

## Experiment 12

Step 1: Create an IAM role with three policies : s3fullaccess,cloudwatchfull access.  
AwsLambdaBasicExecutionRole

### Name, review, and create

#### Role details

##### Role name

Enter a meaningful name to identify this role.

harshitha\_33

Maximum 64 characters. Use alphanumeric and '+,=, @, \_' characters.

##### Description

Add a short explanation for this role.

Allows Lambda functions to call AWS services on your behalf.

Maximum 1000 characters. Use letters (A-Z and a-z), numbers (0-9), tabs, new lines, or any of the following characters: \_ + = , @ - / [ ] ! # \$ % ^ & \* ( ) ; ' " , ~

### Step 1: Select trusted entities

Edit

#### Trust policy

```
1 {
2   "Version": "2012-10-17",
3   "Statement": [
4     {
5       "Effect": "Allow",
6       "Action": [
7         "sts:AssumeRole"
```

### Step 2: Add permissions

Edit

#### Permissions policy summary

Policy name ⓘ	Type	Attached as
<a href="#">AmazonS3FullAccess</a>	AWS managed	Permissions policy
<a href="#">AWSLambdaBasicExecutionRole</a>	AWS managed	Permissions policy
<a href="#">CloudWatchFullAccess</a>	AWS managed	Permissions policy

### Step 3: Add tags

#### Add tags - optional ⓘ

Tags are key-value pairs that you can add to AWS resources to help identify, organize, or search for resources.

No tags associated with the resource.

Add new tag

You can add up to 50 more tags.

Cancel

Previous

Create role

[Alt+S] Global Harshitha%20Nakka

Role harshitha\_33 created. [View role](#)

### Roles (4) [Info](#)

An IAM role is an identity you can create that has specific permissions with credentials that are valid for short durations. Roles can be assumed by entities that you trust.

[Search](#) [Delete](#) [Create role](#)

<input type="checkbox"/>	Role name	Trusted entities	Last activity
<input type="checkbox"/>	<a href="#">AWSServiceRoleForSupport</a>	AWS Service: support (Service-Linker)	-
<input type="checkbox"/>	<a href="#">AWSServiceRoleForTrustedAdvisor</a>	AWS Service: trustedadvisor (Service-Linker)	-
<input type="checkbox"/>	<a href="#">harshitha_33</a>	AWS Service: lambda	-
<input type="checkbox"/>	<a href="#">myFunction-role-e2s3w47s</a>	AWS Service: lambda	14 minutes ago

#### Roles Anywhere [Info](#)

Authenticate your non AWS workloads and securely provide access to AWS services.

##### Access AWS from your non AWS workloads

Operate your non AWS workloads using the same authentication and authorization strategy that you use within AWS.

##### X.509 Standard

Use your own existing PKI infrastructure or use [AWS Certificate Manager Private Certificate Authority](#) to authenticate identities.

##### Temporary credentials

Use temporary credentials with ease and benefit from the enhanced security they provide.

### AWSServiceRoleForSupport [Info](#)

Enables resource access for AWS to provide billing, administrative and support services

[Delete](#)

#### Summary

**Creation date**  
July 29, 2025, 10:33 (UTC+05:30)

**Last activity**  
-

**ARN**  
[arn:aws:iam::546821226095:role/aws-service-role/support.amazonaws.com/AWSServiceRoleForSupport](#)

**Maximum session duration**  
1 hour

[Edit](#)

[Permissions](#) | [Trust relationships](#) | [Tags](#) | [Last Accessed](#)

#### Permissions policies (1) [Info](#)

[Search](#) [Filter by Type](#) [All types](#) [Delete](#) [Create policy](#)

<input type="checkbox"/>	Policy name	Type	Attached entities
<input type="checkbox"/>	<a href="#">AWSsupportServiceRolePolicy</a>	AWS managed	1

## Step2: Create an Empty Bucket using s3

Amazon S3 Buckets

Successfully created bucket "harshitha33aws" To upload files and folders, or to configure additional bucket settings, choose [View details](#).

[General purpose buckets](#) [All AWS Regions](#) [Directory buckets](#)

#### General purpose buckets (1) [Info](#)

Buckets are containers for data stored in S3.

[Find buckets by name](#) [Copy ARN](#) [Empty](#) [Delete](#) [Create bucket](#)

<input type="radio"/>	Name	AWS Region	Creation date
<input type="radio"/>	<a href="#">harshitha33aws</a>	Asia Pacific (Mumbai) ap-south-1	September 9, 2025, 09:41:32 (UTC+05:30)

#### Account snapshot [Info](#)

[View dashboard](#)

Updated daily

Storage Lens provides visibility into storage usage and activity trends.

#### External access summary - new [Info](#)

[View dashboard](#)

Updated daily

External access findings help you identify bucket permissions that allow public access or access from other AWS accounts.

## Step3: Create a Lambda Function

### Function name

Enter a name that describes the purpose of your function.

xie33

Function name must be 1 to 64 characters, must be unique to the Region, and can't include spaces. Valid characters are a-z, A-Z, 0-9, hyphens (-), and underscores (\_).

### Runtime

Choose the language to use to write your function. Note that the console code editor supports only Node.js, Python, and Ruby.

Python 3.9

### Architecture

Choose the instruction set architecture you want for your function code.

☐ arm64

☒ x86\_64

### Permissions

By default, Lambda will create an execution role with permissions to upload logs to Amazon CloudWatch Logs. You can customize this default role later when adding triggers.

► Change default execution role

### ► Additional configurations

Use additional configurations to set up code signing, function URL, tags, and Amazon VPC access for your function.

Cancel

Create function

Successfully created the function xie33. You can now change its code and configuration. To invoke your function with a test event, choose "Test".

### xie33

Throttle Copy ARN Actions

Export to Infrastructure Composer Download

#### Function overview

Diagram Template

xie33

Layers (0)

+ Add trigger + Add destination

Description

Last modified 1 second ago

Function ARN [arn:aws:lambda:ap-south-1:546821226095:func:onie33](#)

Function URL [Info](#)

Learn how to implement common use cases in AWS Lambda.

#### Create a simple web app

In this tutorial you will learn how to:

- Build a simple web app, consisting of a Lambda function with a function URL that outputs a webpage
- Invoke your function through its function URL

[Learn more](#)

[Start tutorial](#)

Successfully updated the function xie33.

We couldn't set up the code editor because your browser is blocking a [sandboxed HTML iframe](#). This sandboxed iframe gives the editor the access it needs to scripts and same-origin content. Check with your administrator if you have any security plugins or browser extensions that might be blocking this iframe, or try using a different browser.

[Diagnose with Amazon Q](#)

Select test event

Choose the saved event that you want to use

Create new test event

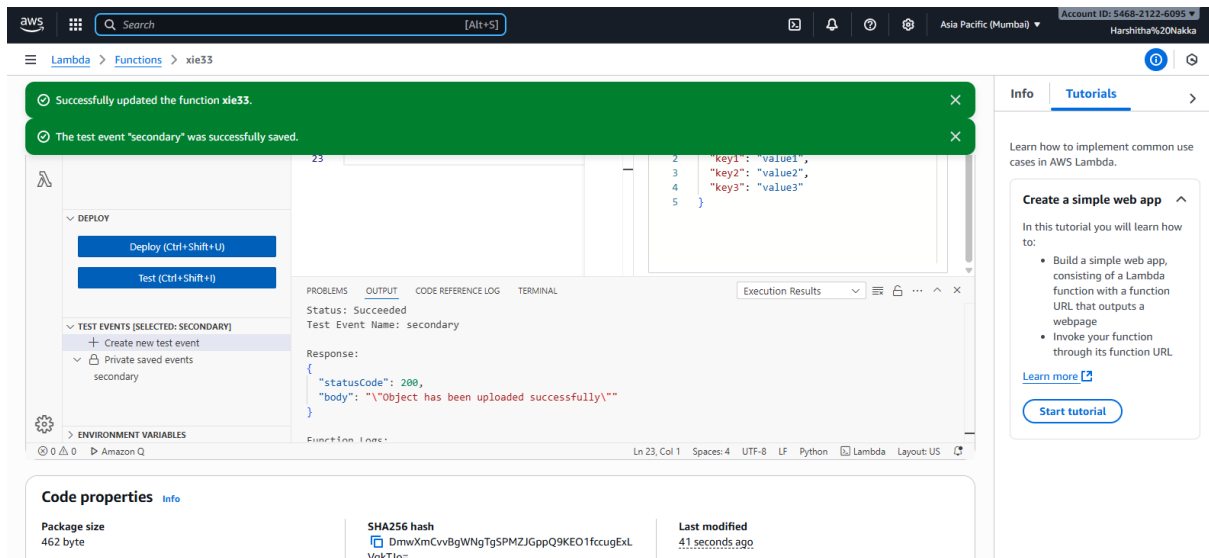
```

4 def lambda_handler(event, context):
5     bucket='harshitha33aws'
6     dataToUpload= {}
7     dataToUpload['Sid']=33
8     dataToUpload['Class']='TE'
9     dataToUpload['Department']='IT'
10    dataToUpload['Name']='Harshitha'
11    dataToUpload['File']='harshu_33'
12    fileName='harshu_33'+'.json'
13    uploadByteStream = bytes(json.dumps(dataToUpload).encode('UTF-8'))
14    s3.put_object(Bucket=bucket,Key=fileName,Body=uploadByteStream)
15

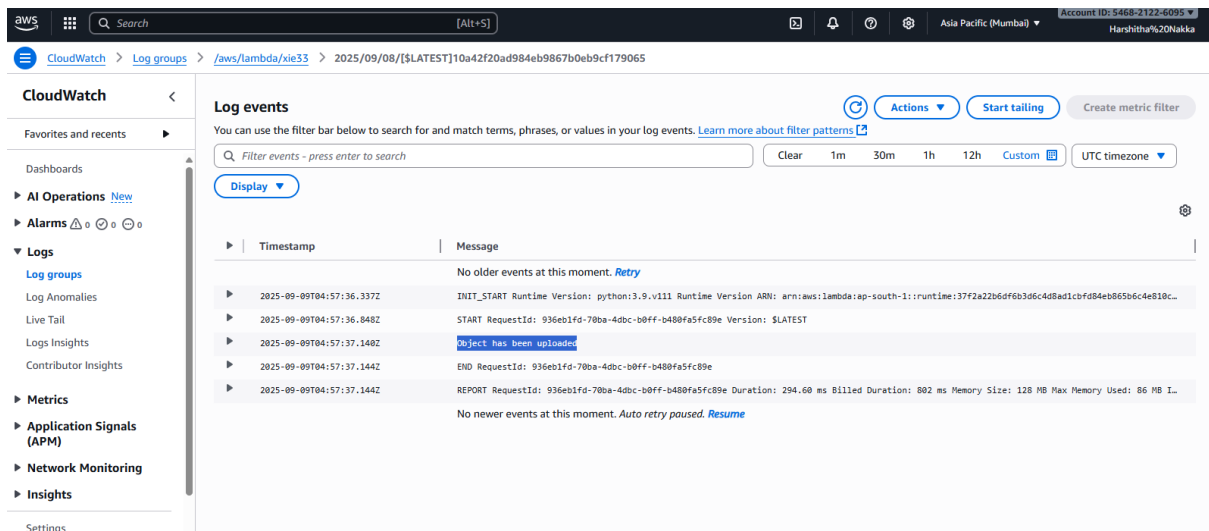
```

Deploy (Ctrl+Shift+U)

Test (Ctrl+Shift+I)



Step 4: go to cloud watch log books to observe the log records



Step 5: Go to s3 and check the empty bucket.

