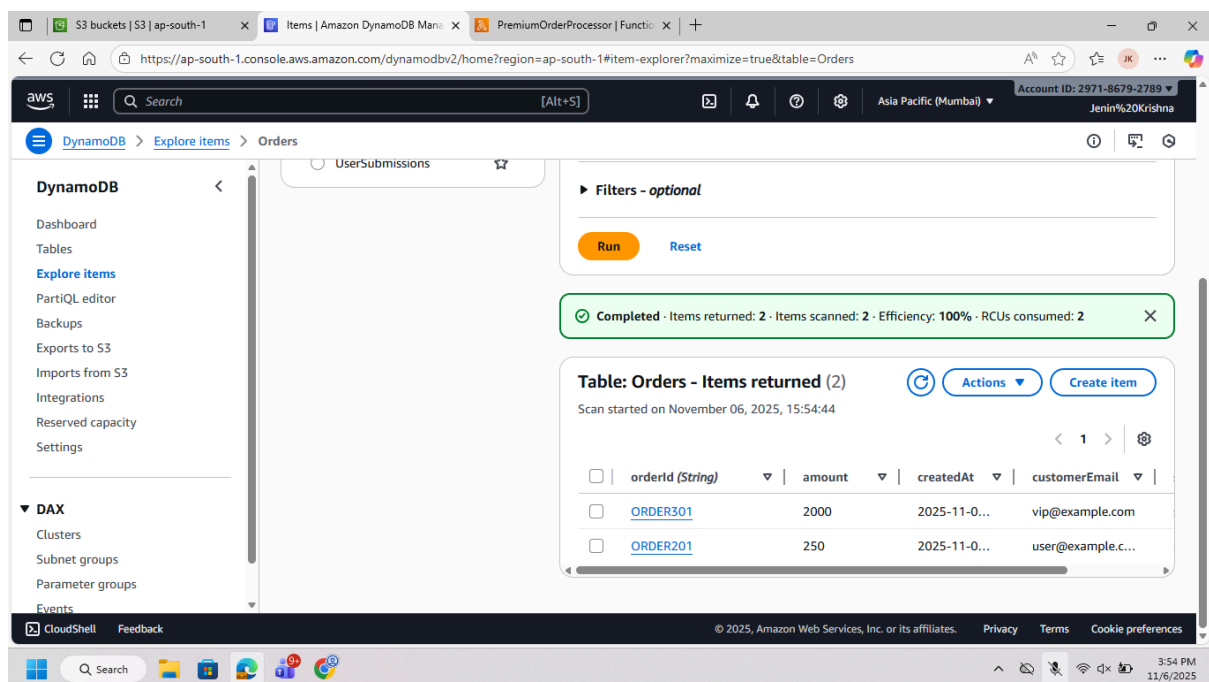
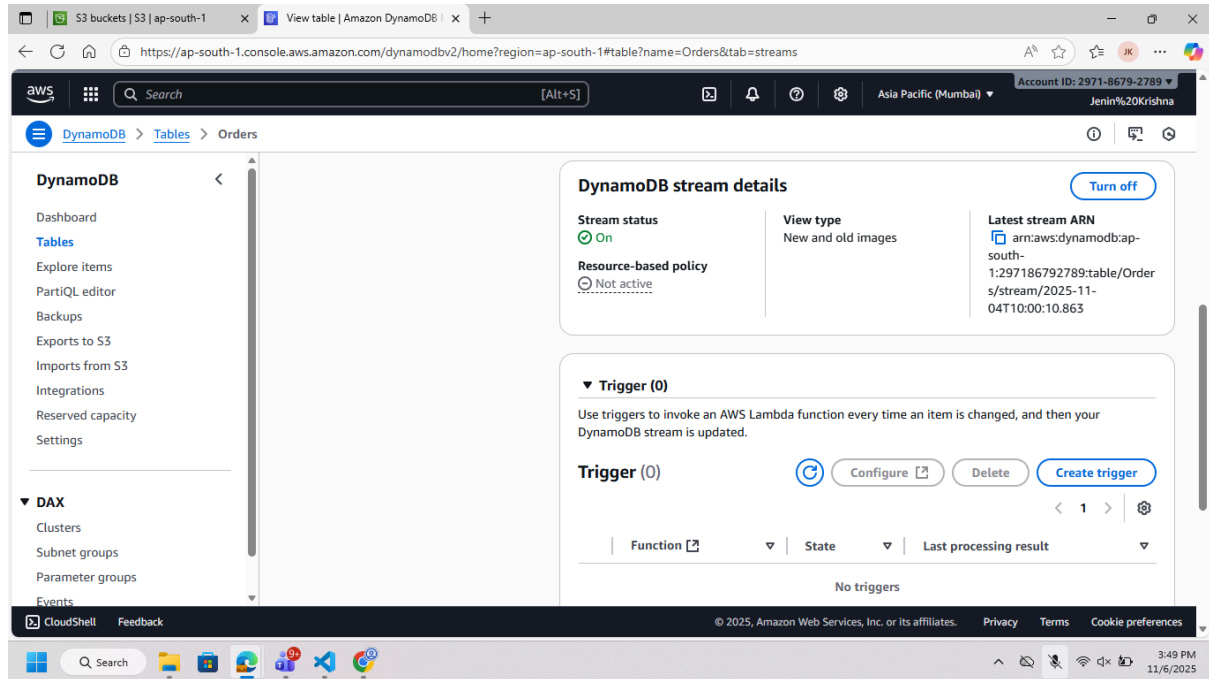


Task - 2

Name: Jenin Krishna K P

Location: Chennai

Real-time data processing pipeline for an e-commerce application :



StandardOrderProcessor | Function

https://ap-south-1.console.aws.amazon.com/lambda/home?region=ap-south-1#/functions/StandardOrderProcessor?tab=code

Account ID: 2971-8679-2789 Jenin%20Krishna

Lambda > Functions > StandardOrderProcessor

Code source Info

Open in Visual Studio Code Upload from

EXPLORER

STANDARDORDERPROCESSOR

lambda_function.py

DEPLOY [UNDEPLOYED CHANGES]

You have undeployed changes.

Deploy (Ctrl+Shift+U)

Test (Ctrl+Shift+I)

TEST EVENTS [NONE SELECTED]

Create new test event

```
1 import json
2 def lambda_handler(event, context):
3     # EventBridge Pipes sends a list of records
4     if isinstance(event, list):
5         records = event
6     else:
7         records = [event]
8     for record in records:
9         new_image = record.get('dynamodb', {}).get('NewImage', {})
10
11         order_id = new_image.get('orderId', {}).get('S')
12         status = new_image.get('status', {}).get('S')
13         amount_str = new_image.get('amount', {}).get('N')
14         email = new_image.get('customerEmail', {}).get('S')
15
16     try:
17         amount = float(amount_str)
18     except (TypeError, ValueError):
```

Info Tutorials

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

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4:04 PM 11/6/2025

PremiumOrderProcessor | Function

https://ap-south-1.console.aws.amazon.com/lambda/home?region=ap-south-1#/functions/PremiumOrderProcessor?tab=code

Account ID: 2971-8679-2789 Jenin%20Krishna

Lambda > Functions > PremiumOrderProcessor

Code Test Monitor Configuration Aliases Versions

Code source Info

Open in Visual Studio Code Upload from

EXPLORER

PREMIUMORDERPROCESSOR

lambda_function.py

DEPLOY [UNDEPLOYED CHANGES]

You have undeployed changes.

Deploy (Ctrl+Shift+U)

Test (Ctrl+Shift+I)

TEST EVENTS [NONE SELECTED]

```
1 import json
2 def lambda_handler(event, context):
3     premium_orders = []
4     if isinstance(event, list):
5         records = event
6     else:
7         records = [event]
8     for record in records:
9         dynamodb = record.get('dynamodb', {})
10         new = dynamodb.get('NewImage', {})
11         old = dynamodb.get('OldImage', {})
12
13         order_id = new.get('orderId', {}).get('S')
14         new_status = new.get('status', {}).get('S')
15         old_status = old.get('status', {}).get('S')
```

Info Tutorials

Learn how to implement common use cases in AWS Lambda.

Create a simple web app

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- Invoke your function through its function URL

Learn more

Start tutorial

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S3 buckets | S3 | ap-south-1 | Items | Amazon DynamoDB Man... | Amazon EventBridge | ap-south-1 |

https://ap-south-1.console.aws.amazon.com/events/home?region=ap-south-1#/pipe/OrdersStandardPipe

aws Search [Alt+S] Asia Pacific (Mumbai) Account ID: 2971-8679-2789 Jenin%20Krishna

Amazon EventBridge > Pipes > OrdersStandardPipe

Amazon EventBridge <

- Dashboard
- Developer resources
 - Learn
 - Sandbox
 - Quick starts
- Buses
 - Event buses Updated
 - Rules
 - Global endpoints
 - Archives
 - Replays
- Pipes
 - Pipes
- Scheduler
 - Schedules

OrdersStandardPipe

Refresh Edit Stop Delete CloudFormation Template

Details Info

Name OrdersStandardPipe	Status Running	Created on Nov 4, 2025, 05:29 PM GMT+5:30
Description	Status reason No records processed	Last modified on Nov 4, 2025, 05:29 PM GMT+5:30
ARN arn:aws:pipes:ap-south-1:297186792789:pipe/OrdersStandardPipe		

Pipe Components Info

Source Required → Filtering Optional → Target Required

DynamoDB Stream → Added → Lambda function

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S3 buckets | S3 | ap-south-1 | Items | Amazon DynamoDB Man... | Amazon EventBridge | ap-south-1 |

https://ap-south-1.console.aws.amazon.com/events/home?region=ap-south-1#/pipe/OrdersStandardPipe

aws Search [Alt+S] Asia Pacific (Mumbai) Account ID: 2971-8679-2789 Jenin%20Krishna

Amazon EventBridge > Pipes > OrdersStandardPipe

Amazon EventBridge <

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 - Archives
 - Replays
- Pipes
 - Pipes
- Scheduler
 - Schedules

OrdersStandardPipe

Execution Role
service-role/Amazon_EventBridge_Pipe_OrdersStandardPipe_5f1bc60f

Retry policy and Dead-letter queue (DLQ)

Dead-Letter Queue orders-standard-dlq SQS Queue	Retry Policy Retry attempts: -1 attempts Maximum Age of Event: 59m
SQS Queue ARN arn:aws:sqs:ap-south-1:297186792789:orders-standard-dlq	

CloudWatch logs Info

Log destination CloudWatch logs	CloudWatch log group /aws/vendedlogs/pipes/OrdersStandardPipe
Log level ERROR	ARN arn:aws:logs:ap-south-1:297186792789:log-group:/aws/vendedlogs/pipes/OrdersStandardPipe
Log execution data OFF	

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S3 buckets | S3 | ap-south-1 | Items | Amazon DynamoDB Man... | Amazon EventBridge | ap-south-1 | +

https://ap-south-1.console.aws.amazon.com/events/home?region=ap-south-1#/pipe/OrdersPremiumPipe

aws Search [Alt+S] Asia Pacific (Mumbai) Account ID: 2971-8679-2789 Jenin%20Krishna

Amazon EventBridge > Pipes > OrdersPremiumPipe

Dashboard

Developer resources

- Learn
- Sandbox
- Quick starts

Buses

- Event buses Updated
- Rules
- Global endpoints
- Archives
- Replays

Pipes

- Pipes

Scheduler

- Schedules

OrdersPremiumPipe

Details Info

Name OrdersPremiumPipe	Status Running	Created on Nov 4, 2025, 05:38 PM GMT+5:30
Description	Status reason No records processed	Last modified on Nov 4, 2025, 05:38 PM GMT+5:30
ARN arn:aws:pipes:ap-south-1:297186792789:pipe/OrdersPremiumPipe		

Pipe Components Info

Source Required
DynamoDB Stream

Filtering Optional
Added

Target Required
Lambda function

CloudShell Feedback

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S3 buckets | S3 | ap-south-1 | Items | Amazon DynamoDB Man... | Amazon EventBridge | ap-south-1 | +

https://ap-south-1.console.aws.amazon.com/events/home?region=ap-south-1#/pipe/OrdersPremiumPipe

aws Search [Alt+S] Asia Pacific (Mumbai) Account ID: 2971-8679-2789 Jenin%20Krishna

Amazon EventBridge > Pipes > OrdersPremiumPipe

Dashboard

Developer resources

- Learn
- Sandbox
- Quick starts

Buses

- Event buses Updated
- Rules
- Global endpoints
- Archives
- Replays

Pipes

- Pipes

Scheduler

- Schedules

OrdersPremiumPipe

Execution Role

service-role/Amazon_EventBridge_Pipe_OrdersPremiumPipe_ba6c90f5

Retry policy and Dead-letter queue (DLQ)

Dead-Letter Queue orders-premium-dlq SQS Queue	Retry Policy Retry attempts: -1 attempts Maximum Age of Event: 59m
SQS Queue ARN arn:aws:sqs:ap-south-1:297186792789:orders-premium-dlq	

CloudWatch logs Info

Log destination CloudWatch logs	CloudWatch log group /aws/vendedlogs/pipes/OrdersPremiumPipe
Log level ERROR	ARN arn:aws:logs:ap-south-1:297186792789:log-group:/aws/vendedlogs/pipes/OrdersPremiumPipe
Log execution data OFF	

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S3 buckets | S3 | ap-south-1 | Items | Amazon DynamoDB Man... | Queue details | Simple Queue Ser... | +

https://ap-south-1.console.aws.amazon.com/sqs/v3/home?region=ap-south-1#/queues/https%3A%2F%2Fsqs.ap-south-1.amazonaws.com%2F297186792789...

aws Search [Alt+S] Asia Pacific (Mumbai) Account ID: 2971-8679-2789 Jenin%20Krishna

Amazon SQS > Queues > orders-standard-dlq

orders-standard-dlq

Edit Delete Purge Send and receive messages Start DLQ redrive

Details Info

Name orders-standard-dlq	Type Standard	ARN arn:aws:sqs:ap-south-1:297186792789:orders-standard-dlq
Encryption Amazon SQS key (SSE-SQS)	URL https://sqs.ap-south-1.amazonaws.com/297186792789/orders-standard-dlq	Dead-letter queue -

More

Queue policies Monitoring SNS subscriptions Lambda triggers EventBridge Pipes Dead-letter queue Tagging Encryption

Access policy Info

Define who can access your queue

Edit

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Search 3:56 PM 11/6/2025

S3 buckets | S3 | ap-south-1 | Items | Amazon DynamoDB Man... | Log Groups | CloudWatch | ap-south-1 | +

https://ap-south-1.console.aws.amazon.com/cloudwatch/home?region=ap-south-1#/logsV2/log-groups/log-group/\$252Faws\$252Flambda\$252FStandardOrderProcessor

aws Search [Alt+S] Asia Pacific (Mumbai) Account ID: 2971-8679-2789 Jenin%20Krishna

CloudWatch > Log groups > /aws/lambda/StandardOrderProcessor

CloudWatch

Favorites and recents

Dashboards

AI Operations New

Alarms 0 0 0 0

Logs

Log groups

Log Anomalies

Live Tail

Logs Insights

Contributor Insights

Metrics New

Application Signals (APM) New

Creation time 2 days ago	KMS key ID -	Transformer Configure
Retention Never expire	Anomaly detection Configure	
Stored bytes 1.48 KB		

Log streams Tags Anomaly detection Metric filters Subscription filters Contributor Insights Data

Log streams (2)

By default, we only load the most recent log streams.

Filter log streams or try prefix search

Exact match Show expired Info 1

Log stream	Last event time
2025/11/04/[\$LATEST]256c4d1877d94b5380db3bbaa3e3abc6	2025-11-04 12:24:00 (UTC)
2025/11/04/[\$LATEST]54635694ca4a4b03b3244ccf11a3dbd6	2025-11-04 12:15:36 (UTC)

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Search 3:57 PM 11/6/2025

S3 buckets | S3 | ap-south-1 | Items | Amazon DynamoDB Man... | CloudWatch | ap-south-1 | +

https://ap-south-1.console.aws.amazon.com/cloudwatch/home?region=ap-south-1#logsV2/log-groups/log-group/\$252Faws\$252Flambda\$252FStandardOrde...

aws [Search] [Alt+S] Asia Pacific (Mumbai) Account ID: 2971-8679-2789 Jenin%20Krishna

CloudWatch > Log groups > /aws/lambda/StandardOrderProcessor > 2025/11/04/[LATEST]256c4d1877d94b5380db3bbaa3e3abc6

CloudWatch <

Favorites and recents ▶

Dashboards

▶ AI Operations [New](#)

▶ Alarms [0](#) [0](#) [0](#) [0](#)

▼ Logs

Log groups

Log Anomalies

Live Tail

Logs Insights

Contributor Insights

▶ Metrics [New](#)

▶ Application Signals (APM) [New](#)

Log events

You can use the filter bar below to search for and match terms, phrases, or values in your log events. [Learn more about filter patterns](#)

Filter events - press enter to search 1m 1h UTC timezone

Display

Message

No older events at this moment. [Retry](#)

INIT_START Runtime Version: python:3.12.v89 Runtime Version ARN: arn:aws:lambda:ap-south-1::runtime:644f999c44288c3dd580a0b58d0576fe347ce4d089106e2c52ed35b26e0fb3c

START RequestId: 95e4491e-4306-431b-84e8-f6ff6cfa1576 Version: \$LATEST

Processing order ORDER301 | Status=shipped | Amount=2000.0 | Email=vip@example.com

END RequestId: 95e4491e-4306-431b-84e8-f6ff6cfa1576

REPORT RequestId: 95e4491e-4306-431b-84e8-f6ff6cfa1576 Duration: 1.98 ms Billed Duration: 92 ms Memory Size: 128 MB Max Memory Used: 37 MB

Init Duration: 89.35 ms

No newer events at this moment. Auto retry paused. [Resume](#)

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Search 3:57 PM 11/6/2025

S3 buckets | S3 | ap-south-1 | Items | Amazon DynamoDB Man... | Queue details | Simple Queue Ser... | +

https://ap-south-1.console.aws.amazon.com/sqs/v3/home?region=ap-south-1#/queues/https%3A%2F%2Fsqs.ap-south-1.amazonaws.com%2F297186792789...

aws [Search] [Alt+S] Asia Pacific (Mumbai) Account ID: 2971-8679-2789 Jenin%20Krishna

Amazon SQS > Queues > orders-premium-dlq

orders-premium-dlq Edit Delete Purge Send and receive messages Start DLQ redrive

Details Info

Name orders-premium-dlq	Type Standard	ARN arn:aws:sqs:ap-south-1:297186792789:orders-premium-dlq
Encryption Amazon SQS key (SSE-SQS)	URL https://sqs.ap-south-1.amazonaws.com/297186792789/orders-premium-dlq	Dead-letter queue -

▶ More

< Queue policies Monitoring SNS subscriptions Lambda triggers EventBridge Pipes Dead-letter queue Tagging Encryption >

Access policy Info Edit

Define who can access your queue

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Search 3:56 PM 11/6/2025

S3 buckets | S3 | ap-south-1 | Items | Amazon DynamoDB Man... | CloudWatch | ap-south-1

https://ap-south-1.console.aws.amazon.com/cloudwatch/home?region=ap-south-1#logsV2:log-groups/log-group/\$252Faws\$252Flambda\$252FPremiumOrde...

aws Search [Alt+S] Asia Pacific (Mumbai) Account ID: 2971-8679-2789 Jenin%20Krishna

CloudWatch > Log groups > /aws/lambda/PremiumOrderProcessor

CloudWatch

Favorites and recents

Dashboards

AI Operations New

Alarms 0 0 0 0

Logs

Log groups

Log Anomalies

Live Tail

Logs Insights

Contributor Insights

Metrics New

Application Signals (APM) New

group:/aws/lambda/PremiumOrderProcessor:

Creation time
2 days ago

Retention
Never expire

Stored bytes
539 bytes

Contributor insights rules

KMS key ID

Anomaly detection
Configure

Custom field indexes
Configure

Transformer
Configure

Log streams

Tags

Anomaly detection

Metric filters

Subscription filters

Contributor Insights

Data

Log streams (1)

By default, we only load the most recent log streams.

Filter log streams or try prefix search

Exact match Show expired Info < 1 >

Log stream

Last event time

2025/11/04/[\$LATEST]ec3cba4e38a24a13b70834796ebe35b6

2025-11-04 12:24:01 (UTC)

CloudShell Feedback

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Search

3:58 PM
11/6/2025

S3 buckets | S3 | ap-south-1 | Items | Amazon DynamoDB Man... | CloudWatch | ap-south-1

https://ap-south-1.console.aws.amazon.com/cloudwatch/home?region=ap-south-1#logsV2:log-groups/log-group/\$252Faws\$252Flambda\$252FPremiumOrde...

aws Search [Alt+S] Asia Pacific (Mumbai) Account ID: 2971-8679-2789 Jenin%20Krishna

CloudWatch > Log groups > /aws/lambda/PremiumOrderProcessor > 2025/11/04/[\$LATEST]ec3cba4e38a24a13b70834796ebe35b6

CloudWatch

Favorites and recents

Dashboards

AI Operations New

Alarms 0 0 0 0

Logs

Log groups

Log Anomalies

Live Tail

Logs Insights

Contributor Insights

Metrics New

Application Signals (APM) New

Log events

You can use the filter bar below to search for and match terms, phrases, or values in your log events. [Learn more about filter patterns](#)

Filter events - press enter to search

1m 1h

UTC timezone

Display

Message

No older events at this moment. [Retry](#)

INIT_START Runtime Version: python:3.12.v89 Runtime Version ARN: arn:aws:lambda:ap-south-1::runtime:644f999c44288c3d580a0b58d0576fe347ce4d089106e2c52ed35b626e9fb3c

1::runtime:644f999c44288c3d580a0b58d0576fe347ce4d089106e2c52ed35b626e9fb3c

START RequestId: 4d7023ca-7411-4cb4-8eee-ff96e16af025 Version: \$LATEST

Premium order shipped! Order ID: ORDER301 | Amount=2000.0

END RequestId: 4d7023ca-7411-4cb4-8eee-ff96e16af025

REPORT RequestId: 4d7023ca-7411-4cb4-8eee-ff96e16af025 Duration: 1.97 ms Billed Duration: 95 ms Memory Size: 128 MB Max Memory Used: 36 MB

Init Duration: 92.19 ms

No newer events at this moment. Auto retry paused. [Resume](#)

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Search

3:58 PM
11/6/2025