NAME: MULLA AFRAH AKKAS ALI

ROLL NO.: 612038

BRANCH: T.E. – I.T.

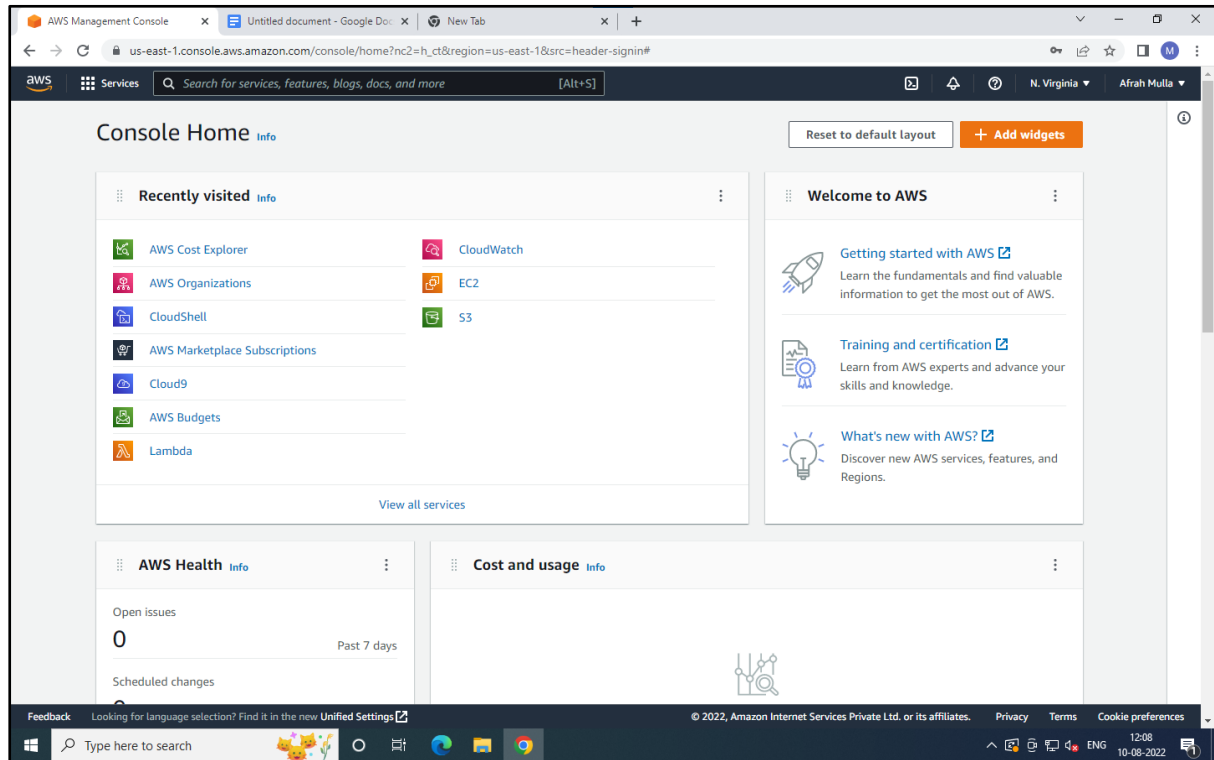**SEMESTER:** ODD SEMESTER 5

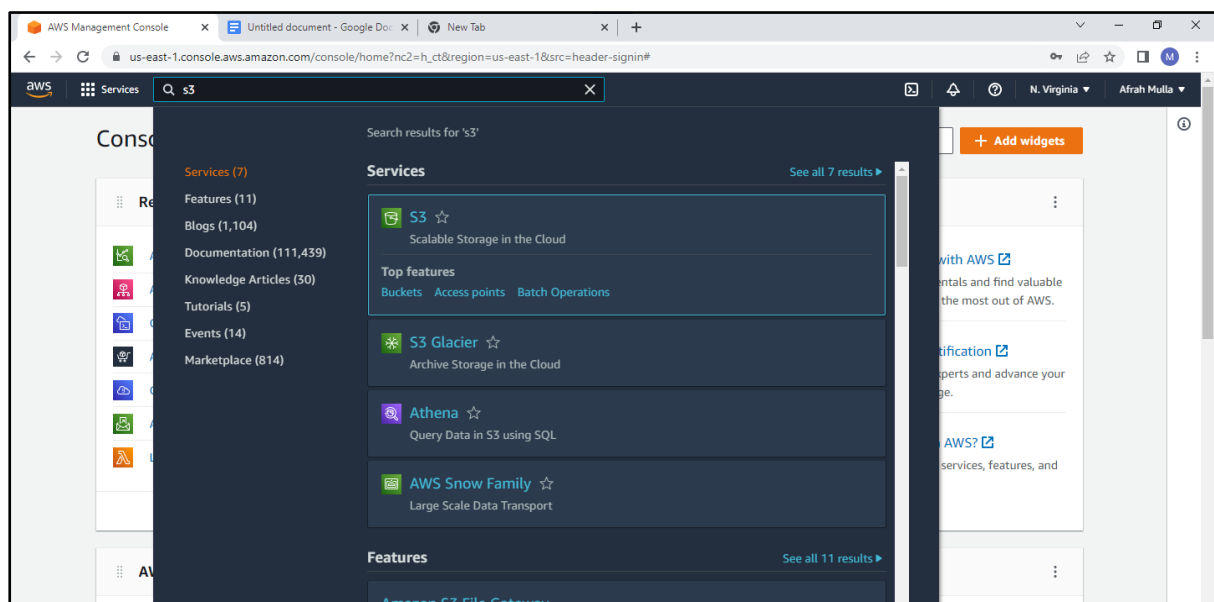**COURSE:** Advance DevOPs (ITL504)

DATE: 10-08-2022

EXPERIMENT 6

To create a Lambda function which will log "An Image has been added" once you add an object to a specific bucket in S3. Use AWS Lambda blueprint.
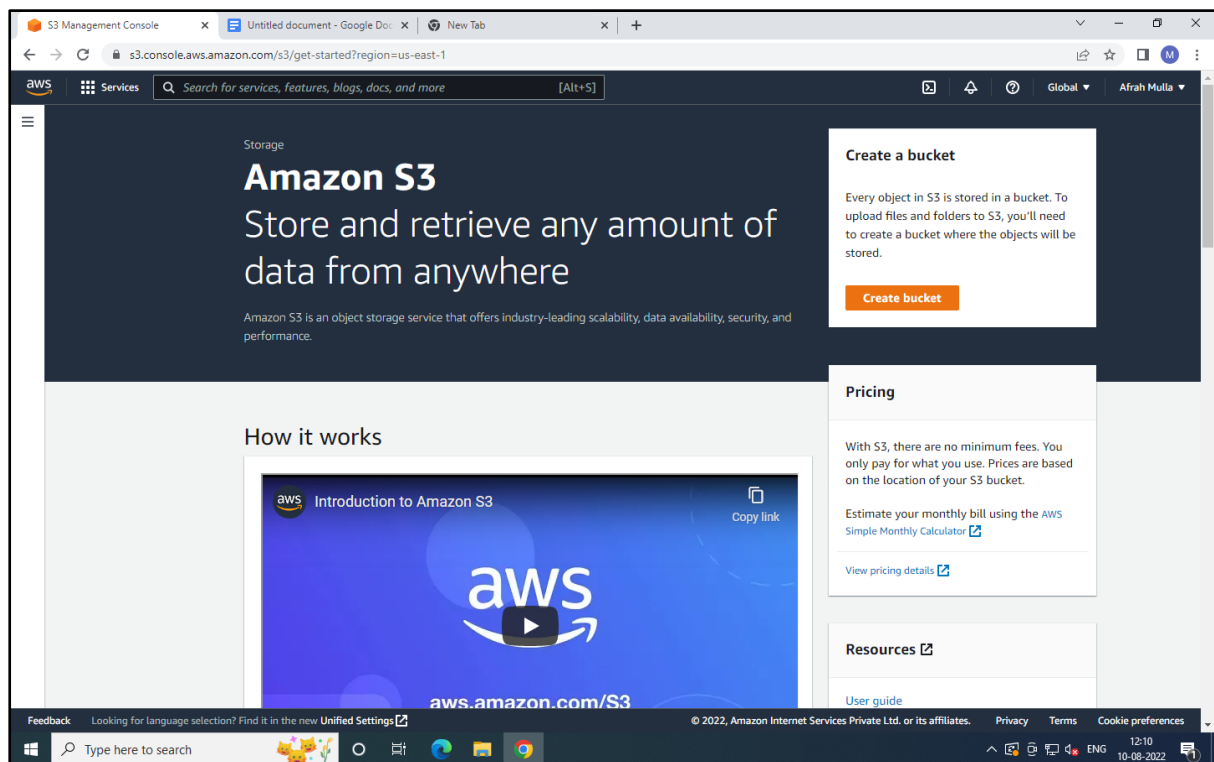
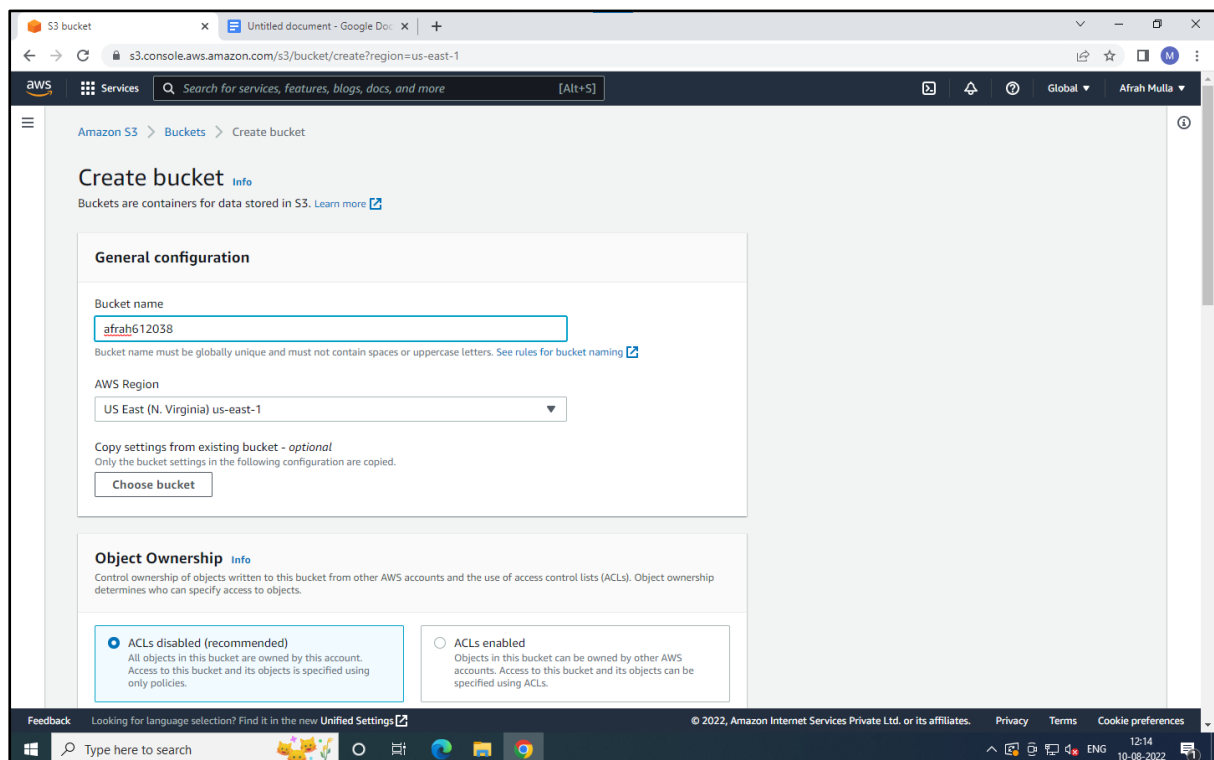Step 1: AWS Management Console Dashboard

Step 2: Click on Services -> Storage -> S3
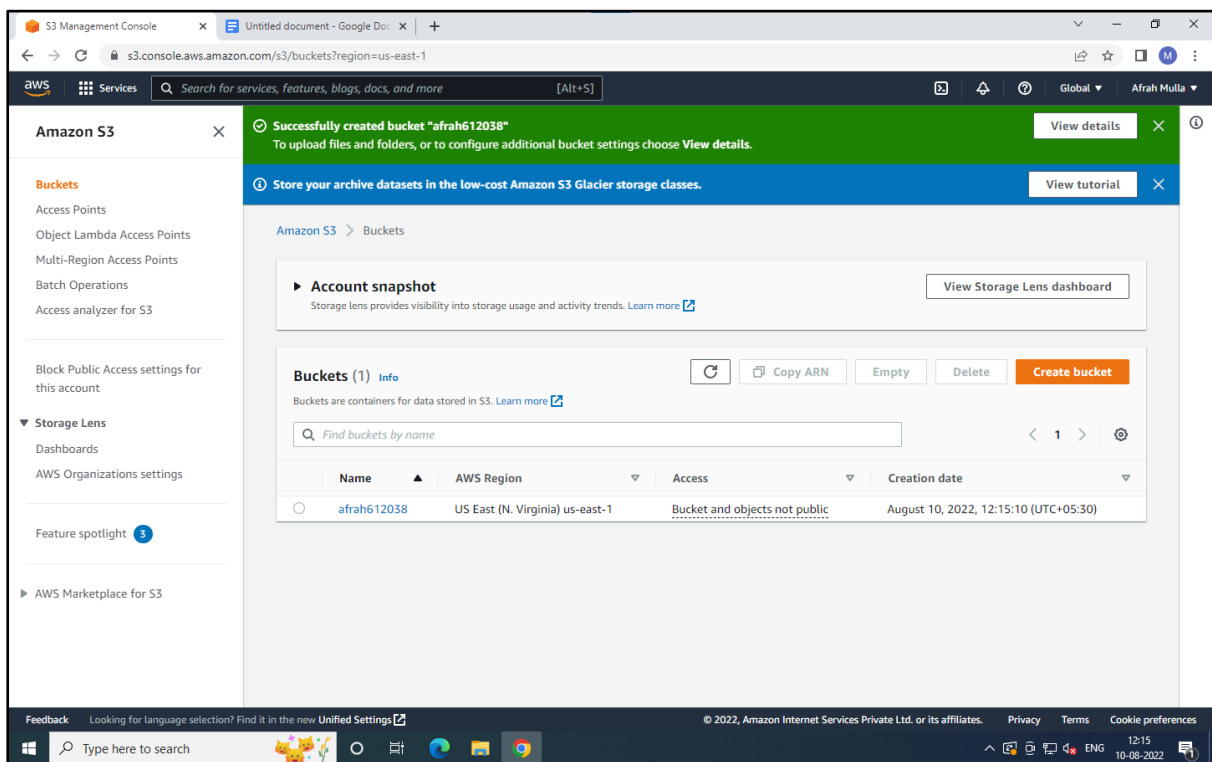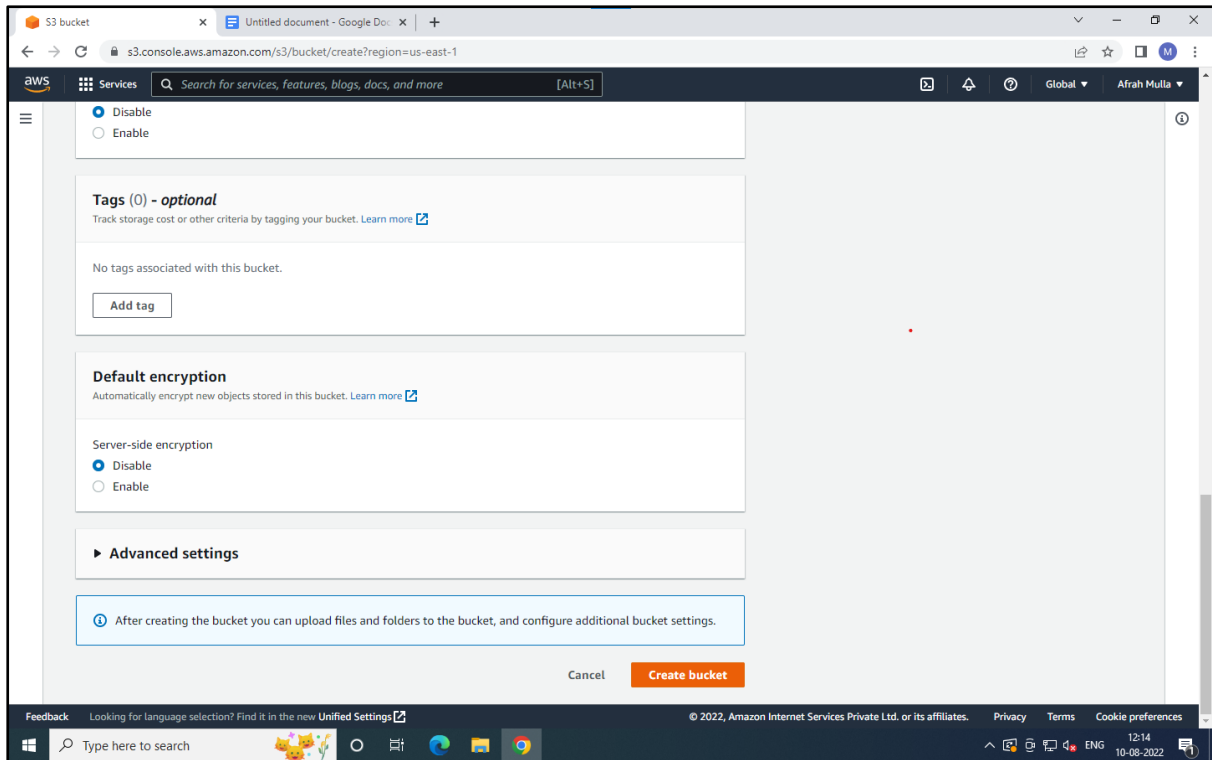
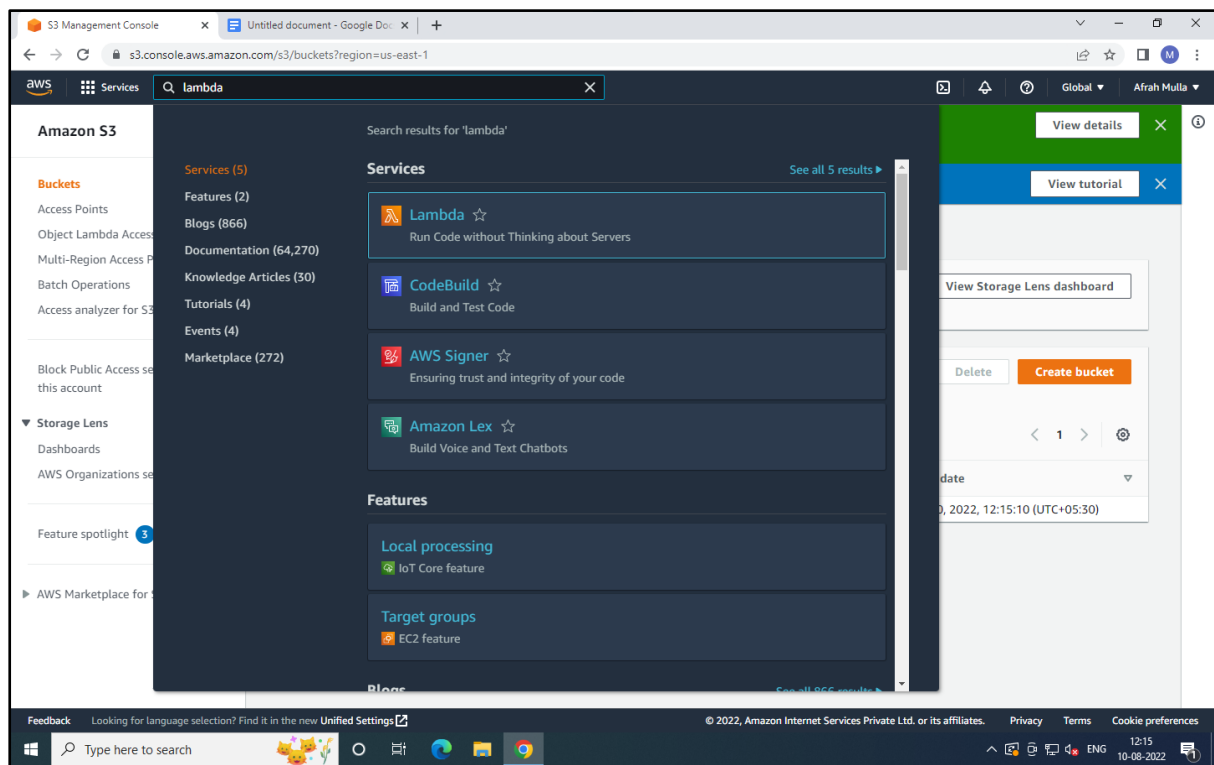Step 3: Click on 'Create bucket'

Step 4: Give your bucket a name -> Click on Create bucket
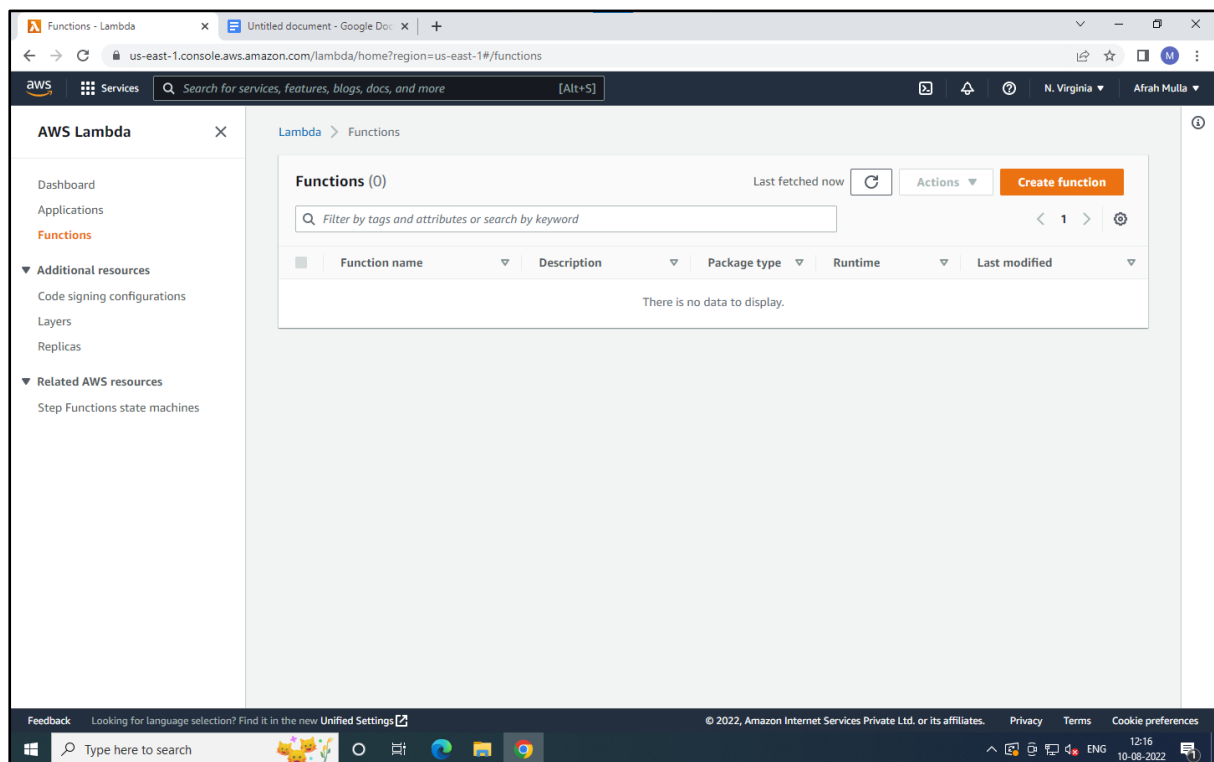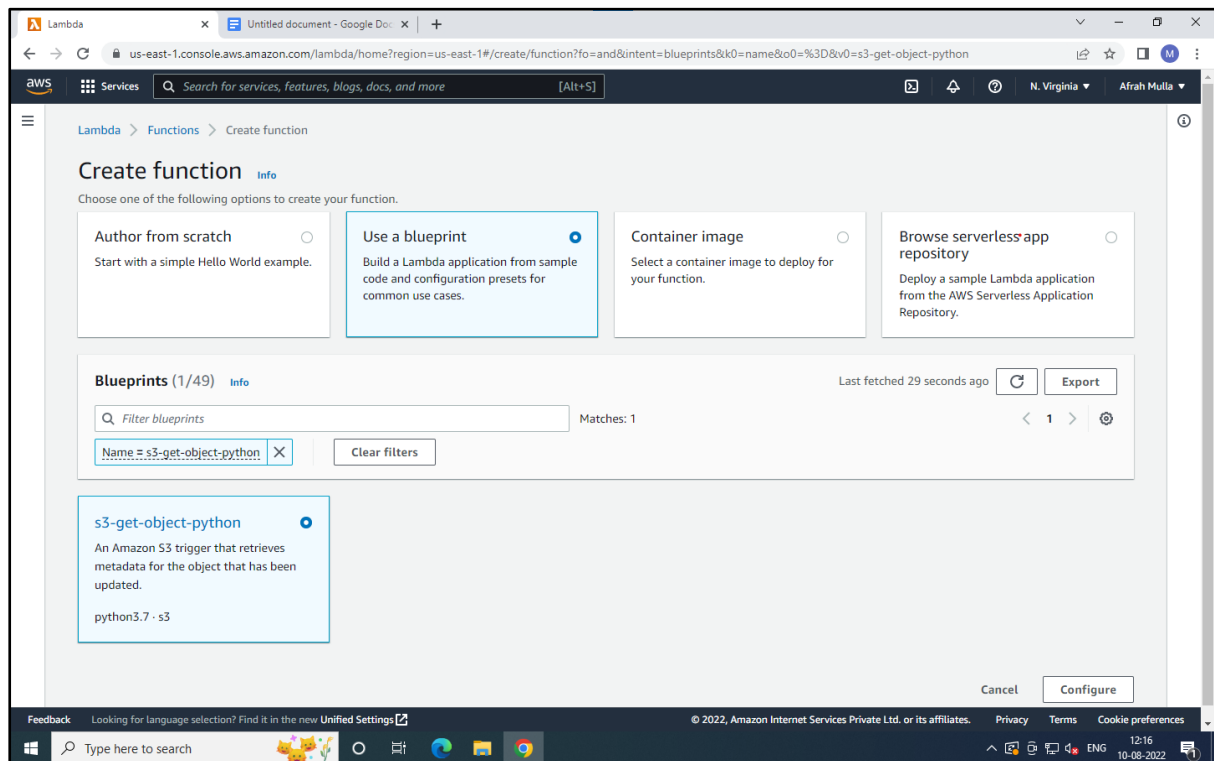
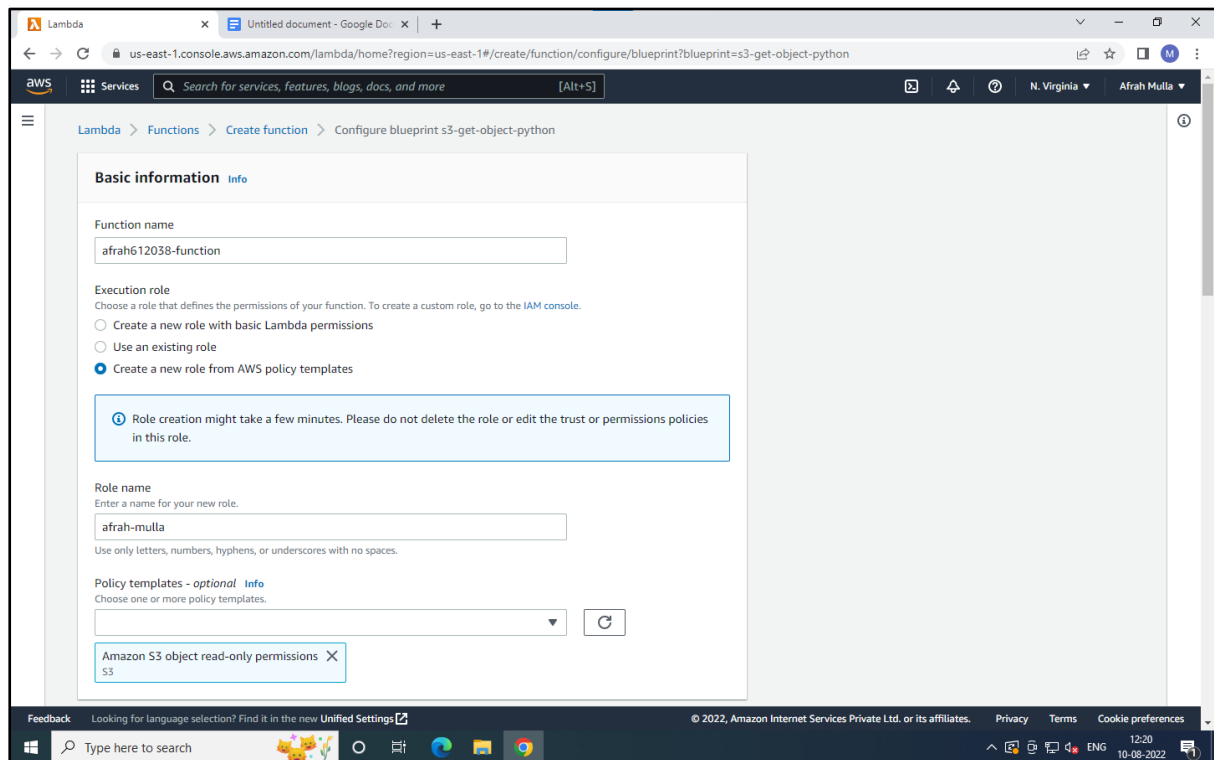## Step 5: Search for Lambda and select it

Step 6: Click on Create Function

Step 7: Choose "Use a blueprint" -> Search s3 in "Blueprints" -> Select "s3-get-object-python"

Step 8: Name the Function & Role -> Select your S3 bucket as trigger -> Click on Create Function

Lambda ✕ | Untitled document - Google Doc ✕ | +

us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/create/function/configure/blueprint?blueprint=s3-get-object-python

aws ⠿ Services Q Search for services, features, blogs, docs, and more [Alt+S] N. Virginia ▾ Afrah Mulla ▾

S3 trigger

Remove

S3
aws   storage

Bucket
Please select the S3 bucket that serves as the event source. The bucket must be in the same region as the function.

🔍 s3/afrah612038   ✕   ⟳

Event type
Select the events that you want to have trigger the Lambda function. You can optionally set up a prefix or suffix for an event. However, for each bucket, individual events cannot have multiple configurations with overlapping prefixes or suffixes that could match the same object key.

All object create events ▼

Prefix - optional
Enter a single optional prefix to limit the notifications to objects with keys that start with matching characters.

e.g. images/

Suffix - optional
Enter a single optional suffix to limit the notifications to objects with keys that end with matching characters.

e.g. .jpg

Recursive invocation
If your function writes objects to an S3 bucket, ensure that you are using different S3 buckets for input and output. Writing to the same bucket increases the risk of creating a recursive invocation, which can result in increased Lambda usage and increased costs. Learn more

☑ I acknowledge that using the same S3 bucket for both input and output is not recommended and that this configuration can cause recursive invocations, increased Lambda usage, and increased costs.

Lambda ✕ | Untitled document - Google Doc ✕ | +

us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/create/function/configure/blueprint?blueprint=s3-get-object-python

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Code is preconfigured by the chosen blueprint. You can configure it after you create the function. Learn more about deploying Lambda functions.

Runtime   **Architecture**
Python 3.7   x86_64

```python
1  import json
2  import urllib.parse
3  import boto3
4
5  print('Loading function')
6
7  s3 = boto3.client('s3')
8
9
10  def lambda_handler(event, context):
11      #print("Received event: " + json.dumps(event, indent=2))
12
13      # Get the object from the event and show its content type
14      bucket = event['Records'][0]['s3']['bucket']['name']
15      key = urllib.parse.unquote_plus(event['Records'][0]['s3']['object']['key'], encoding='ut
16      try:
17          response = s3.get_object(Bucket=bucket, Key=key)
18          print("CONTENT TYPE: " + response['ContentType'])
19          return response['ContentType']
20      except Exception as e:
21          print(e)
22          print('Error getting object {} from bucket {}. Make sure they exist and your bucket
23          raise e
24
```

Cancel   **Create function**
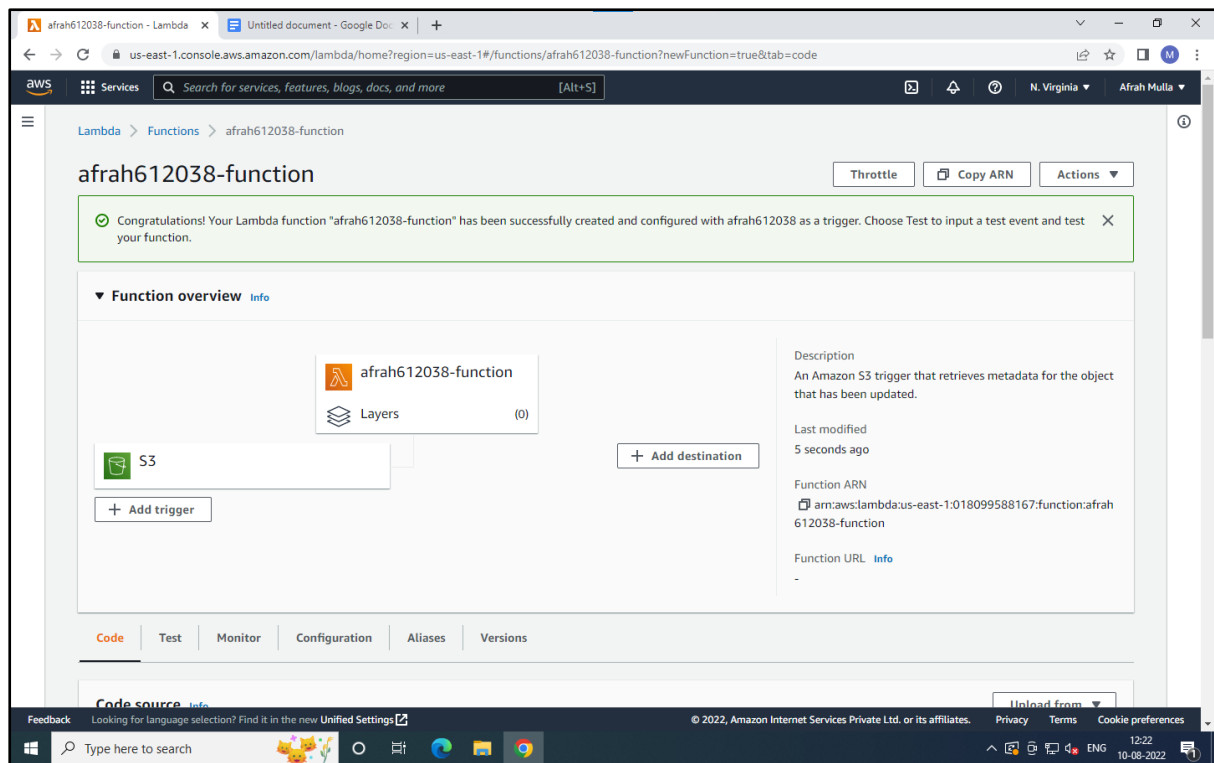
Step 9: Click on your function -> Go to code -> Add a print statement in code -> Save the code and deploy it
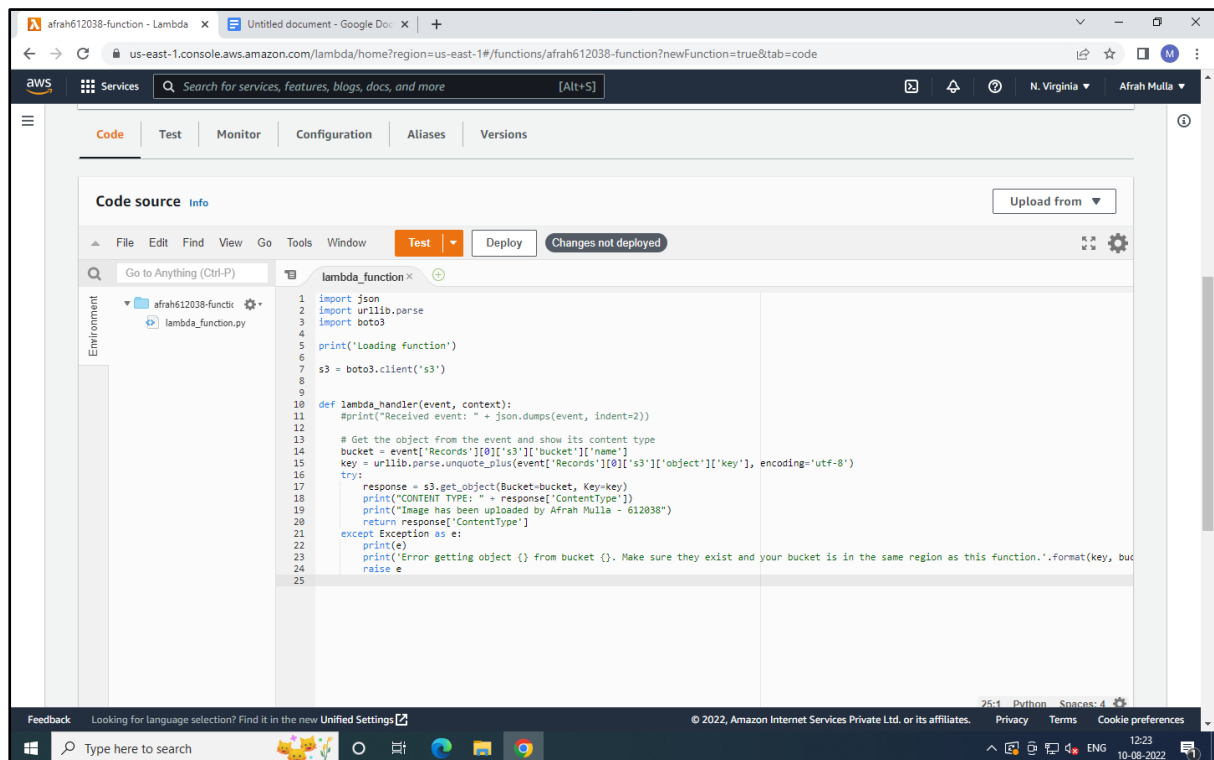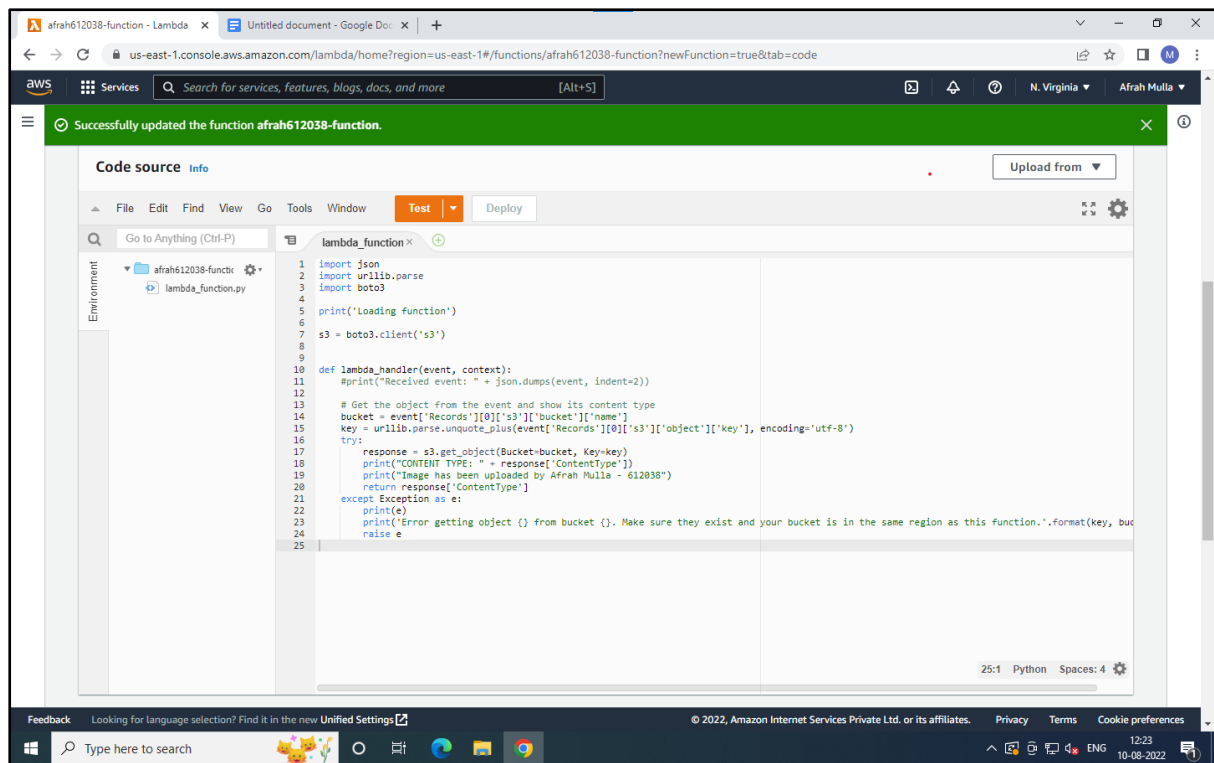
Step 10: Go to your bucket -> Upload an image as object in your bucket -> Click on upload
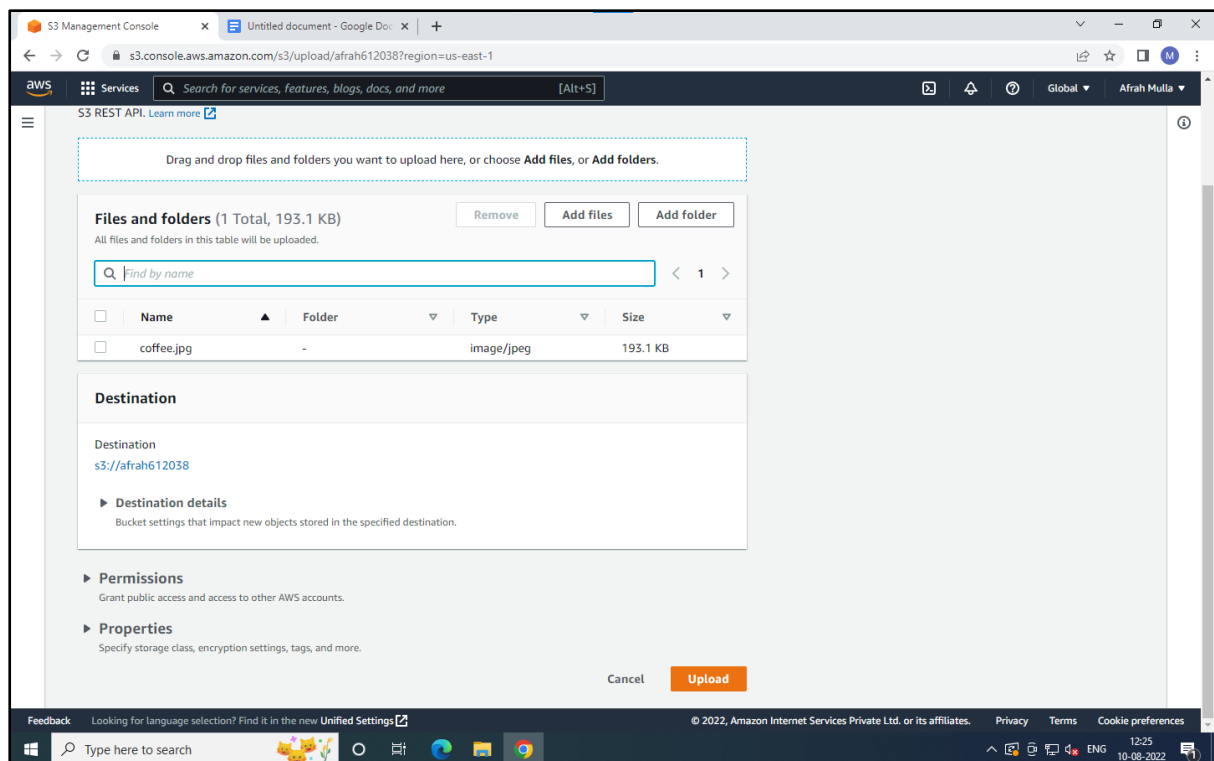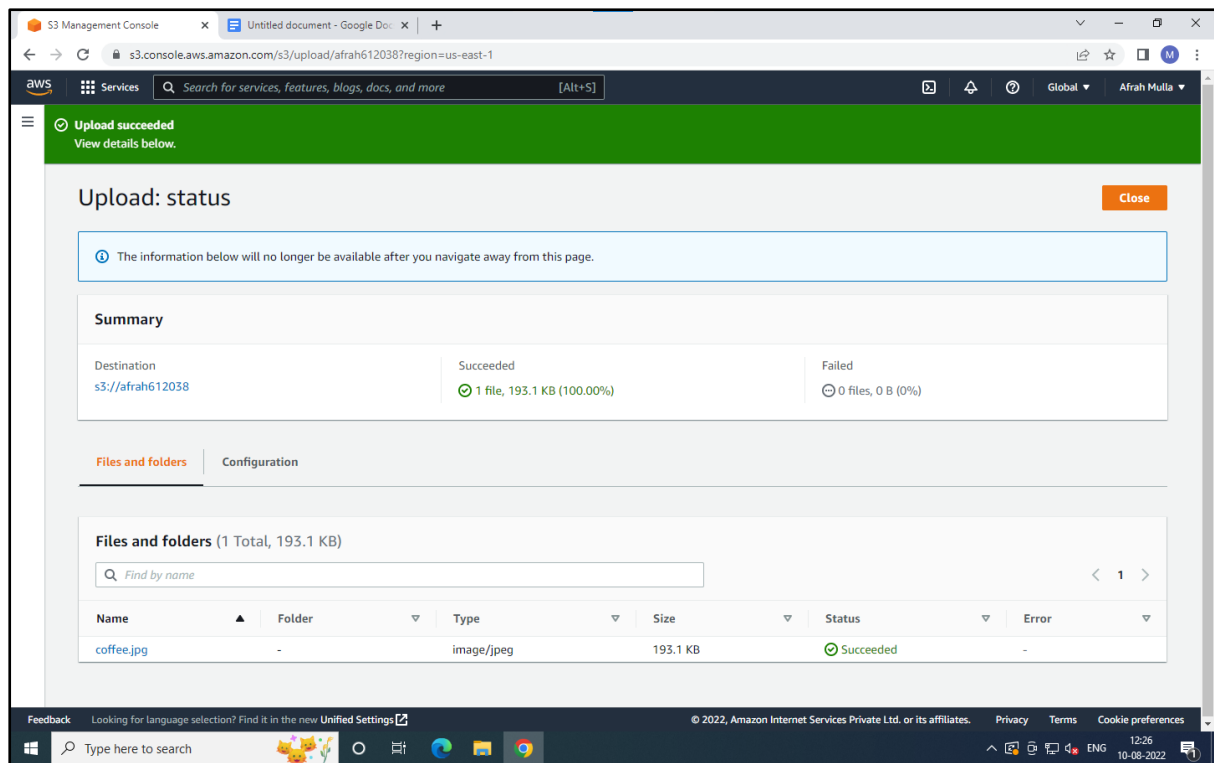
Step 11: Click on your lambda function -> Monitor -> View logs in CloudWatch
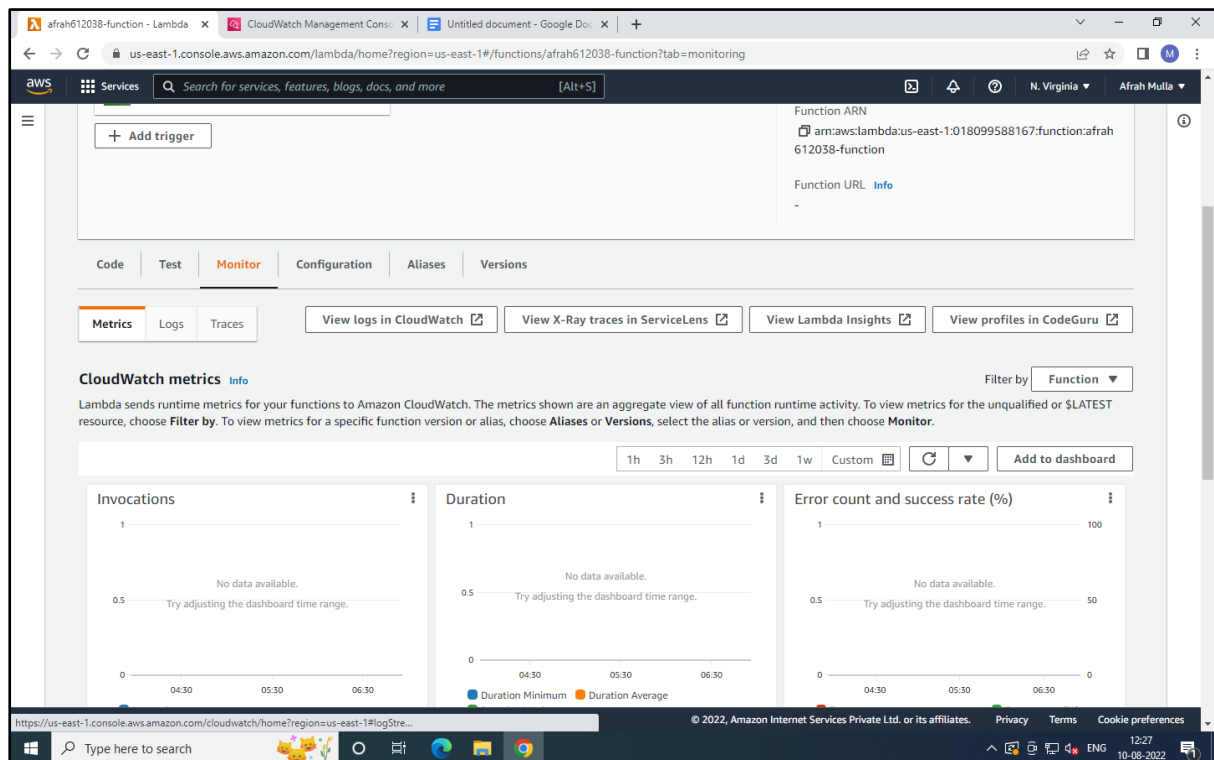
Step 12: Click the blue link in Log stream -> Check the message "Image has been uploaded by Afrah Mulla - 612038"

Step 13: Delete your lambda function

Step 14: Empty your bucket & delete the bucket

Screenshot 1 — AWS S3 Delete bucket page

Browser tabs: afrah612038 - S3 bucket | CloudWatch Management Console | Untitled document - Google Doc | +

URL: s3.console.aws.amazon.com/s3/bucket/afrah612038/delete?region=us-east-1

Services | Search for services, features, blogs, docs, and more [Alt+S] | Global ▼ | Afrah Mulla ▼

Amazon S3 > Buckets > afrah612038 > Delete bucket

Delete bucket Info

⚠ • Deleting a bucket cannot be undone.
• Bucket names are unique. If you delete a bucket, another AWS user can use the name.

Learn more ↗

Delete bucket "afrah612038"?

To confirm deletion, enter the name of the bucket in the text input field.

afrah612038

Cancel | **Delete bucket**

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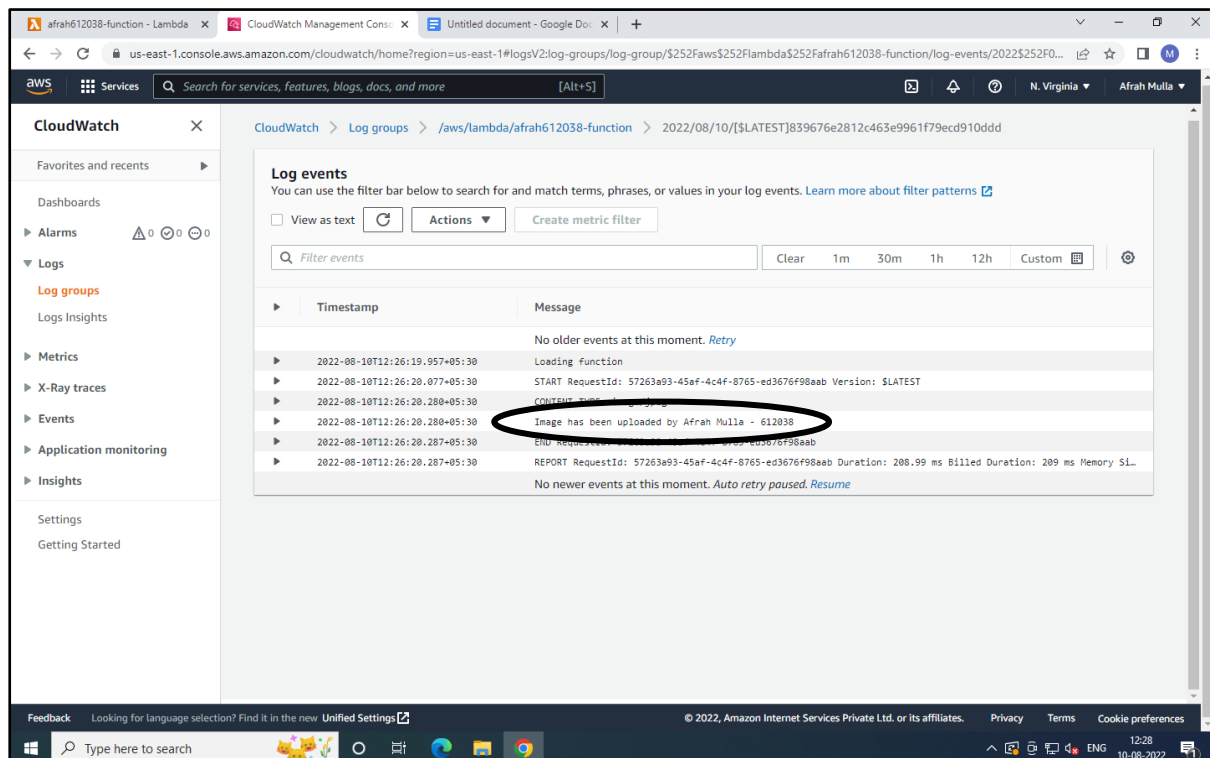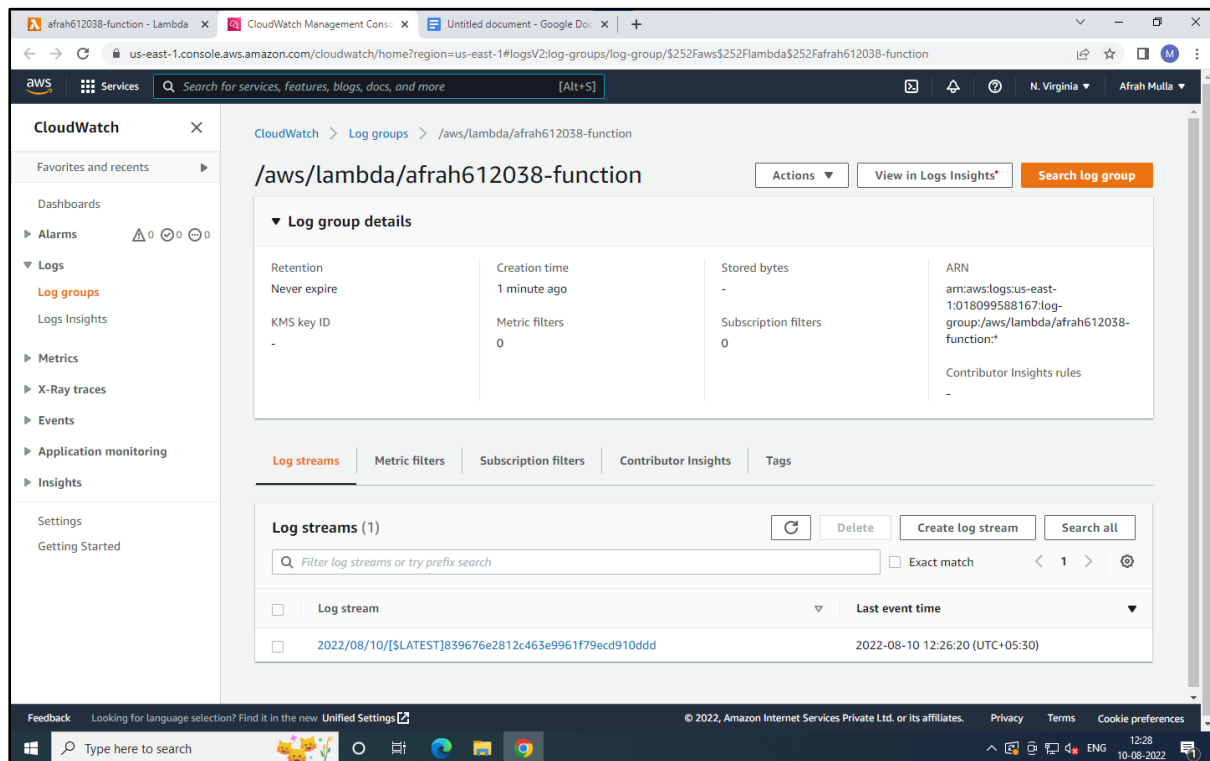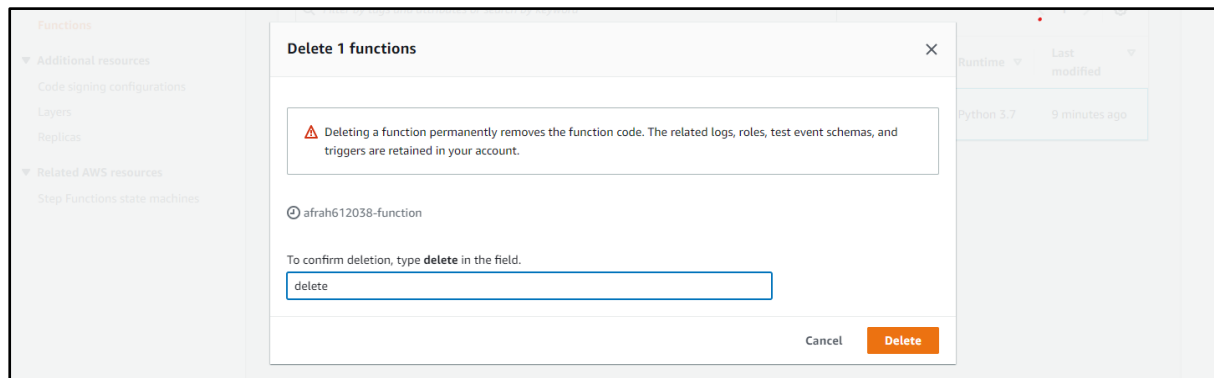
Type here to search 12:36 10-08-2022

Screenshot 2 — AWS S3 Get started page

Browser tabs: S3 Management Console | CloudWatch Management Console | Untitled document - Google Doc | +

URL: s3.console.aws.amazon.com/s3/get-started?region=us-east-1

Services | Search for services, features, blogs, docs, and more [Alt+S] | Global ▼ | Afrah Mulla ▼

✓ Successfully deleted bucket "afrah612038" ✕

Storage

Amazon S3
Store and retrieve any amount of data from anywhere

Amazon S3 is an object storage service that offers industry-leading scalability, data availability, security, and performance.

Create a bucket

Every object in S3 is stored in a bucket. To upload files and folders to S3, you'll need to create a bucket where the objects will be stored.

Create bucket

Pricing

With S3, there are no minimum fees. You only pay for what you use. Prices are based on the location of your S3 bucket.

Estimate your monthly bill using the AWS Simple Monthly Calculator ↗

View pricing details ↗

Resources ↗

How it works

Introduction to Amazon S3
Copy link

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