

- Create a lambda function with permission role as LabRole and python 3.12 as lambda function language
- In general configuration of created lambda function increase the size of memory and emperheral storage

[Lambda](#) > [Functions](#) > [extraction](#) > Edit basic settings

Edit basic settings

Basic settings [Info](#)

Description - optional

Memory [Info](#)
Your function is allocated CPU proportional to the memory configured.

10000 MB

Set memory to between 128 MB and 10240 MB

Ephemeral storage [Info](#)
You can configure up to 10 GB of ephemeral storage (/tmp) for your function. [View pricing](#)

10000 MB

Set ephemeral storage (/tmp) to between 512 MB and 10240 MB.

SnapStart [Info](#)
Reduce startup time by having Lambda cache a snapshot of your function after the function has initialized. To evaluate whether your function code is resilient to snapshot operations, review the [SnapStart compatibility considerations](#).

- Add a layer in lambda function to support the Pandas library

Add layer

Function runtime settings

Runtime Python 3.12	Architecture x86_64
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Choose a layer

Layer source [Info](#)
Choose from layers with a compatible runtime and instruction set architecture or specify the Amazon Resource Name (ARN) of a layer version. You can also [create a new layer](#).

☒ **AWS layers**
Choose a layer from a list of layers provided by AWS.

☐ **Custom layers**
Choose a layer from a list of layers created by your AWS account or organization.

☐ **Specify an ARN**
Specify a layer by providing the ARN.

AWS layers
Layers provided by AWS that are compatible with your function's runtime.

AWSSDKPandas-Python312

Version
4


Cancel Add

- Create S3 bucket with two folder excelFile and zipFile to upload excel file for header and zip file to extract rff file and perform transformation
- Now add trigger in lambda function

Lambda > Add trigger

Add trigger

Trigger configuration Info

 **S3**

aws asynchronous storage

Bucket
Choose or enter the ARN of an S3 bucket that serves as the event source. The bucket must be in the same region as the function.

Bucket region: us-east-1

Event types
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.

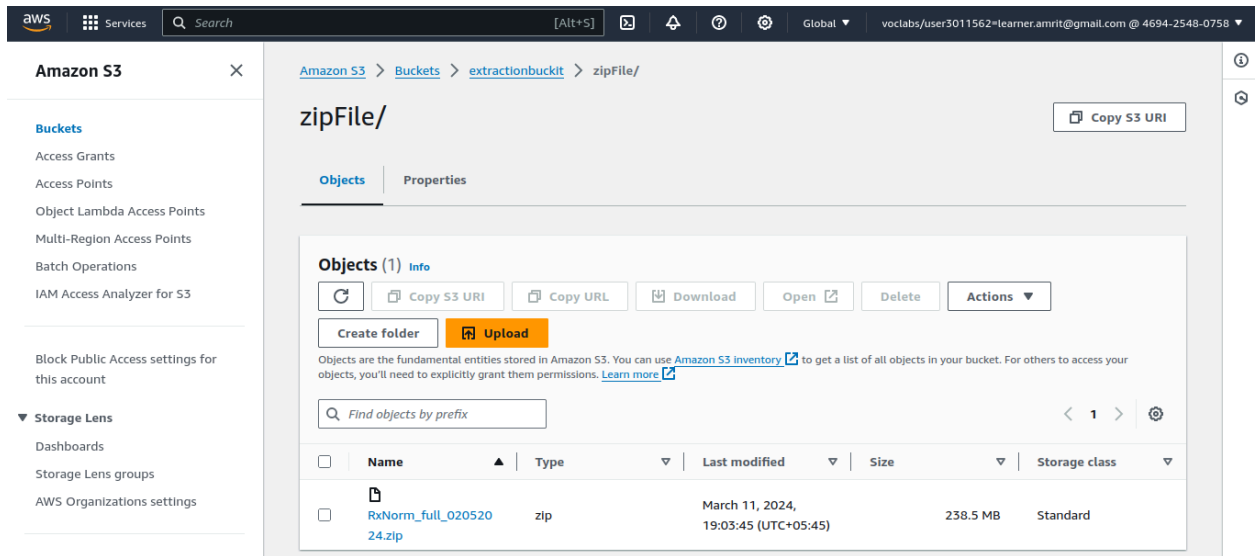
Suffix - optional
Enter a single optional suffix to limit the notifications to objects with keys that end with matching characters.

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.

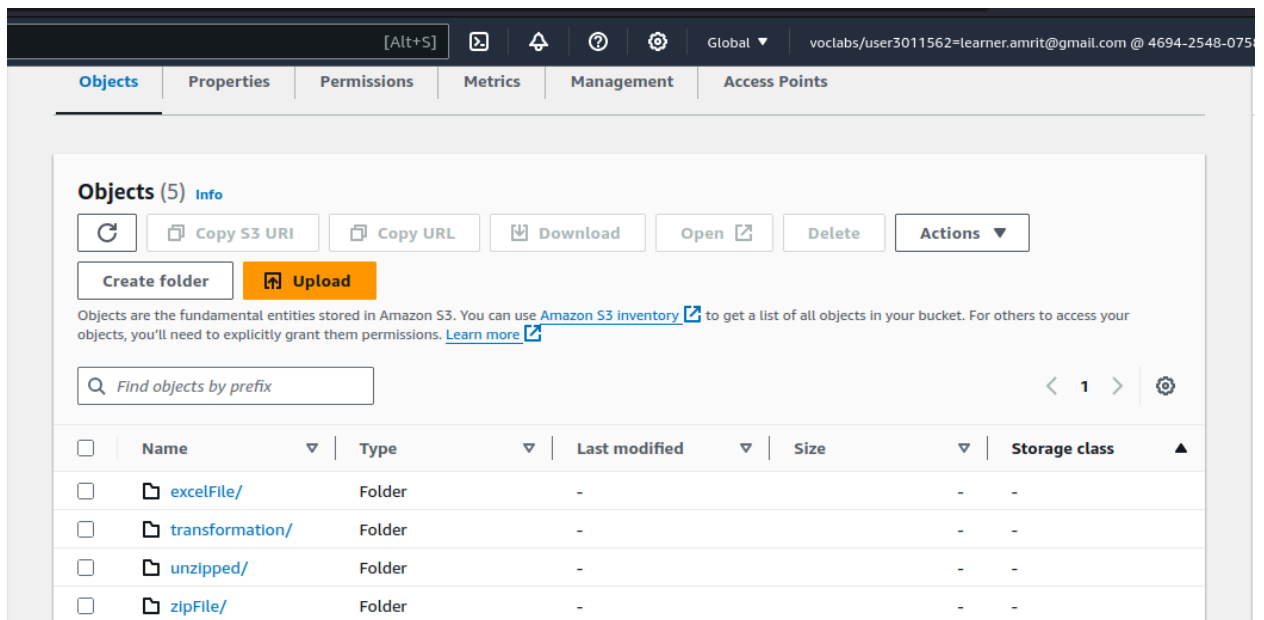
Lambda will add the necessary permissions for AWS S3 to invoke your Lambda function from this trigger. [Learn more](#) about the Lambda permissions model.

Set prefix to zipFile/ for input trigger and .zip as zip file to trigger the lambda function for trigger.

- Upload excel file inside excelFile and zip file inside zipFile folder of S3 bucket



- Lambda function is then triggered and extracted files are in the unzipped folder and transformed files are in the transformation folder.



- Transformed files

<input checked="" type="checkbox"/>	Name	Type	Last modified	Size	Storage class
<input checked="" type="checkbox"/>	RXNATOMARCHIVE.txt	txt	March 11, 2024, 19:16:27 (UTC+05:45)	69.5 MB	Standard
<input checked="" type="checkbox"/>	RXNCONSO.txt	txt	March 11, 2024, 19:16:43 (UTC+05:45)	138.1 MB	Standard
<input checked="" type="checkbox"/>	RXNCUI.txt	txt	March 11, 2024, 19:16:46 (UTC+05:45)	2.1 MB	Standard
<input checked="" type="checkbox"/>	RXNCUICHANGES.txt	txt	March 11, 2024, 19:16:45 (UTC+05:45)	17.8 KB	Standard
<input checked="" type="checkbox"/>	RXNDOC.txt	txt	March 11, 2024, 19:16:46 (UTC+05:45)	271.6 KB	Standard
<input checked="" type="checkbox"/>	RXNREL.txt	txt	March 11, 2024, 19:18:04 (UTC+05:45)	645.2 MB	Standard
<input checked="" type="checkbox"/>	RXNSAB.txt	txt	March 11, 2024, 19:18:18 (UTC+05:45)	10.3 KB	Standard
<input checked="" type="checkbox"/>	RXNSAT.txt	txt	March 11, 2024, 19:19:21 (UTC+05:45)	621.9 MB	Standard
<input checked="" type="checkbox"/>	RXNSTY.txt	txt	March 11, 2024, 19:19:36 (UTC+05:45)	26.0 MB	Standard

- CloudWatch service can be used to view the log of the lambda function for various purposes like debugging and understanding the program flow

<input checked="" type="checkbox"/>	Log stream	Last event time
<input checked="" type="checkbox"/>	2024/03/11/[\$LATEST]jaabde0133e9748ffa4ed46875e27923	2024-03-11 19:14:02 (UTC+05:45)
<input type="checkbox"/>	2024/03/11/[\$LATEST]e09037ec5fb6425b86514cceffa001fc	2024-03-11 18:53:46 (UTC+05:45)
<input type="checkbox"/>	2024/03/11/[\$LATEST]2c70bce1c1a94c518bb8c95b972f5481	2024-03-11 18:53:03 (UTC+05:45)
<input type="checkbox"/>	2024/03/11/[\$LATEST]2f1ca08bd9be46e4ae581324f190b76a	2024-03-11 15:38:45 (UTC+05:45)
<input type="checkbox"/>	2024/03/11/[\$LATEST]1d723ee8cee54bda9790a91ef6fae918	2024-03-11 15:27:35 (UTC+05:45)

- Download logs as CSV from Actions menu

CloudWatch

Favorites and recents

Dashboards

▼ Alarms 0 0 0 0

In alarm

All alarms

Billing

▼ Logs

Log groups

Log Anomalies

Live Tail

Logs Insights

► Metrics

► X-Ray traces

CloudWatch > Log groups > /aws/lambda/extraction > 2024/03/11/[\$LATEST]aabde0133e9748ffaa4ed46875e27923

Log events

You can use the filter bar below to search for and match terms, phrases, or values in your log events.

1m

Actions

Start tailing

Create metric filter

View in Logs Insights

Create log event

Export displayed results

Copy search results (ASCII)

Copy search results (CSV)

Download search results (CSV)

Timestamp

Message

There are older events to load. [Load more](#)

▶ 2024-03-11T19:16:27.476+05:45	The RXNCONSO.RRF is read from zip file.
▶ 2024-03-11T19:16:31.328+05:45	/var/task/lambda_function.py:200: DtypeWarning: Columns (9) have mixed types. Specify dtype o...
▶ 2024-03-11T19:16:31.328+05:45	rrf_df = pd.read_csv(file_content_io, delimiter=' ', header=None)
▶ 2024-03-11T19:16:32.115+05:45	Row count before transformation: 1133065
▶ 2024-03-11T19:16:32.116+05:45	Version month: 2024-02-05
▶ 2024-03-11T19:16:32.129+05:45	Row count of RXNCONSO after transformation: 1133065
▶ 2024-03-11T19:16:32.133+05:45	RXCUI LAT TS LUI STT SUI ISPREF RXAUI SAUI SCUI SDUI \

