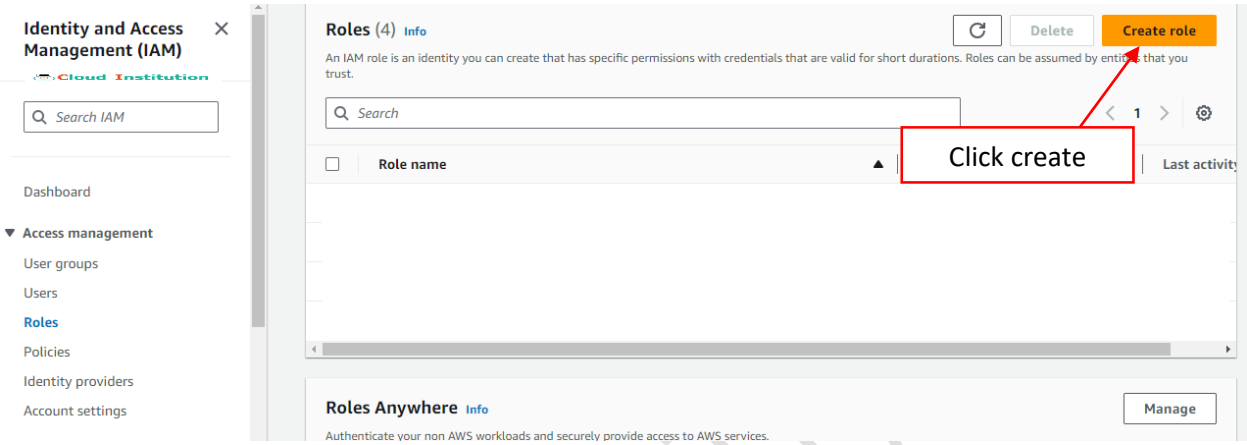
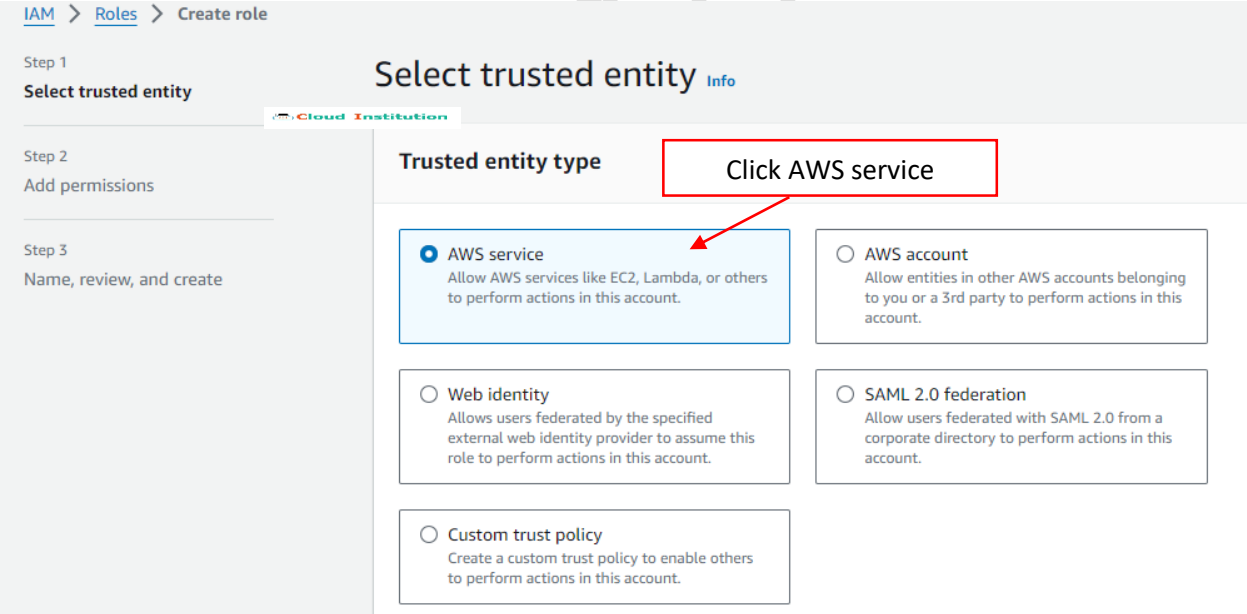
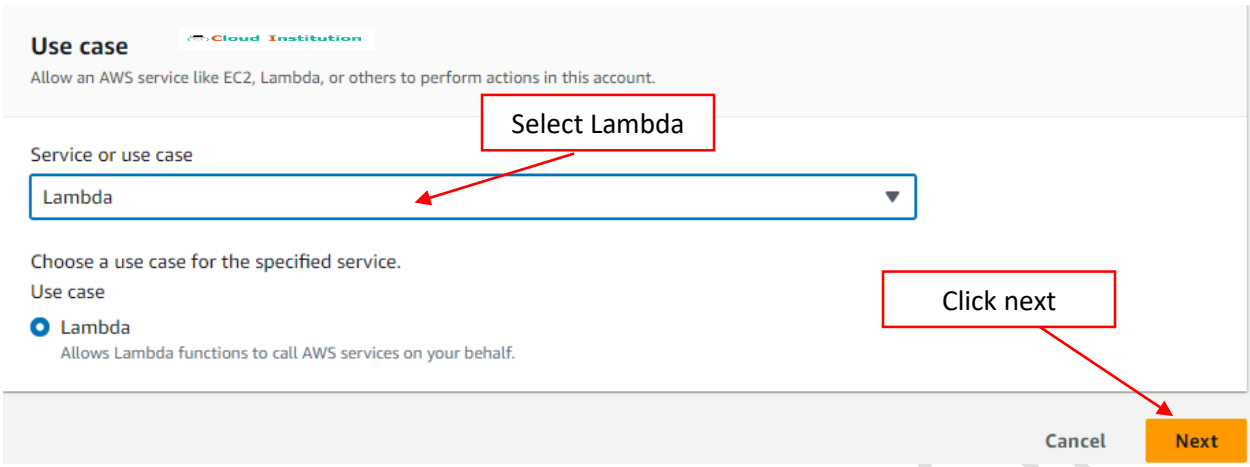
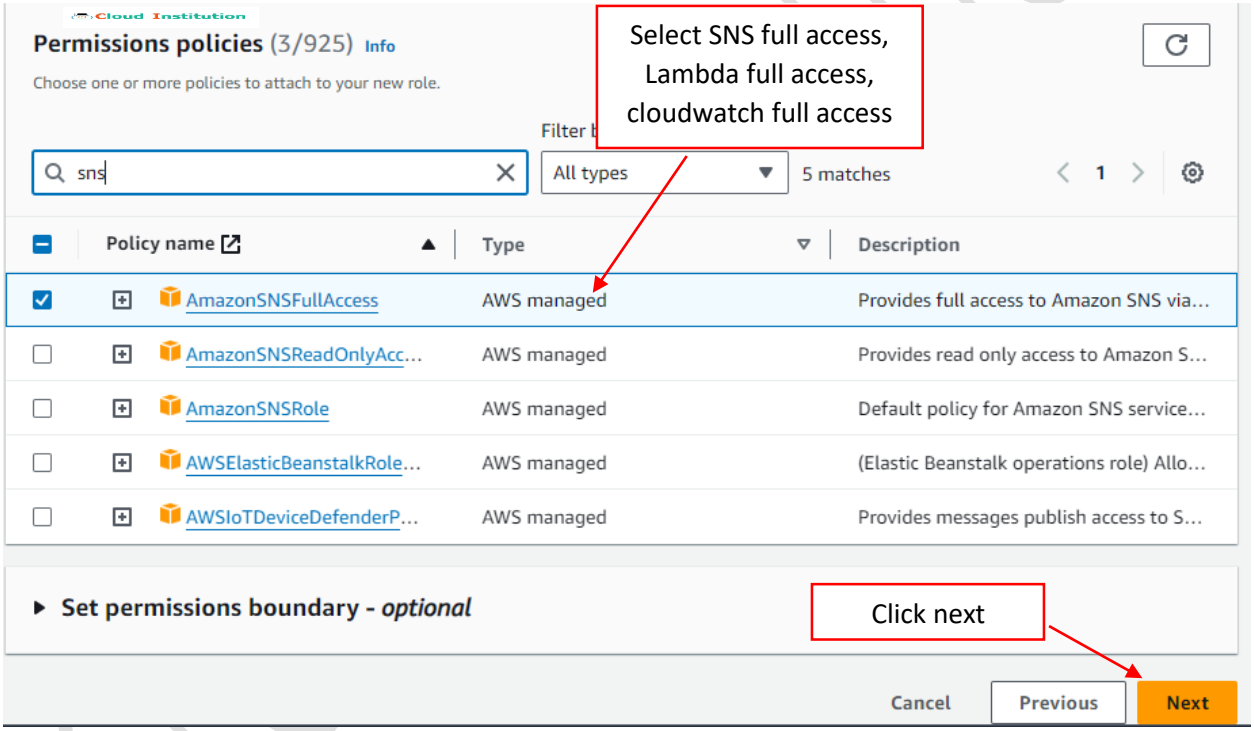
TRIGGERING SNS USING AWS LAMBDA

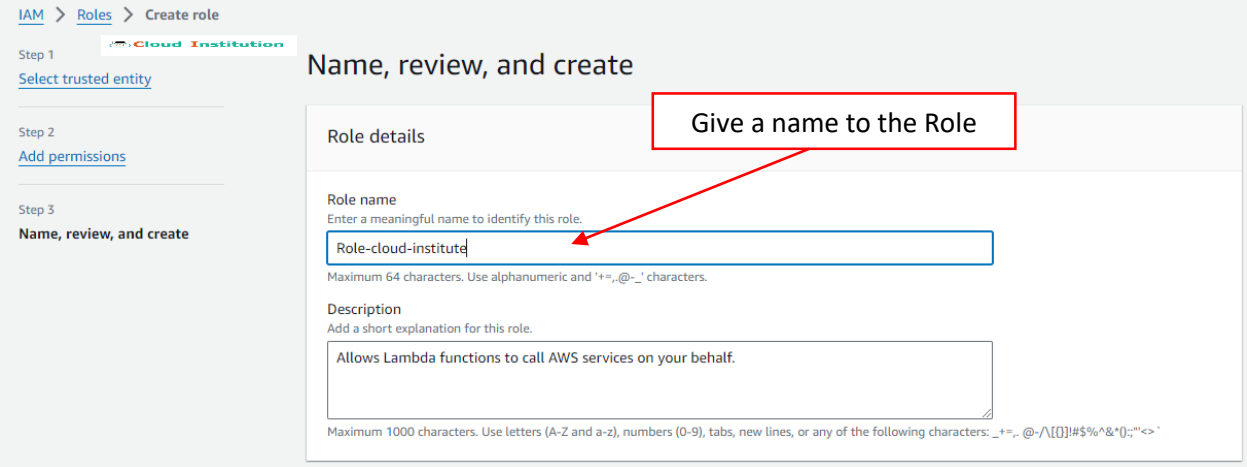
Step 1 : Create a IAM Role

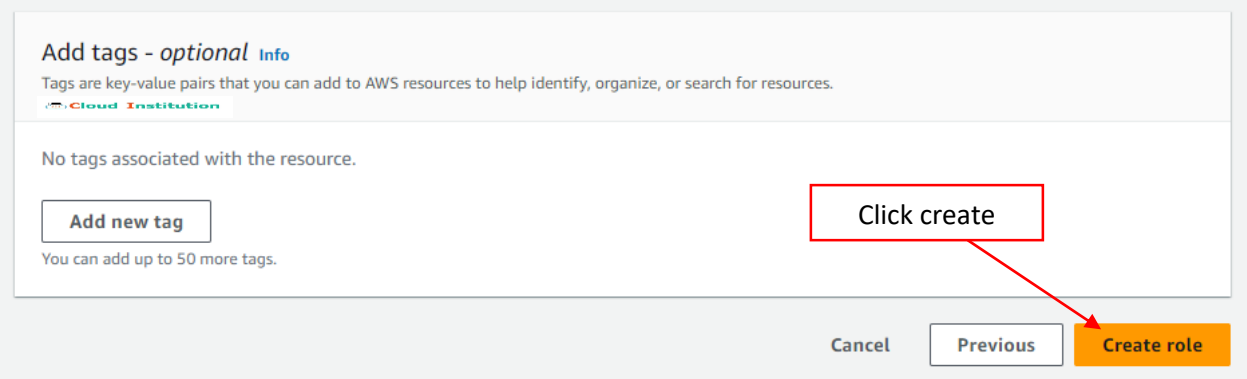




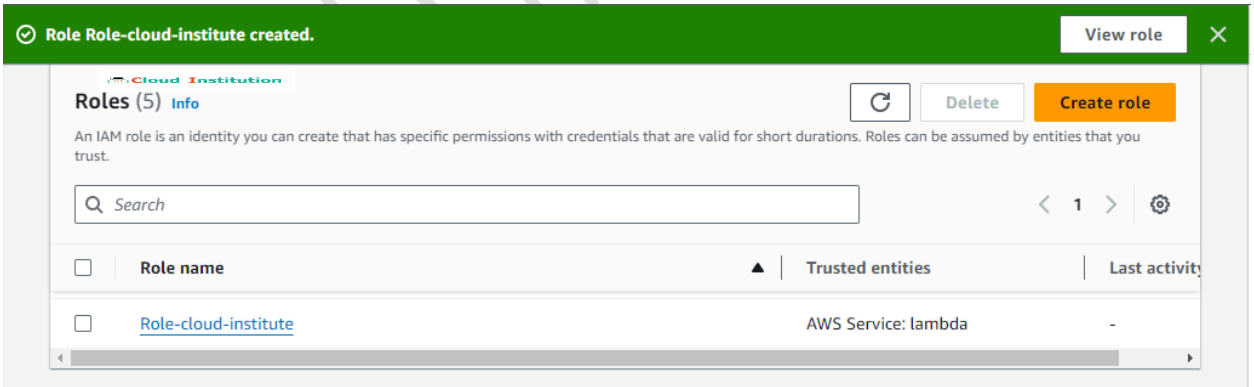

Use case
Allow an AWS service like EC2, Lambda, or others to perform actions in this account.
Select Lambda
Service or use case
Lambda
Choose a use case for the specified service.
Use case
Lambda
Allows Lambda functions to call AWS services on your behalf.
Click next
Cancel
Next


Permissions policies (3/925) Info
Choose one or more policies to attach to your new role.
Select SNS full access, Lambda full access, cloudwatch full access
sns
All types
5 matches
Policy name
Type
Description
AmazonSNSFullAccess
AWS managed
Provides full access to Amazon SNS via...
AmazonSNSReadOnlyAcc...
AWS managed
Provides read only access to Amazon S...
AmazonSNSRole
AWS managed
Default policy for Amazon SNS service...
AWSElasticBeanstalkRole...
AWS managed
(Elastic Beanstalk operations role) Allo...
AWSIoTDeviceDefenderP...
AWS managed
Provides messages publish access to S...
Set permissions boundary - optional
Click next
Cancel
Previous
Next

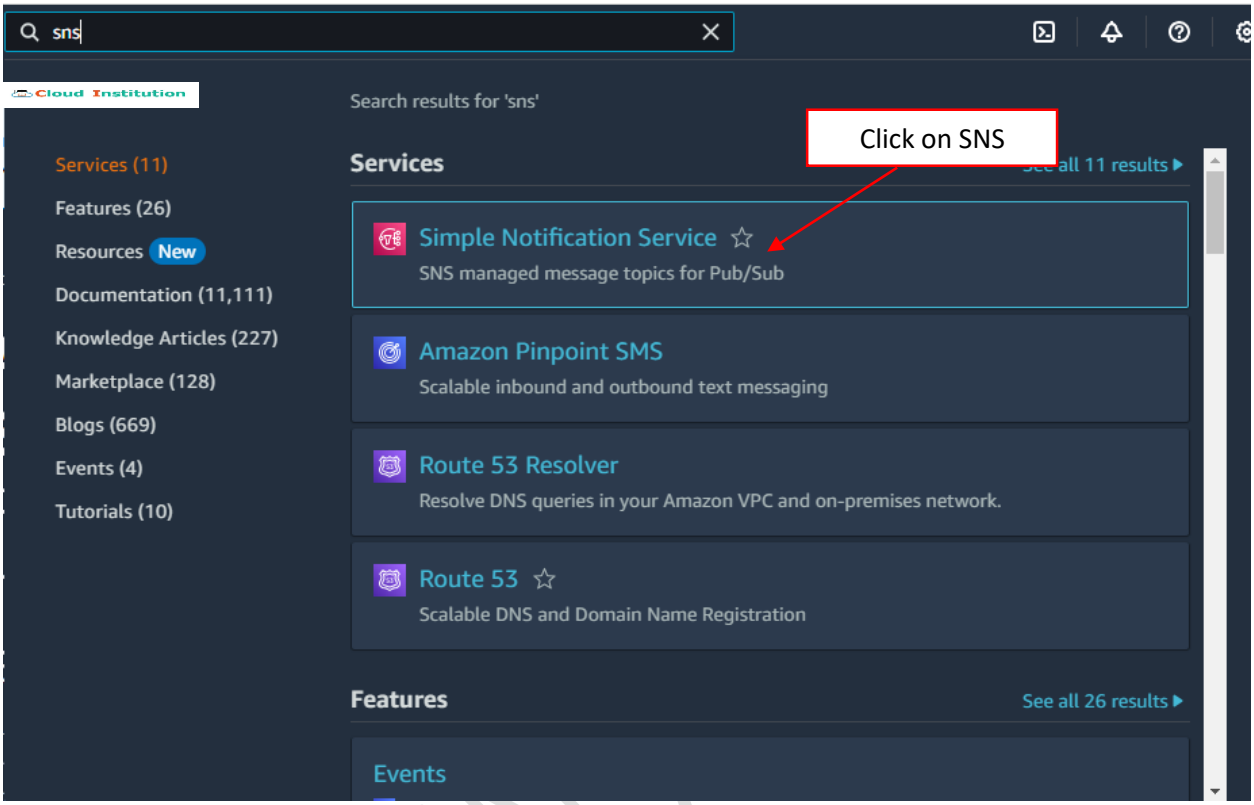


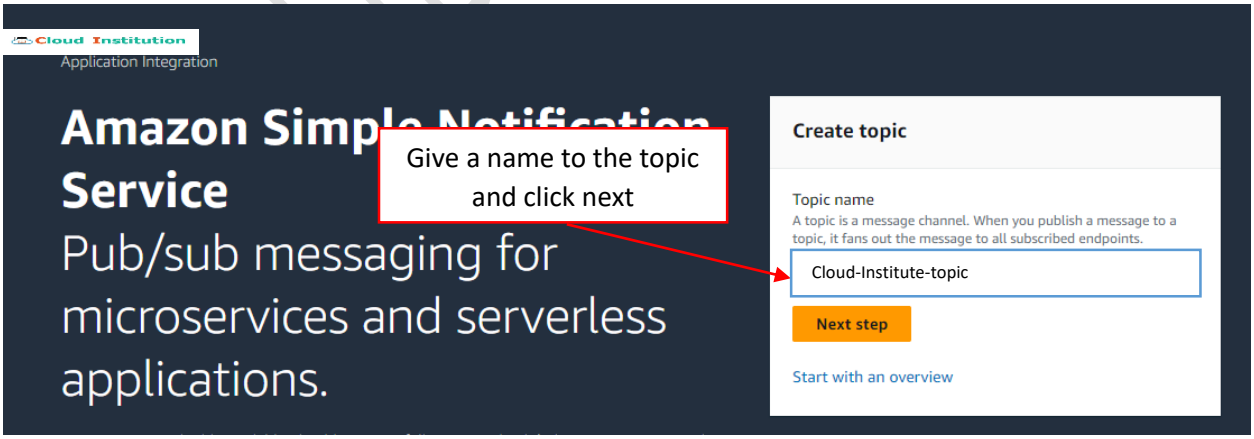


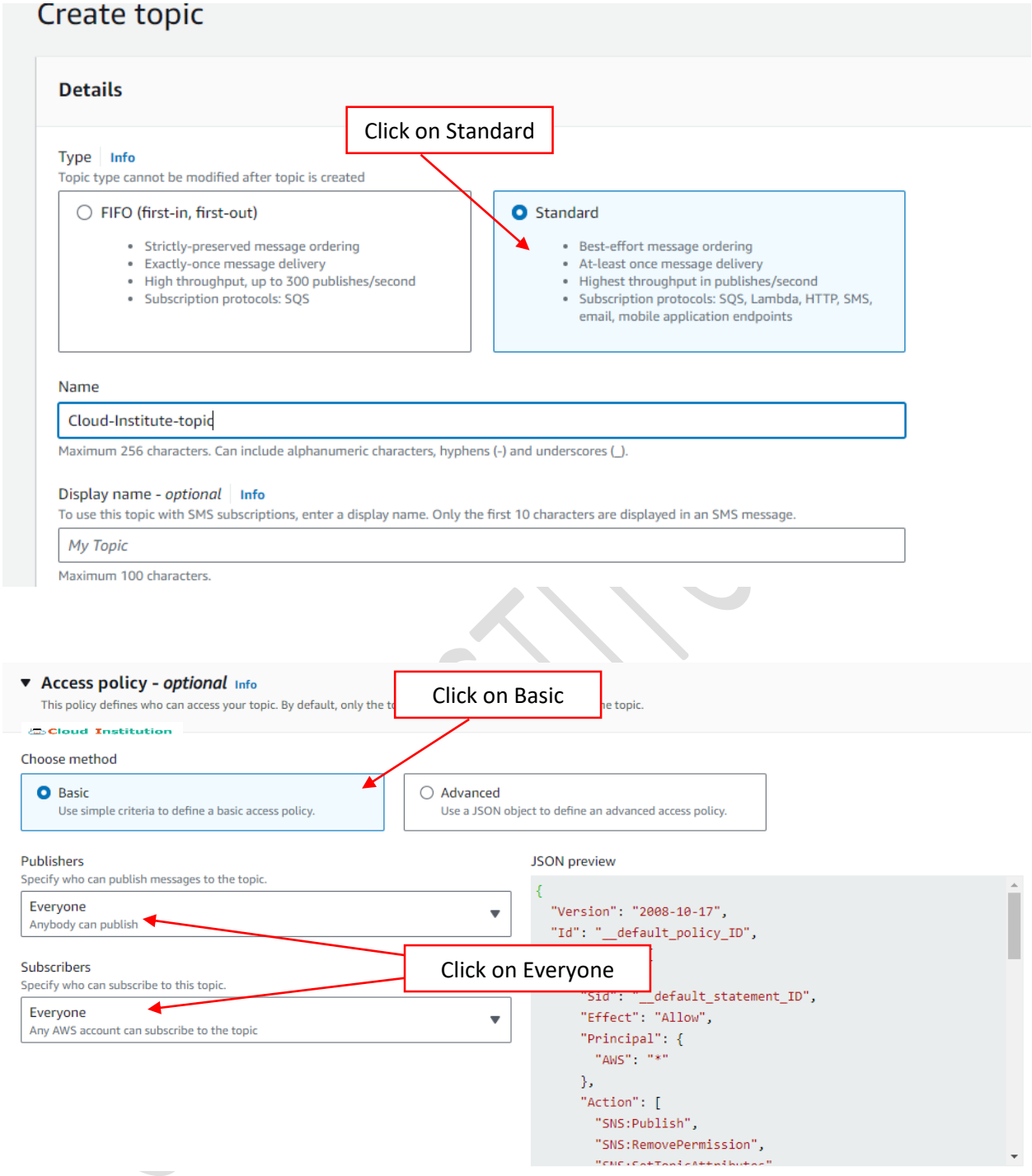
Role Created

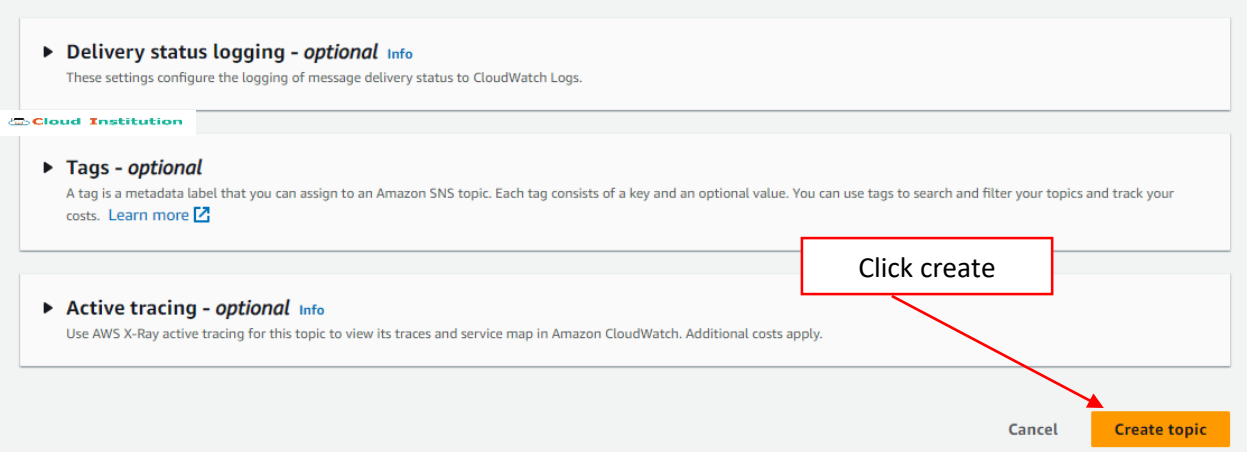


Step 2 : Create a SNS

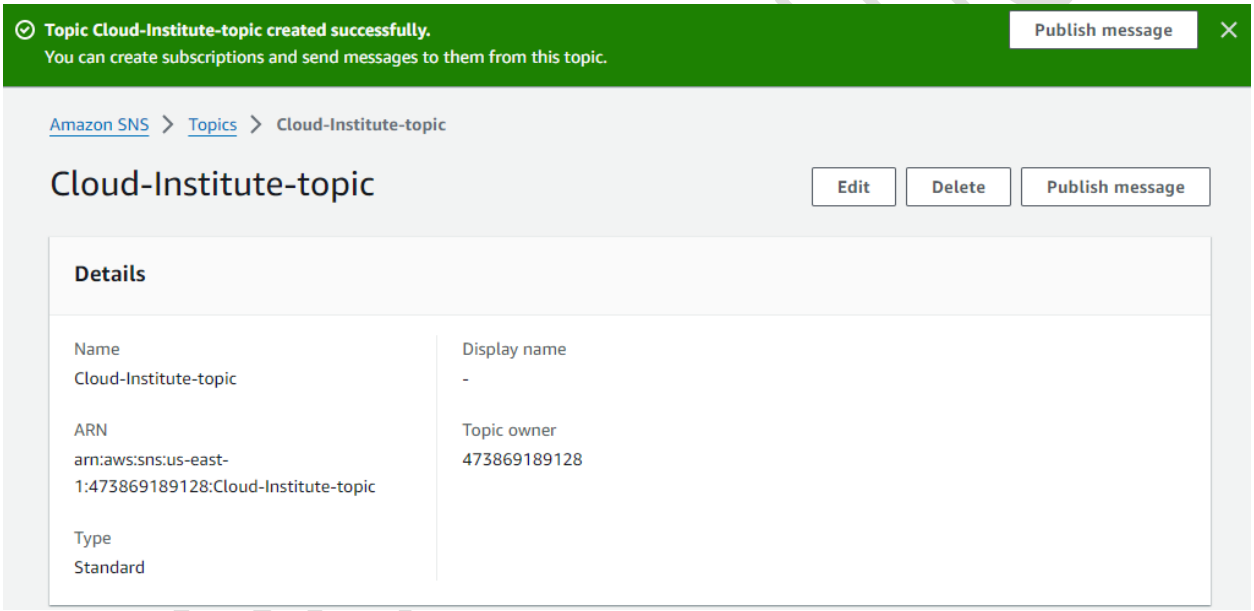




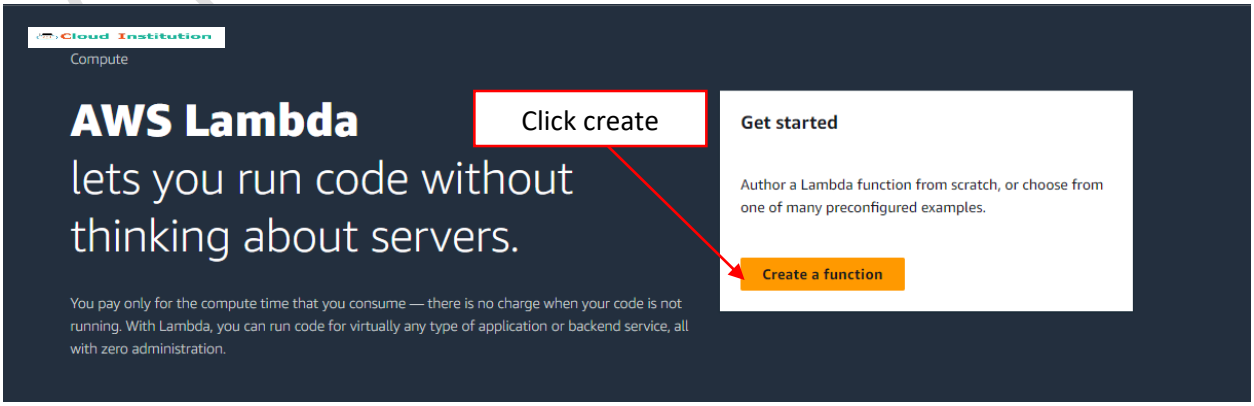

Create topic
Details
Click on Standard
Type Info
Topic type cannot be modified after topic is created
FIFO (first-in, first-out)
Strictly-preserved message ordering
Exactly-once message delivery
High throughput, up to 300 publishes/second
Subscription protocols: SQS
Standard
Best-effort message ordering
At-least once message delivery
Highest throughput in publishes/second
Subscription protocols: SQS, Lambda, HTTP, SMS, email, mobile application endpoints
Name
Cloud-Institute-topic
Maximum 256 characters. Can include alphanumeric characters, hyphens (-) and underscores (_).
Display name - optional Info
To use this topic with SMS subscriptions, enter a display name. Only the first 10 characters are displayed in an SMS message.
My Topic
Maximum 100 characters.
Access policy - optional Info
Click on Basic
Choose method
Basic
Use simple criteria to define a basic access policy.
Advanced
Use a JSON object to define an advanced access policy.
Publishers
Specify who can publish messages to the topic.
Everyone
Anybody can publish
Subscribers
Specify who can subscribe to this topic.
Click on Everyone
Everyone
Any AWS account can subscribe to the topic
JSON preview
{
"Version": "2008-10-17",
"Id": "__default_policy_ID",
"Sid": "__default_statement_ID",
"Effect": "Allow",
"Principal": {
"AWS": "*"
},
"Action": [
"SNS:Publish",
"SNS:RemovePermission",

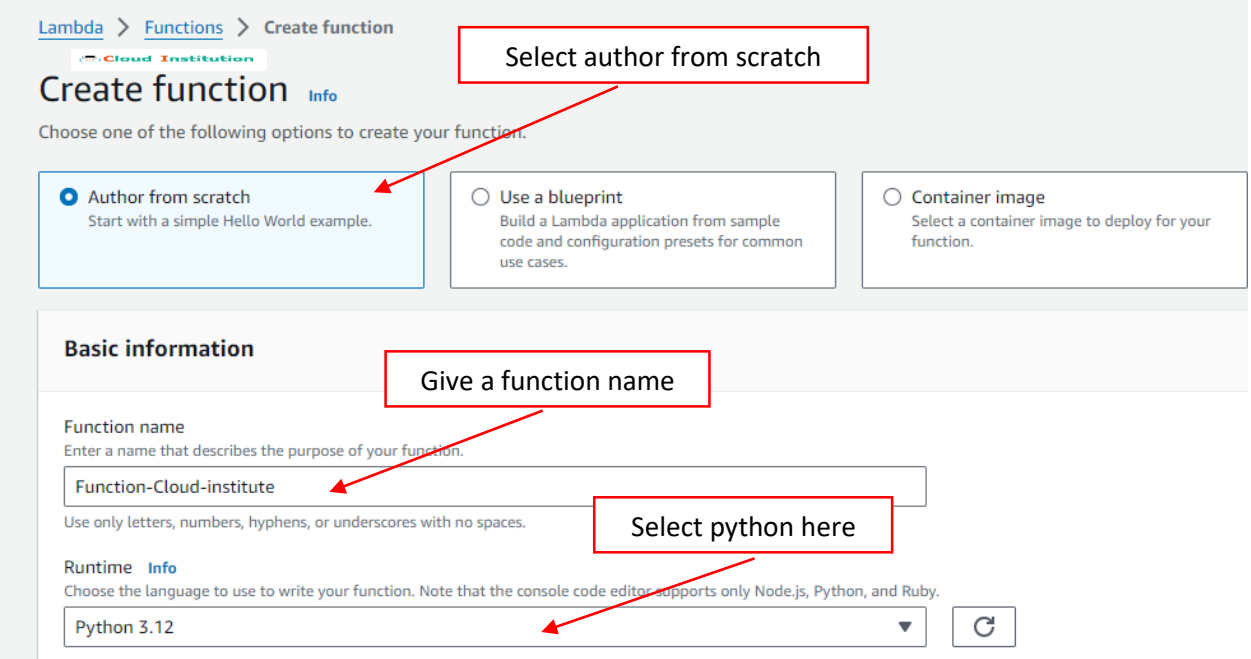


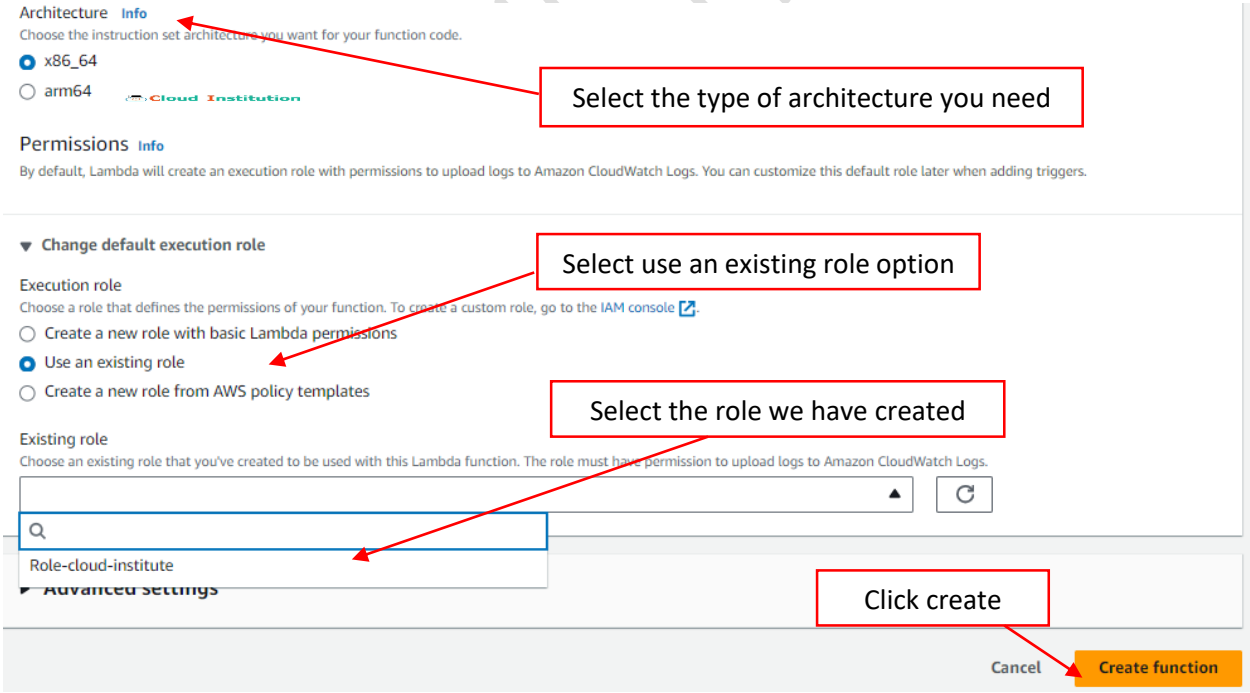
Topic created successfully



Step 3 : Create a Lambda Function

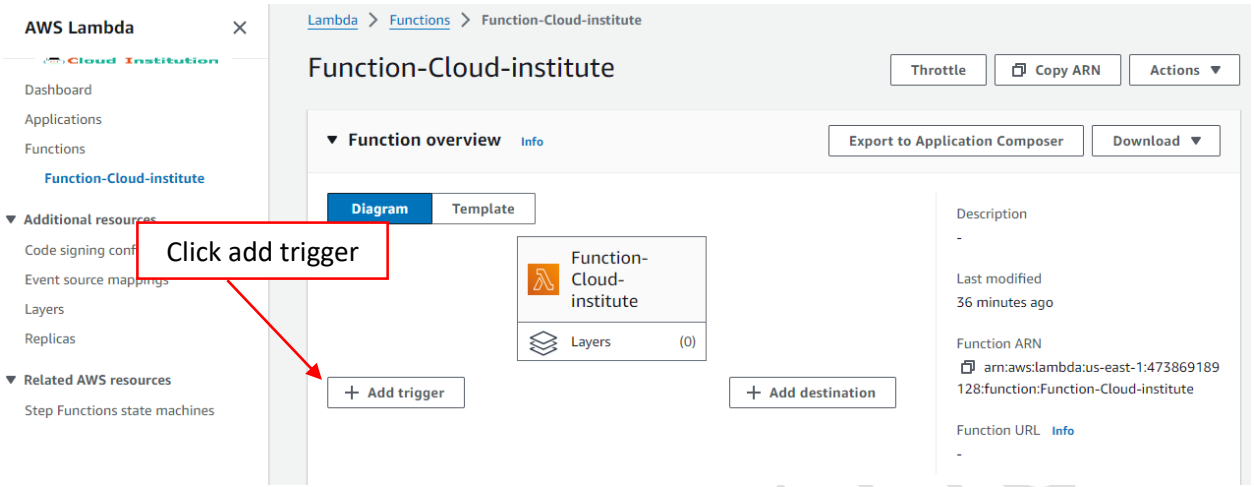


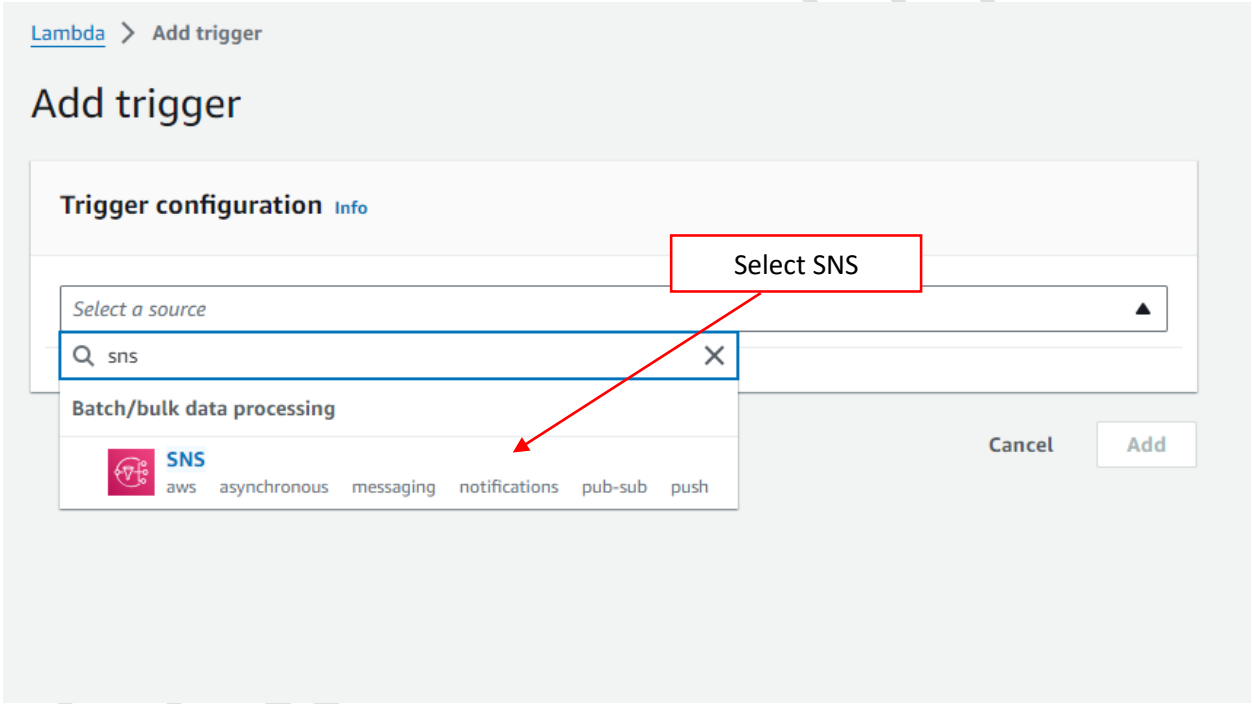


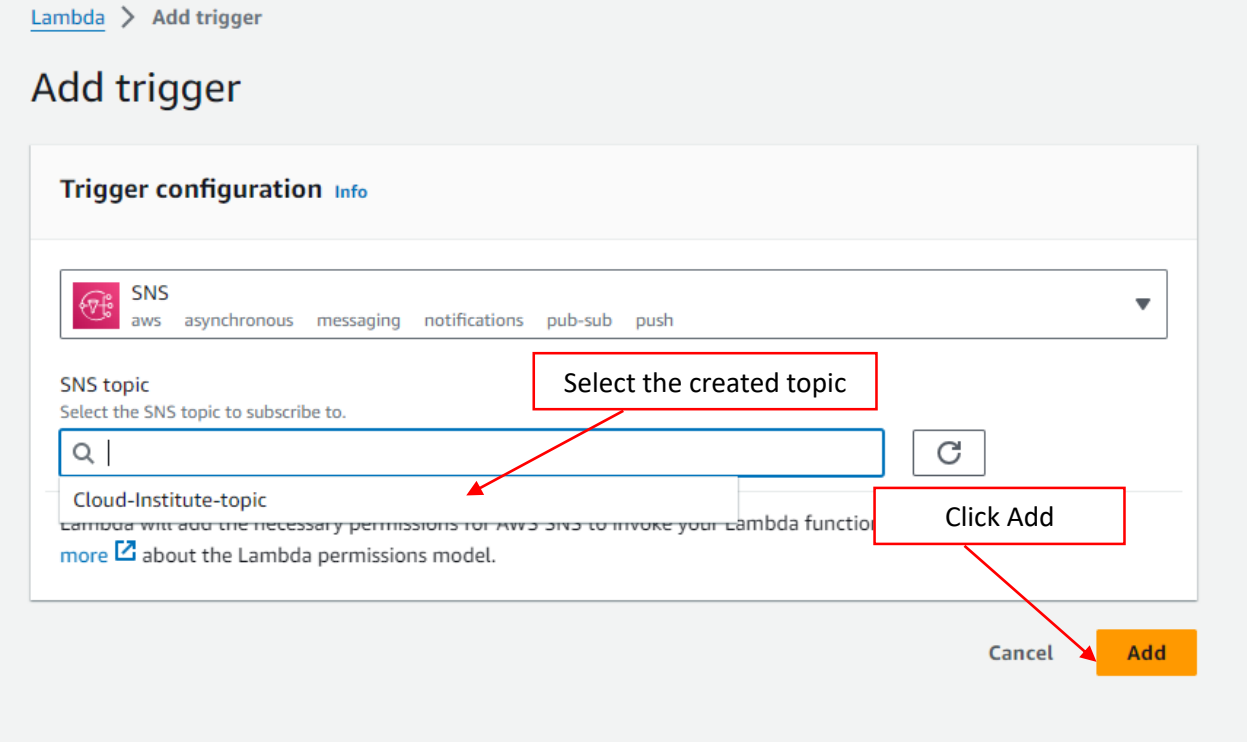


Function created

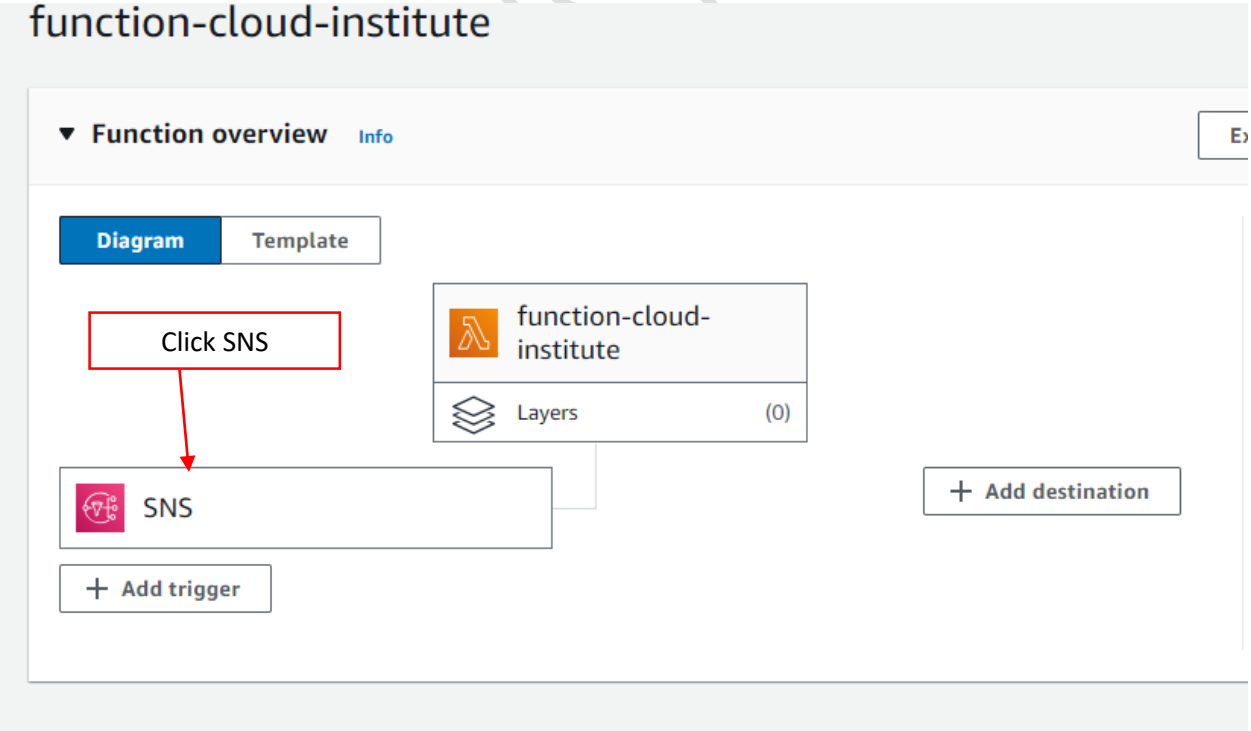
Step : 4 Triggering SNS

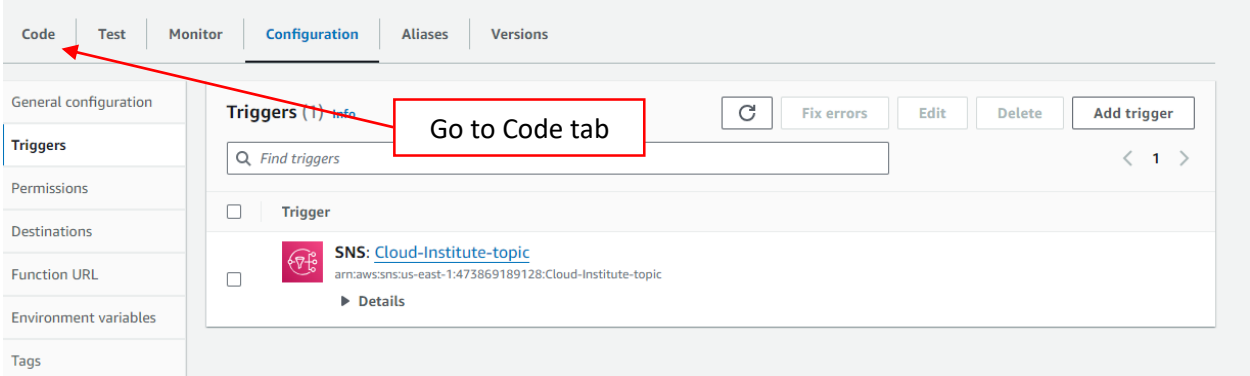


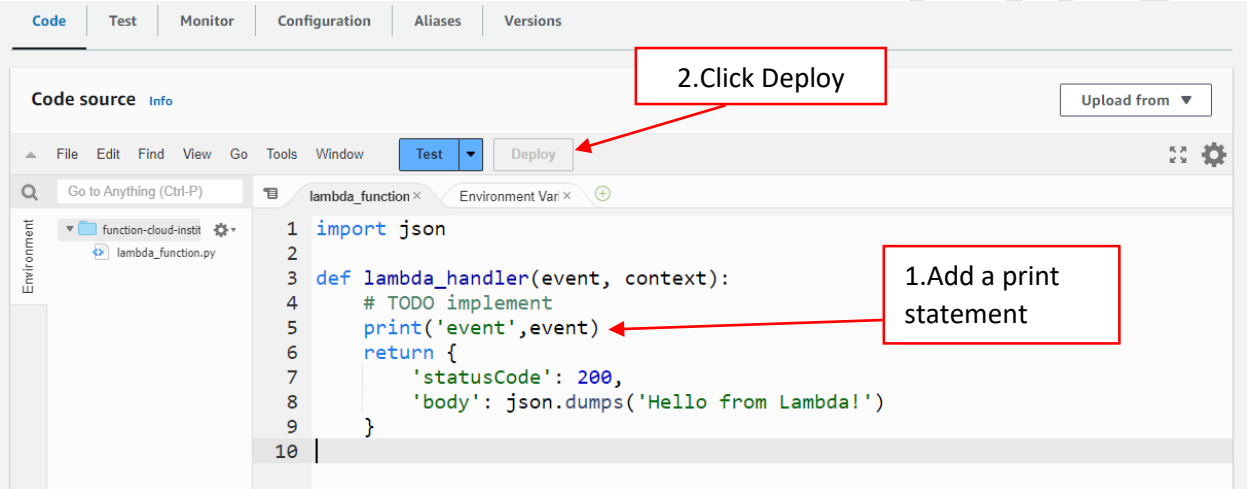




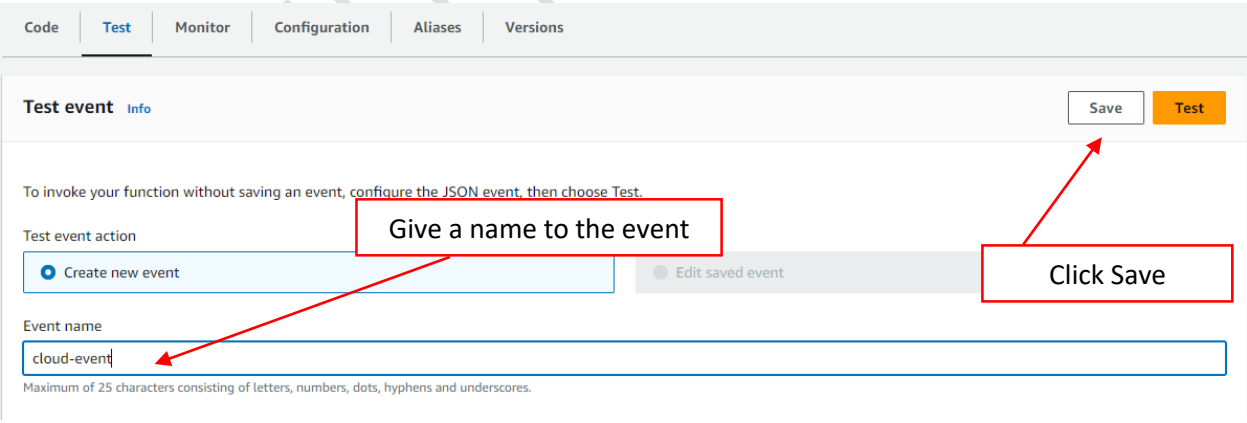
Trigger is added

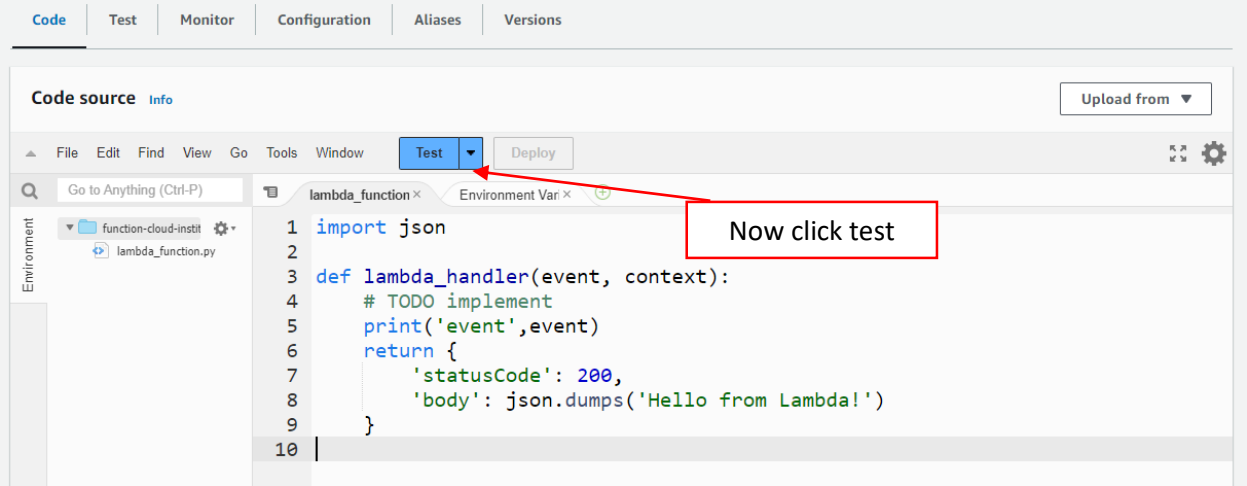




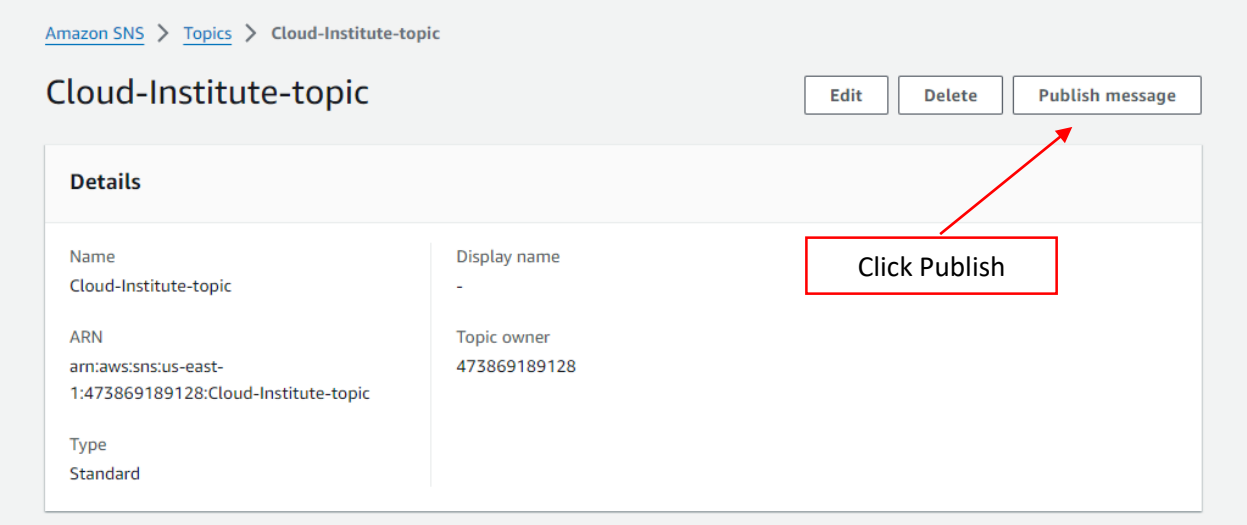


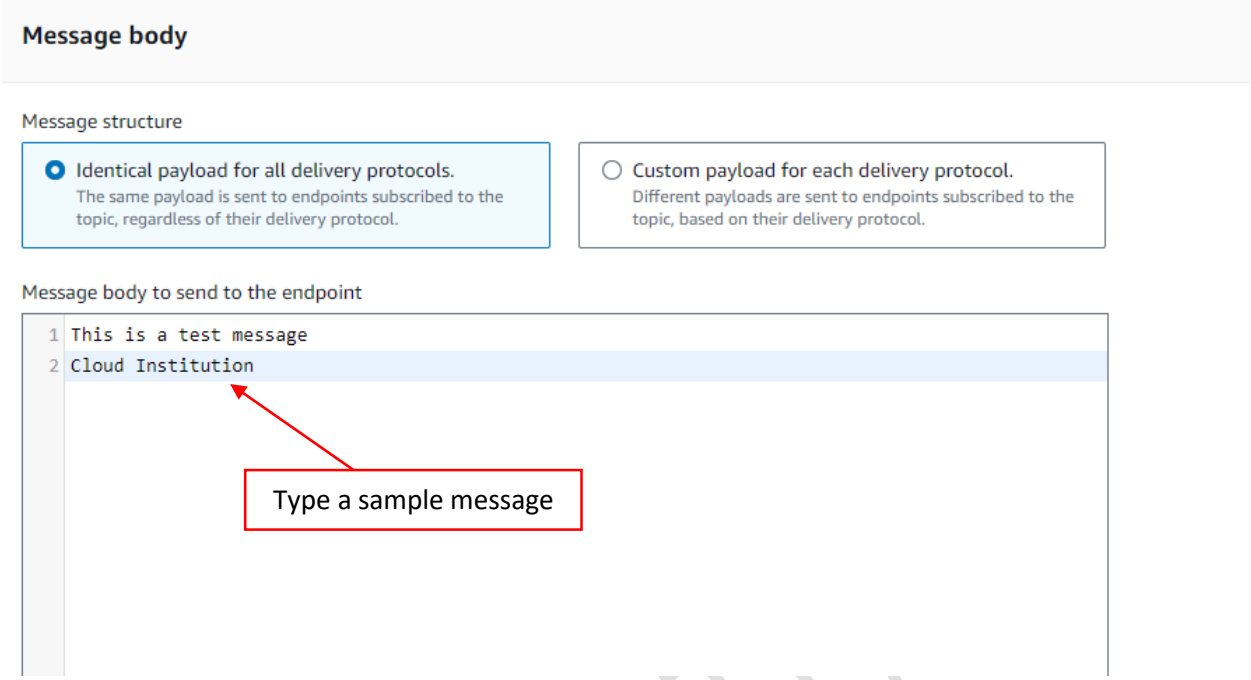
In the Test tab

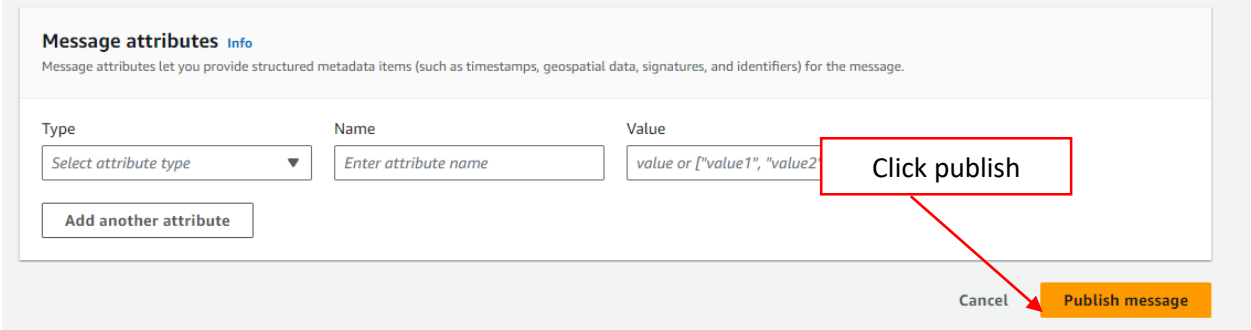




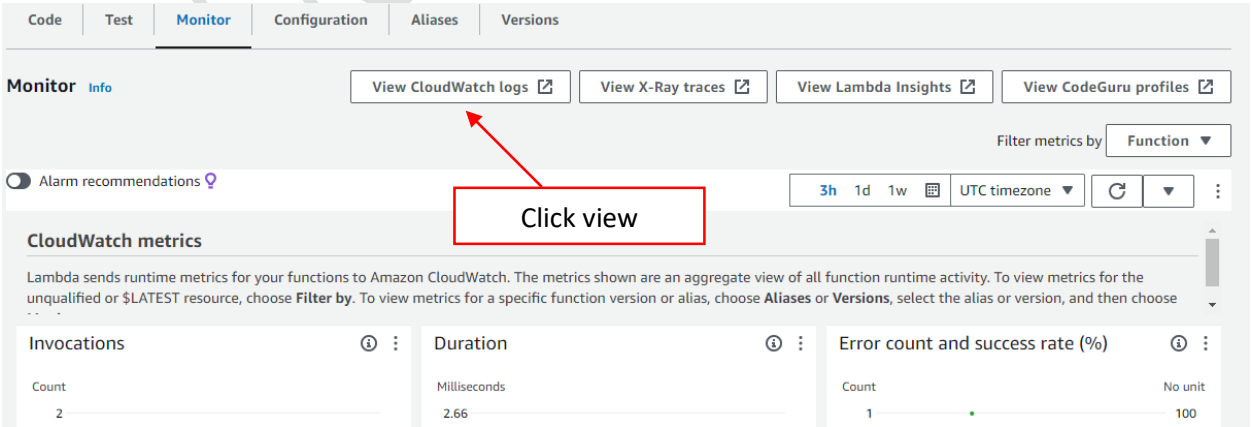
Now go to Topics

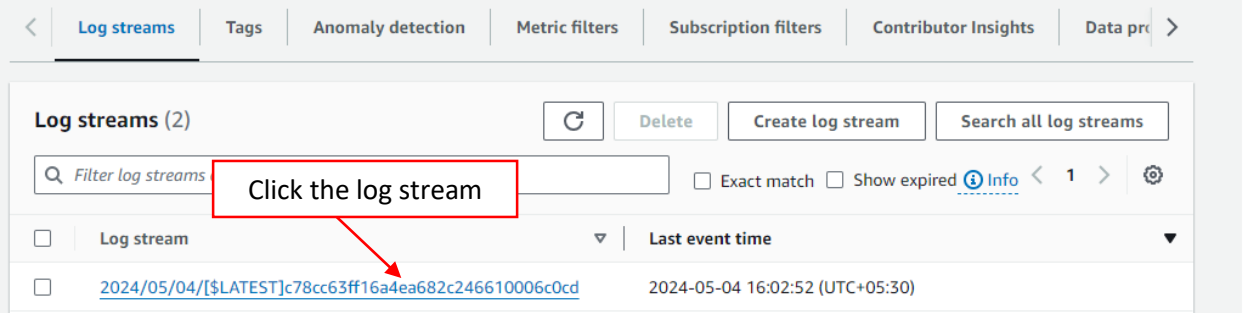


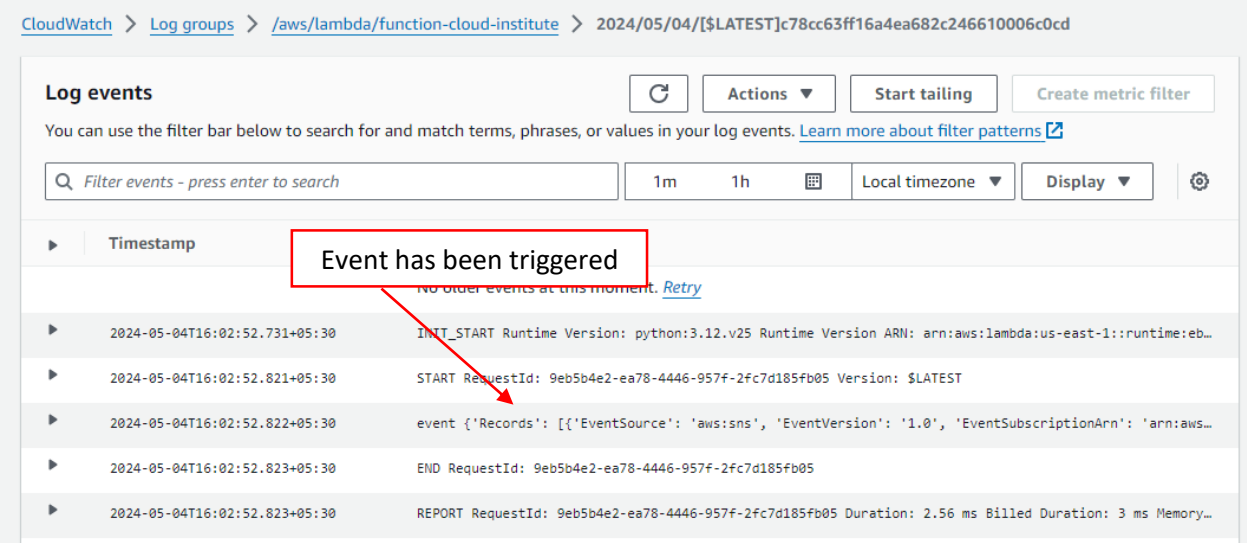


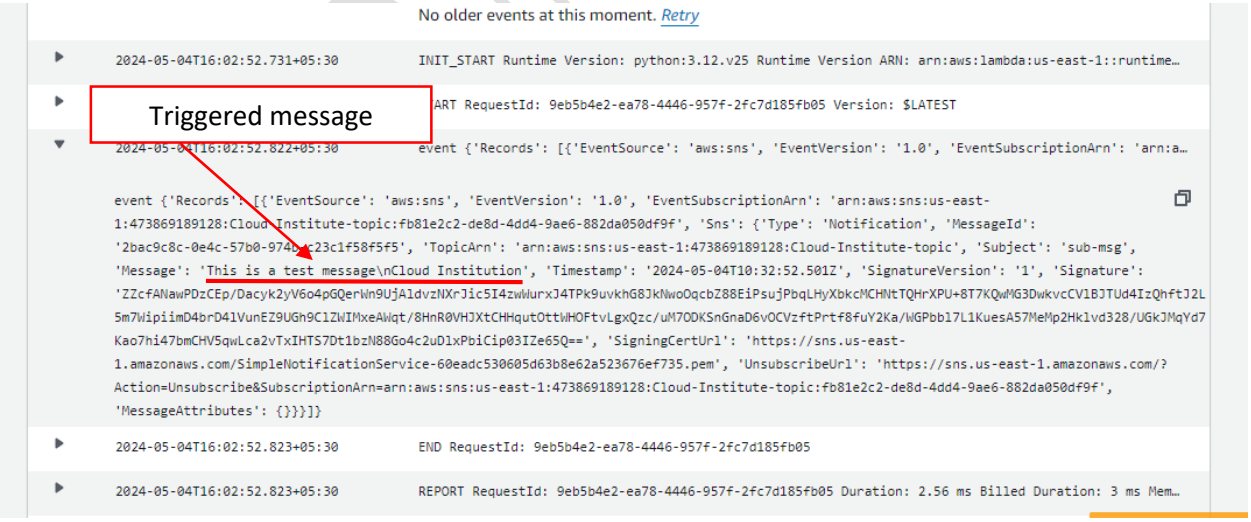


Now go back to lambda functions




Log streams
Tags
Anomaly detection
Metric filters
Subscription filters
Contributor Insights
Log streams (2)
Delete
Create log stream
Search all log streams
Filter log streams
Click the log stream
Exact match
Show expired
Info
Log stream
Last event time
2024/05/04/[$LATEST]c78cc63ff16a4ea682c246610006c0cd
2024-05-04 16:02:52 (UTC+05:30)


CloudWatch > Log groups > /aws/lambda/function-cloud-institute > 2024/05/04/[$LATEST]c78cc63ff16a4ea682c246610006c0cd
Log events
Actions
Start tailing
Create metric filter
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
Local timezone
Display
Timestamp
Event has been triggered
Retry
2024-05-04T16:02:52.731+05:30 INIT_START Runtime Version: python:3.12.v25 Runtime Version ARN: arn:aws:lambda:us-east-1::runtime:eb…
2024-05-04T16:02:52.821+05:30 START RequestId: 9eb5b4e2-ea78-4446-957f-2fc7d185fb05 Version: $LATEST
2024-05-04T16:02:52.822+05:30 event {'Records': [{'EventSource': 'aws:sns', 'EventVersion': '1.0', 'EventSubscriptionArn': 'arn:aws…
2024-05-04T16:02:52.823+05:30 END RequestId: 9eb5b4e2-ea78-4446-957f-2fc7d185fb05
2024-05-04T16:02:52.823+05:30 REPORT RequestId: 9eb5b4e2-ea78-4446-957f-2fc7d185fb05 Duration: 2.56 ms Billed Duration: 3 ms Memory…


No older events at this moment. Retry
2024-05-04T16:02:52.731+05:30 INIT_START Runtime Version: python:3.12.v25 Runtime Version ARN: arn:aws:lambda:us-east-1::runtime…
Triggered message
2024-05-04T16:02:52.822+05:30 event {'Records': [{'EventSource': 'aws:sns', 'EventVersion': '1.0', 'EventSubscriptionArn': 'arn:a…
event {'Records': [{'EventSource': 'aws:sns', 'EventVersion': '1.0', 'EventSubscriptionArn': 'arn:aws:sns:us-east-1:473869189128:Cloud-Institute-topic:fb81e2c2-de8d-4dd4-9ae6-882da050df9f', 'Sns': {'Type': 'Notification', 'MessageId': '2bac9c8c-0e4c-57b0-9740-c23c1f58f5f5', 'TopicArn': 'arn:aws:sns:us-east-1:473869189128:Cloud-Institute-topic', 'Subject': 'sub-msg', 'Message': 'This is a test message\nCloud Institution', 'Timestamp': '2024-05-04T10:32:52.501Z', 'SignatureVersion': '1', 'Signature': 'ZZcfANawPDzCEp/Dacyk2yV6o4pGQerWn9UjAldvzNXrJic5I4zwWurxJ4TPk9uvkhG8JkNwoOqcbZ88EiPsujPbqLHyXbkcMCHNtTQHrXPU+8T7KQwMG3DwkvcCV1BJTUd4IzQhftJ2L5m7WipiimD4brD41VunEZ9UGh9ClZWIMxeAWqt/8HnR0VHJXtCHHqutOttWHOFtvLgxQzc/uM7ODKSnGnaD6vOCVzftPrtf8fuY2Ka/WGPbb17L1KuesA57MeMp2Hklvd328/UGkJMqYd7Kao7hi47bmCHV5qwLca2vTxIHTS7Dt1bzN88Go4c2uDlxPbiCip03IZe65Q==', 'SigningCertUrl': 'https://sns.us-east-1.amazonaws.com/SimpleNotificationService-60eadc530605d63b8e62a523676ef735.pem', 'UnsubscribeUrl': 'https://sns.us-east-1.amazonaws.com/?Action=Unsubscribe&SubscriptionArn=arn:aws:sns:us-east-1:473869189128:Cloud-Institute-topic:fb81e2c2-de8d-4dd4-9ae6-882da050df9f', 'MessageAttributes': {}}}]}
2024-05-04T16:02:52.823+05:30 END RequestId: 9eb5b4e2-ea78-4446-957f-2fc7d185fb05
2024-05-04T16:02:52.823+05:30 REPORT RequestId: 9eb5b4e2-ea78-4446-957f-2fc7d185fb05 Duration: 2.56 ms Billed Duration: 3 ms Mem…