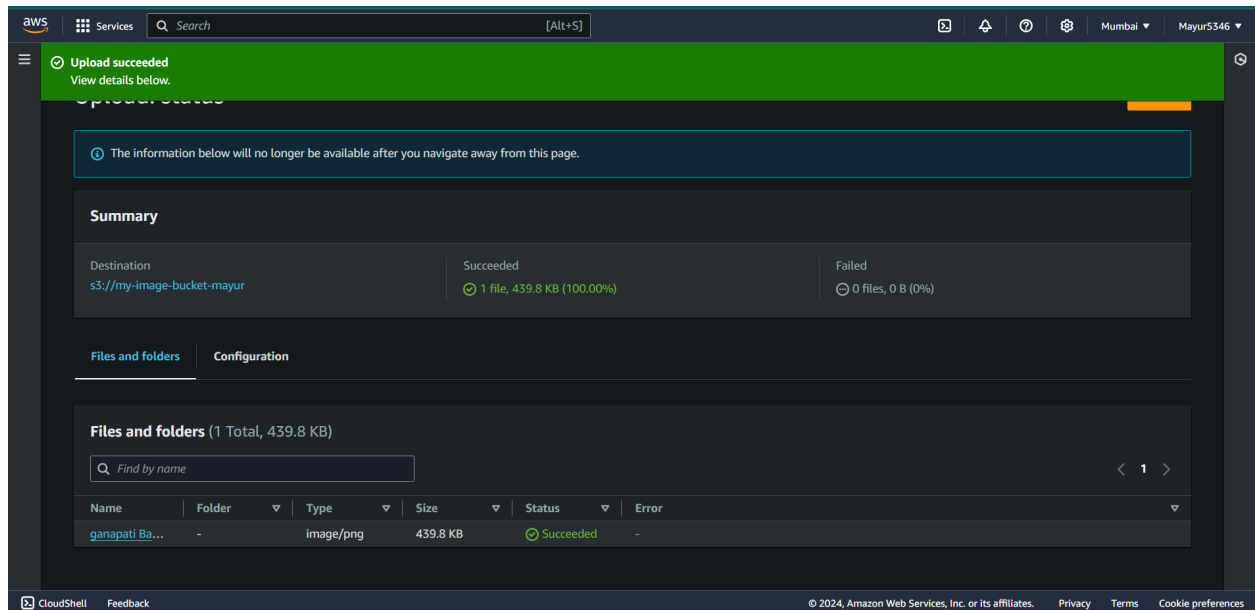
Saved Pictures

ganapati Bappa

3 items

1 item selected

439 KB



Go to cloudwatch: > log group > lambda function

