

**Don Bosco Institute of Technology, Mumbai 400070**  
**Department of Information Technology**

**Experiment No. : 12**

**Date:** 27/10/22

**Name:** Swasti Jain

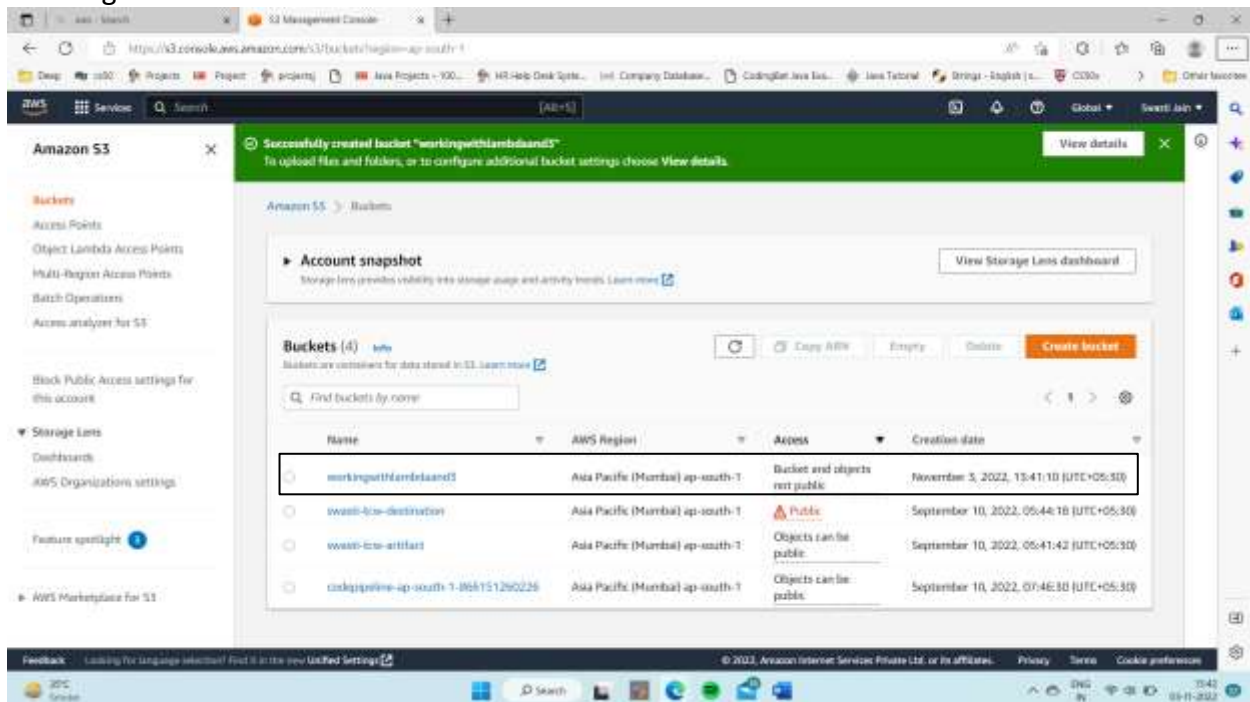
**Batch:** B

**Roll No:** 24

To start using AWS Lambda with Amazon S3, we need the following –

- Create S3 Bucket
- Create role which has permission to work with s3 and lambda
- Create lambda function and add s3 as the trigger.

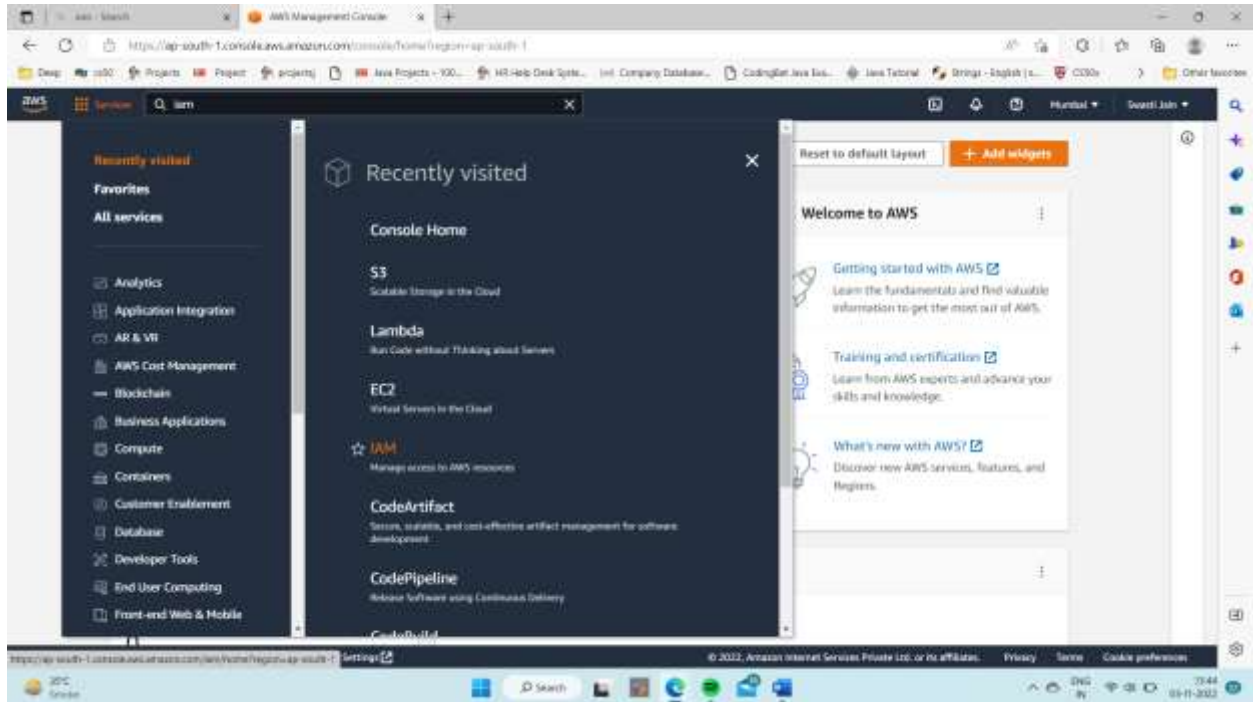
**Creating S3 Bucket**



## Create Role that Works with S3 and Lambda

To create role that works with S3 and Lambda, please follow the Steps given below :

**Step 1:**Go to AWS services and select IAM as shown below –



### IAM dashboard

#### Security recommendations

- Add MFA for root user**  
Add MFA for root user – Enable multi-factor authentication (MFA) for the root user to improve security for this account.
- Deactivate or delete access keys for root user**  
Deactivate or delete the access keys for the root user. Instead, use access keys attached to an IAM user to improve security.

Add MFA

Manage access keys

#### IAM resources

User groups	Users	Roles	Policies	Identity providers
0	1	3	0	0

#### What's new

Updates for features in IAM

View all

#### AWS Account

Account ID  
625453636107

Account Alias  
625453636107 [Create](#)

Sign-in URL for IAM users in this account  
[https://625453636107.signin.aws.a  
mazon.com/console](https://625453636107.signin.aws.amazon.com/console)

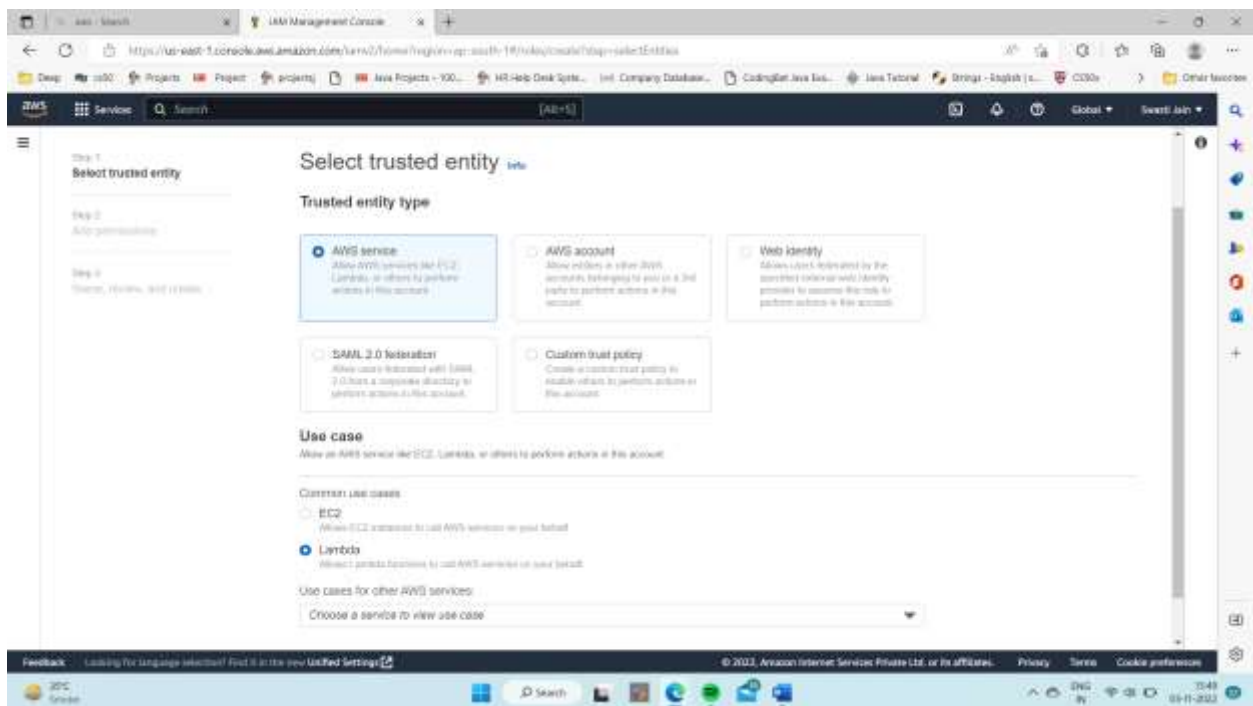
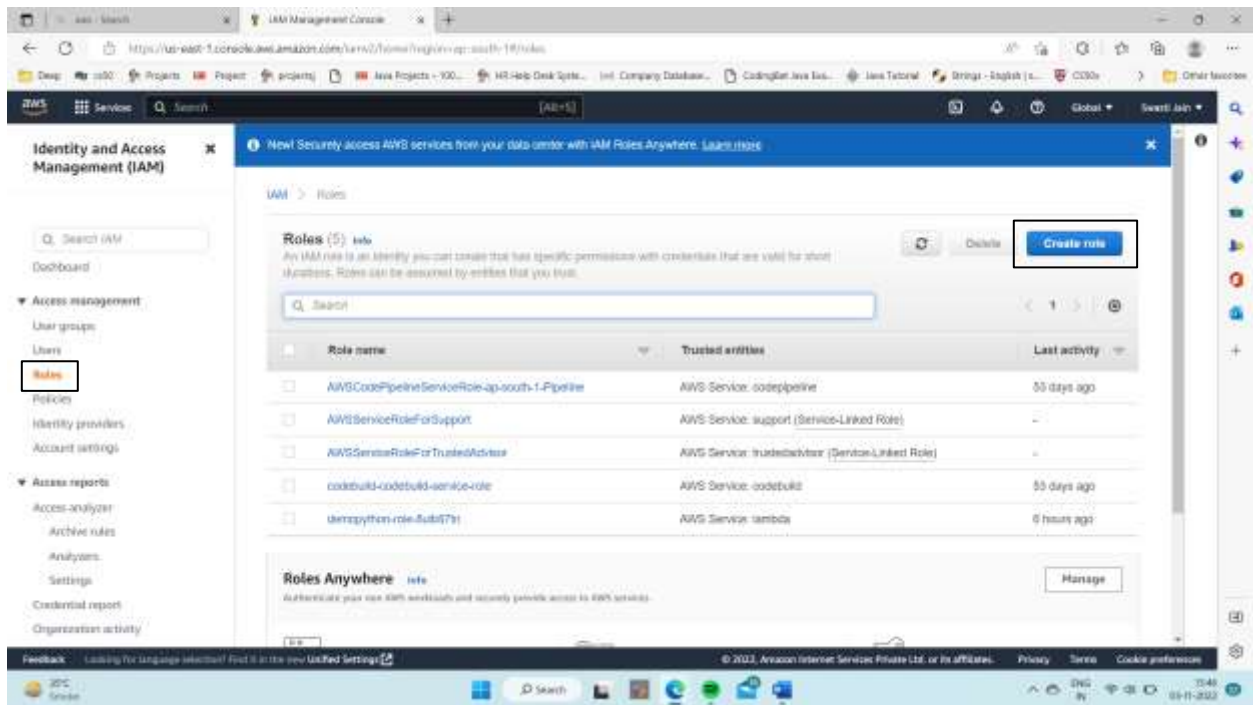
#### Quick Links

[My security credentials](#)  
Manage your access keys, multi-factor authentication (MFA) and other credentials.

#### Tools

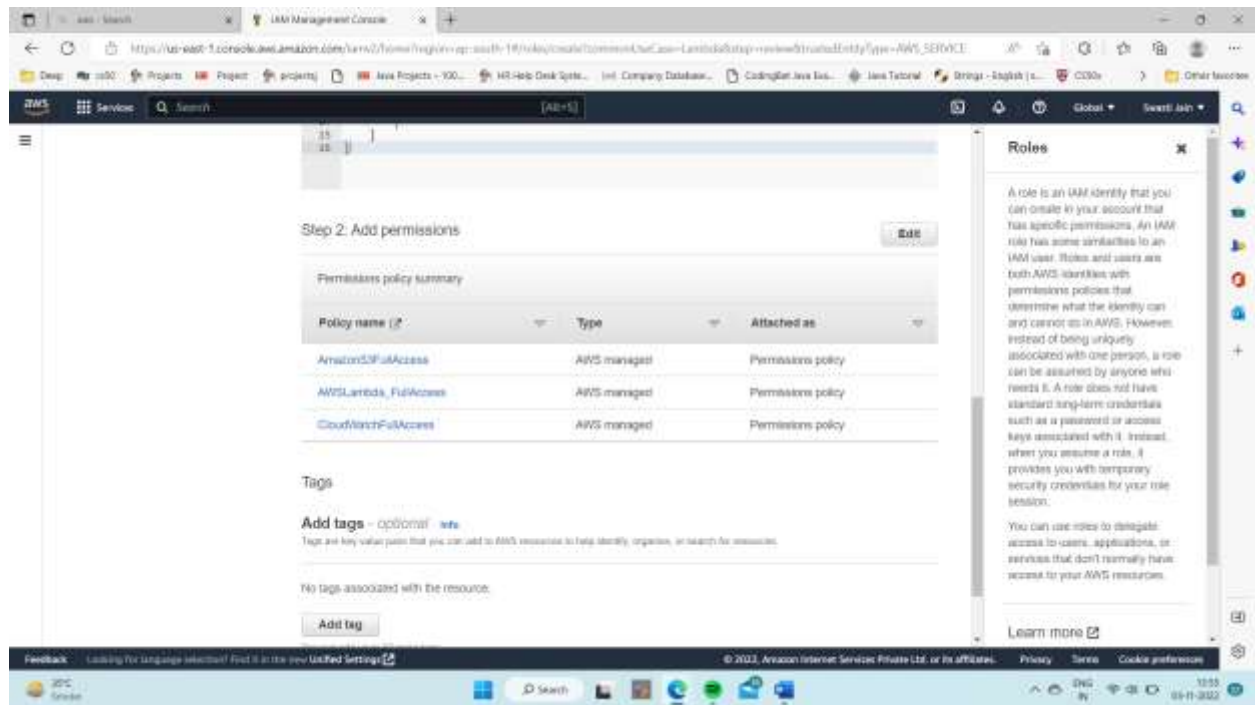
Step 2

Now, click IAM -> Roles as shown below –



Step 3

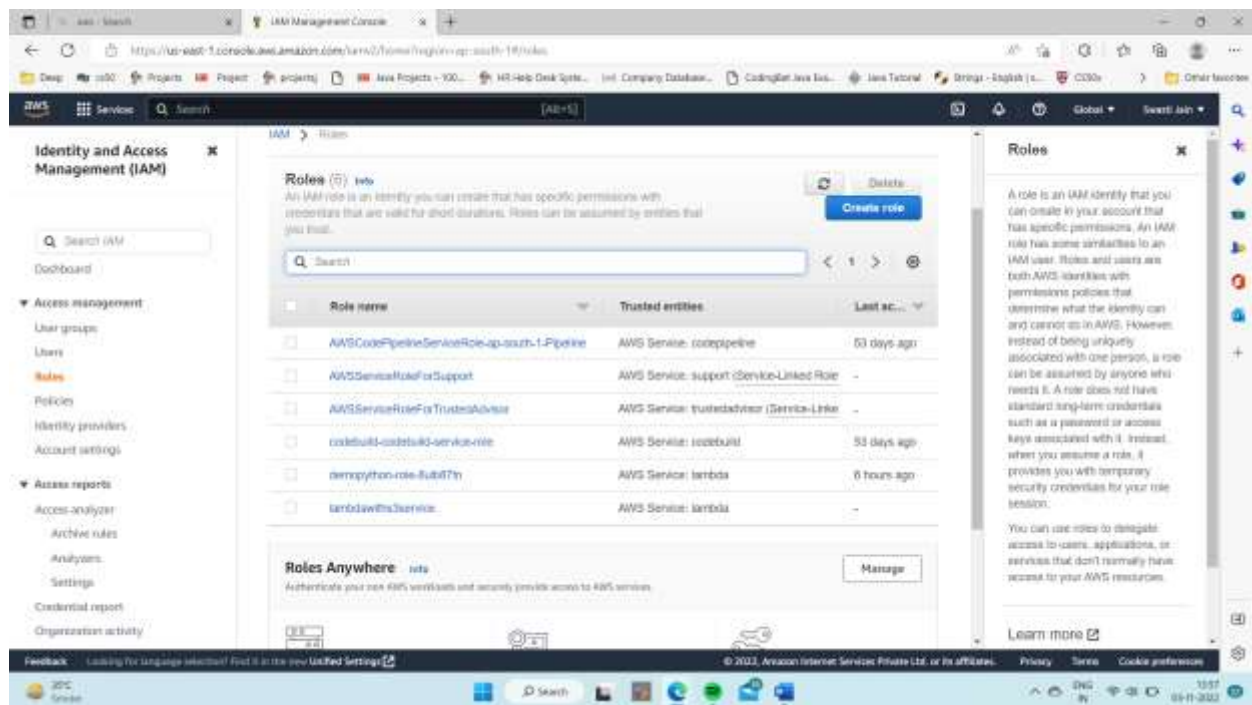
Add the permission from below :



Observe that we have chosen the following permissions –

we have selected are AmazonS3FullAccess, AWSLambdaFullAccess and CloudWatchFullAccess.

Step 4

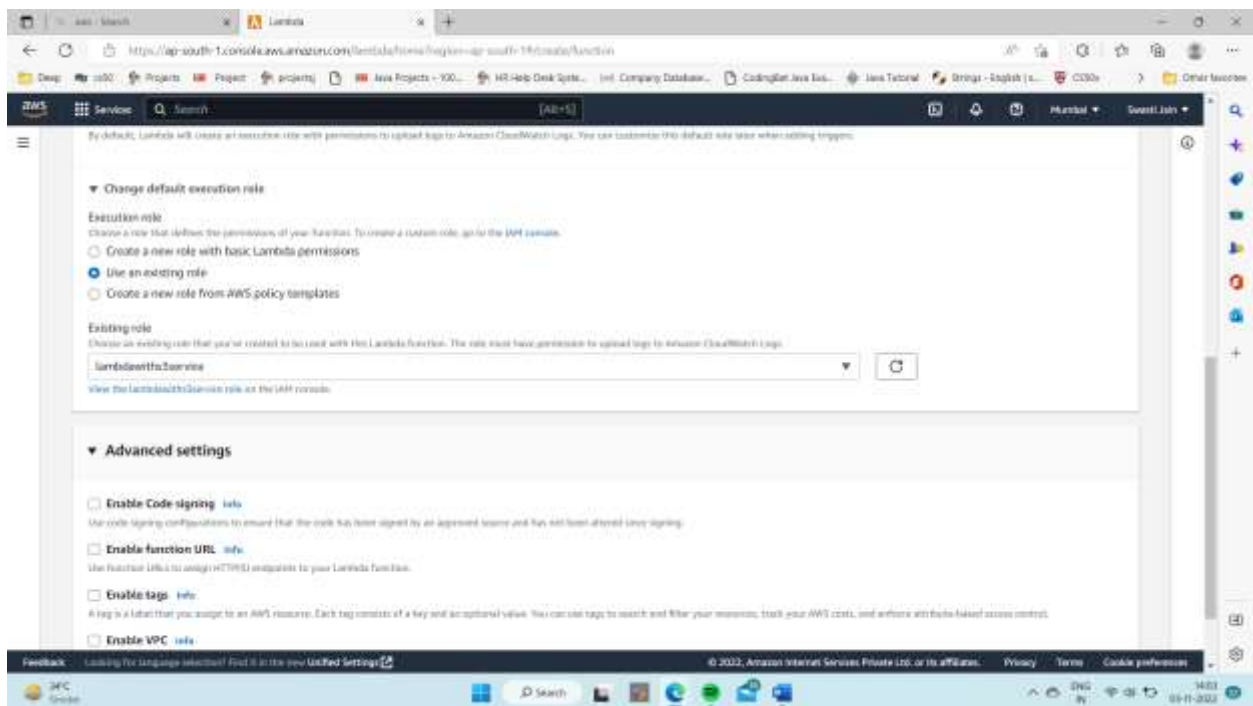
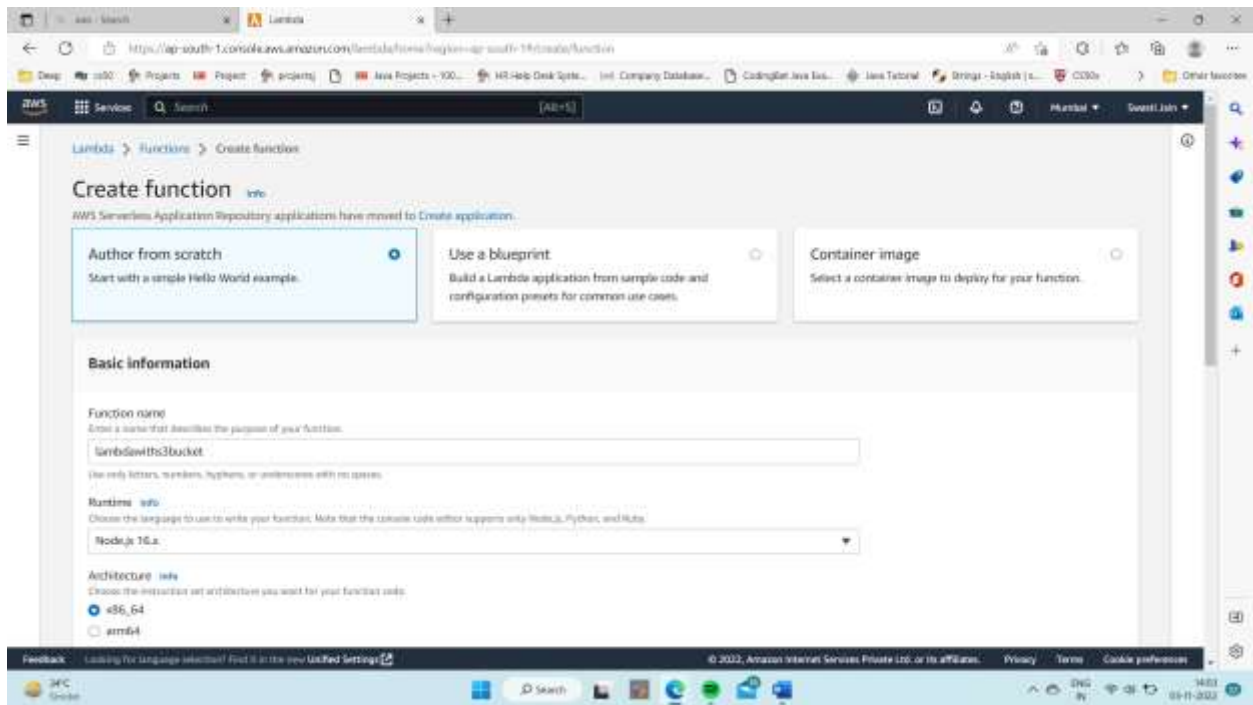


## Create Lambda function and Add S3 Trigger

In this section, let us see how to create a Lambda function and add a S3 trigger to it. For this purpose, you will have to follow the Steps given below –

### Step 1

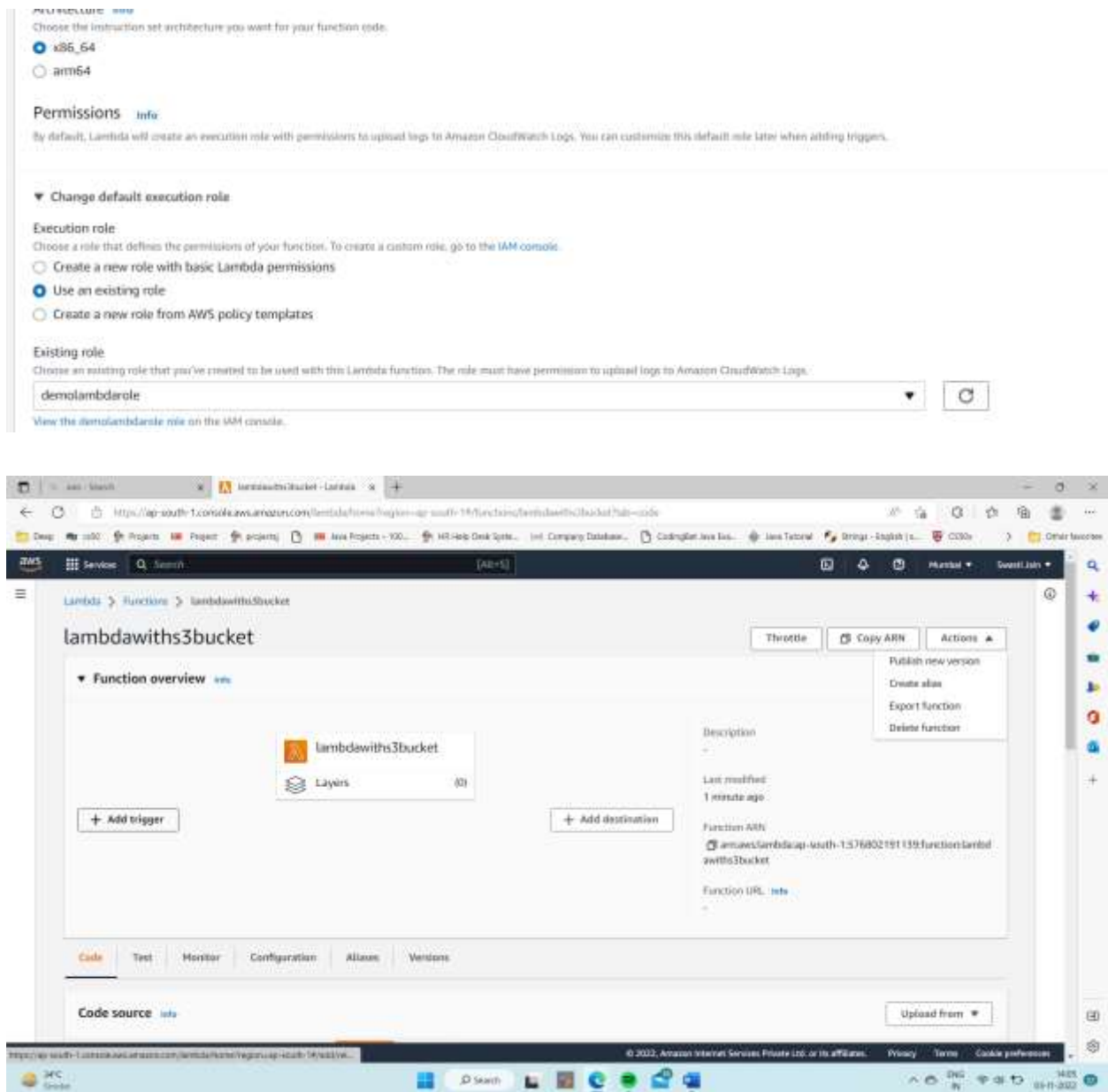
Go to AWS Services and select Lambda as shown below –





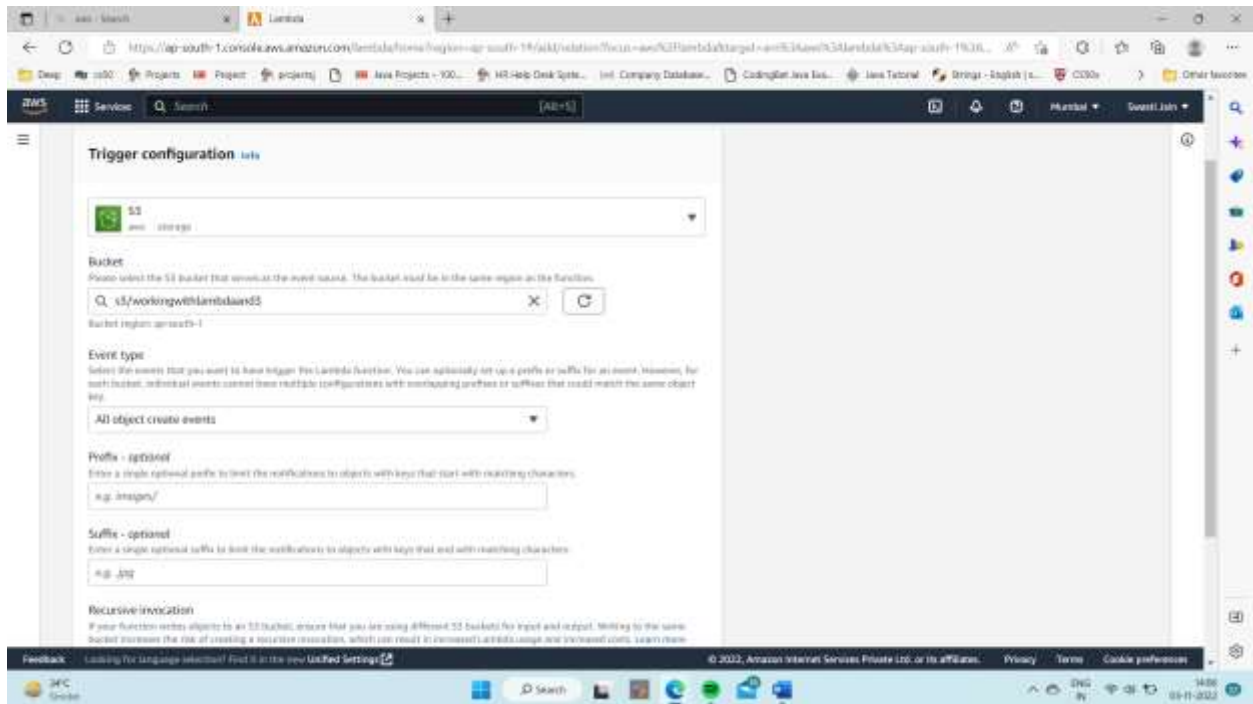
## Step 2

Click Lambda and follow the process for adding Name. Choose the Runtime, Role etc. and create the function. The Lambda function that we have created is shown in the screenshot below –



Hence a lambda function is created

## Now Lets Create a trigger



Below is the code written in node.js to pinned a log about an object that has been added to s3.

[Code source](#) [Info](#)





## Now to test our lambda function with s3 trigger.

Step 1.add a image to s3 bucket

The screenshot shows the AWS S3 console interface. The top navigation bar includes the AWS logo, a search bar, and a list of services. The main content area is titled 'Upload' and provides instructions on how to upload files. A file named 'Michael-Scott.jpg' (142.6 KB) is shown in the 'Files and folders' section. The destination is set to 's3://workingwithlambdaandS3'. A green banner at the top of the console indicates 'Upload successful'. Below this, the 'Upload: status' section shows a summary of the upload process, including the destination, the number of files uploaded (1 file, 142.6 KB, 100.00%), and the status (Succeeded). The 'Files and folders' section is also visible, showing the uploaded file.

Amazon S3 > Buckets > workingwithlambdaandS3 > Upload

### Upload

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

**Files and folders** (1 Total, 142.6 KB)

All files and folders in this table will be uploaded.

Find by name

Name	Folder	Type	Size
Michael-Scott.jpg		Image/jpeg	142.6 KB

**Destination**

Destination  
s3://workingwithlambdaandS3

Destination details

Feedback Loading for language selection? Find it in the new Unified Settings.

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14:31 09-11-2022

Upload successful  
View details below.

### Upload: status

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

**Summary**

Destination	Succeeded	Failed
s3://workingwithlambdaandS3	1 file, 142.6 KB (100.00%)	0 files, 0.0 (0%)

**Files and folders** Configuration

**Files and folders** (1 Total, 142.6 KB)

Find by name

Name	Folder	Type	Size	Status	Error
Michael-Scott.jpg		Image/jpeg	142.6 KB	Succeeded	

Feedback Loading for language selection? Find it in the new Unified Settings.

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## Step 2.

Now go to cloudwatch you will see the logs of newly happened activity in s3.

