

Module 9: Lambda Assignment

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Course Offered: -Advanced Cloud Computing and Devops

Assignment By: -Intellipaat

Trainer: -Puneet Gavri

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Problem Statement:

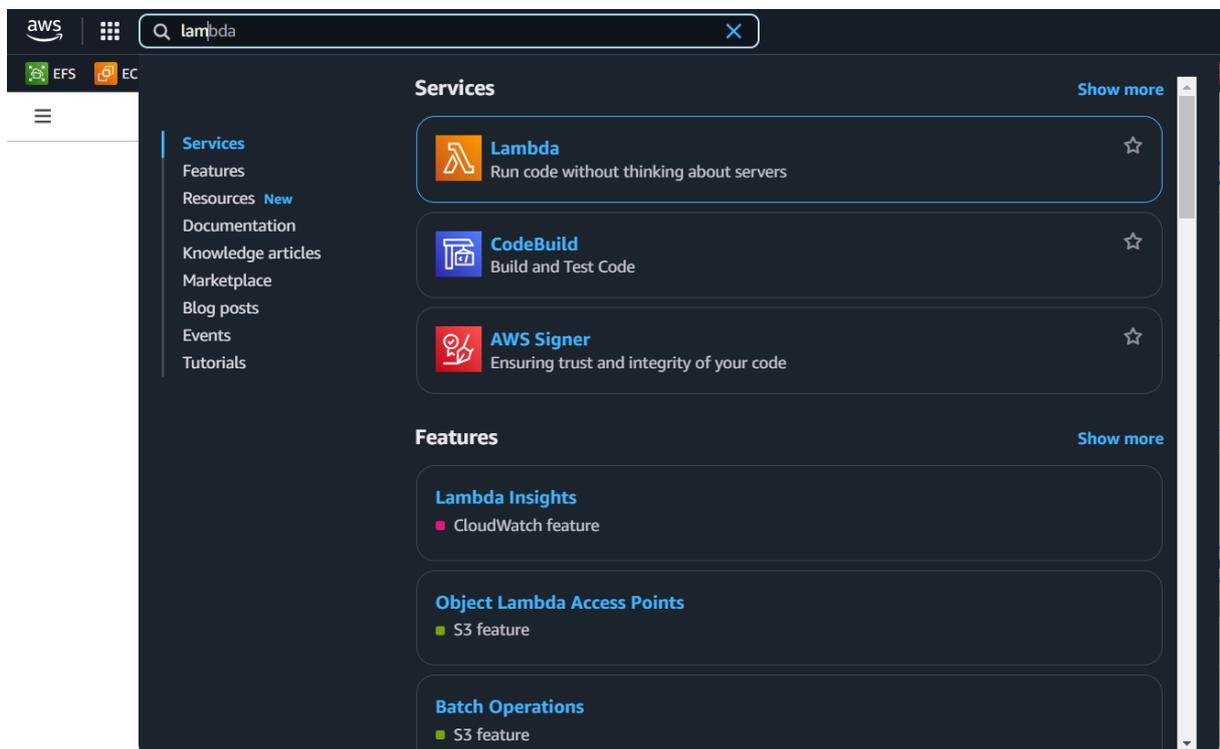
You work for XYZ Corporation. Your corporation wants to launch a new web-based application and they do not want their servers to be running all the time. It should also be managed by AWS. Implement suitable solutions.

Tasks To Be Performed:

1. Create a sample Python Lambda function.
2. Set the Lambda Trigger as SQS and send a message to test invocations.

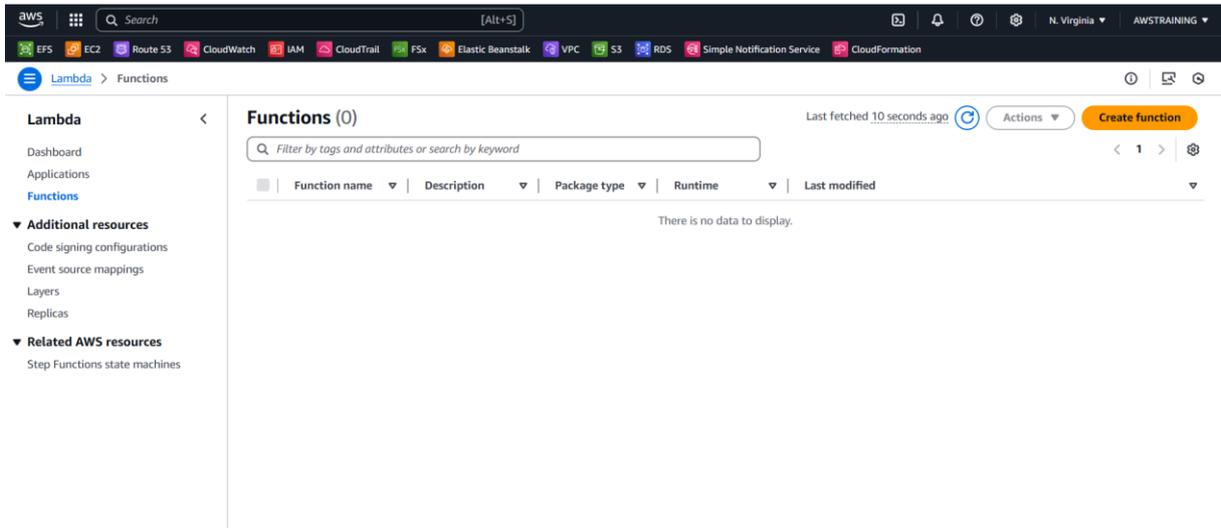
ANSWER:

Login to AWS Management Console then Search Lambda. you will see the lambda and click the lambda.



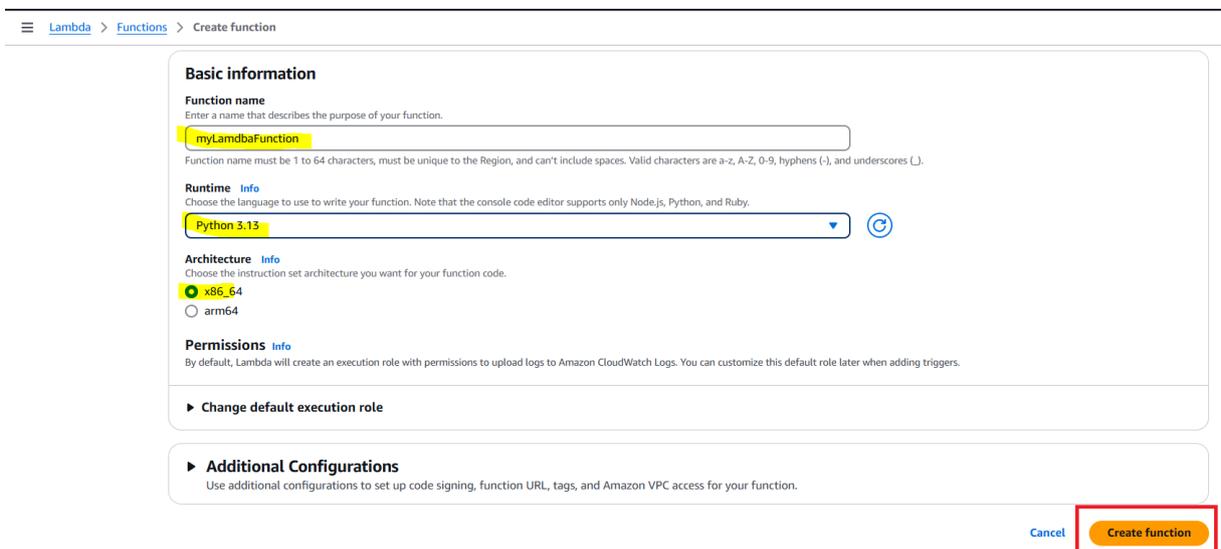
Then Open This Page.

Then Click Create Function

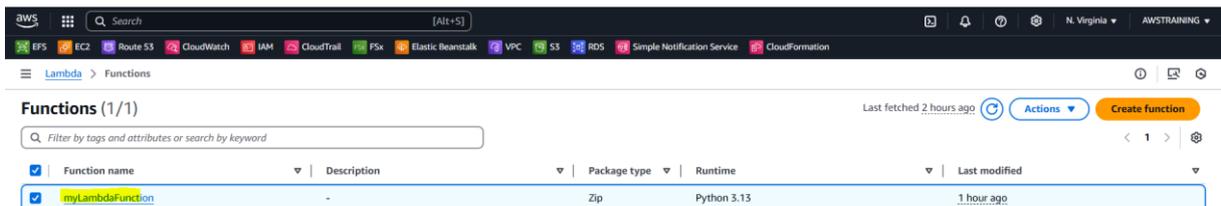


After Click the Create Function

You will like this page.in basic information.you need to assign the name of the function name then runtime will be select python 3.35 and select x86_64



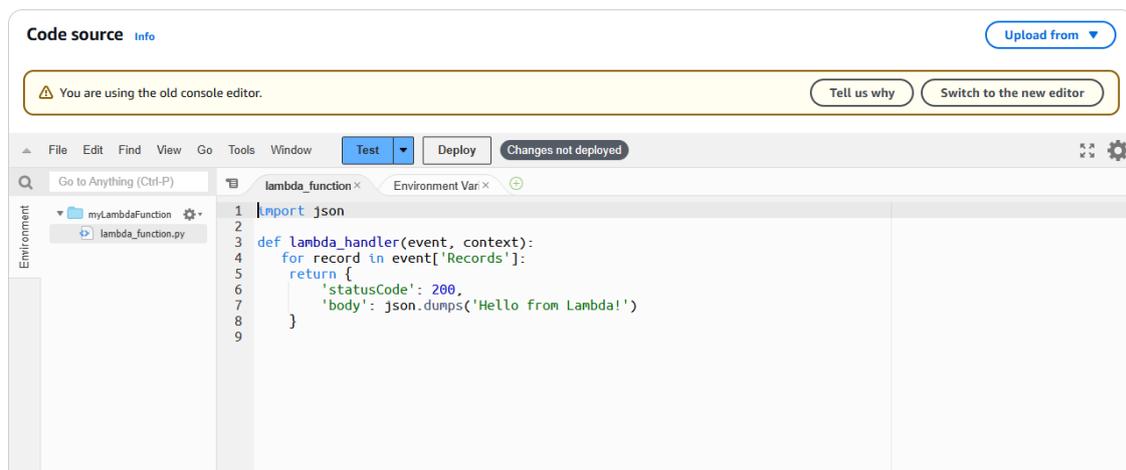
Then Click create function.



In Python scripts,you need to define the function

```
import json
```

```
def lambda_handler(event, context):  
    for record in event['Records']:  
        return {  
            'statusCode': 200,  
            'body': json.dumps('Hello from Lambda!')  
        }  
}
```



After Write the code we need to test the code.

For test the code click the test

We need to configure the test event

Configure test event



A test event is a JSON object that mocks the structure of requests emitted by AWS services to invoke a Lambda function. Use it to see the function's invocation result.

To invoke your function without saving an event, configure the JSON event, then choose Test.

Test event action

Create new event

Edit saved event

Event name

test-event

Maximum of 25 characters consisting of letters, numbers, dots, hyphens and underscores.

Event sharing settings

Private

This event is only available in the Lambda console and to the event creator. You can configure a total of 10. [Learn more](#)

Shareable

This event is available to IAM users within the same account who have permissions to access and use shareable events. [Learn more](#)

Template - optional

hello-world

Event JSON

Format JSON

```
1 {
2   "key1": "value1",
3   "key2": "value2",
4   "key3": "value3"
5 }
```

Cancel

Invoke

Save

After Save the test event you will see like this.

Code source Info Upload from

You are using the old console editor. Tell us why Switch to the new editor

File Edit Find View Go Tools Window **Test** Deploy Changes not deployed

Go to Anything (Ctrl-P) lambda_function x Environment Var x Execution result x

Environment myLambdaFunction lambda_function.py

Execution results Status: Succeeded Max memory used: 30 MB Time: 2.27 ms

Test Event Name
test-event

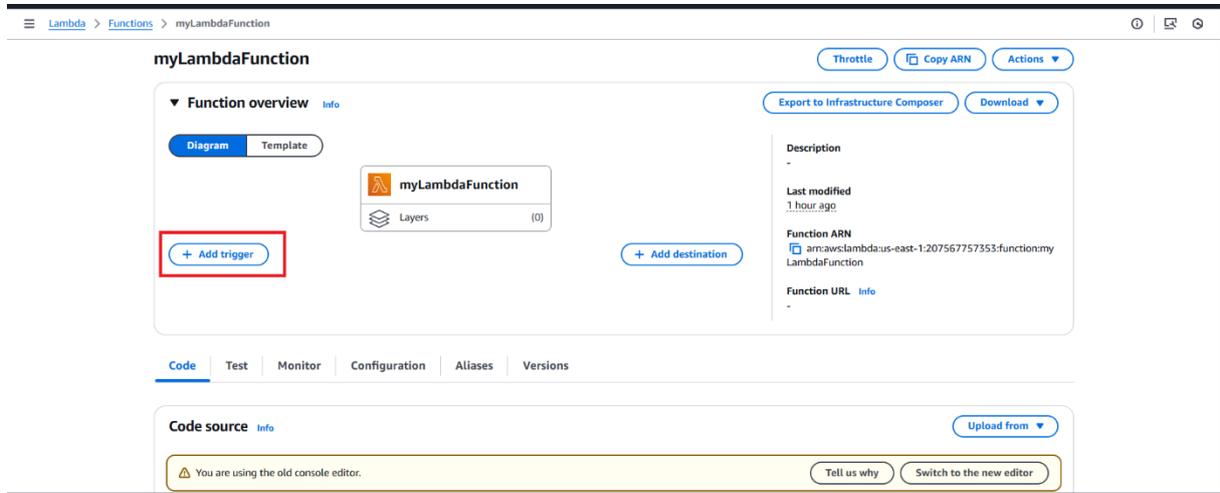
Response
{
 "statusCode": 200,
 "body": "\\Hello from Lambda!\\"
}

Function Logs
START RequestID: cb47ef16-c9b2-49c7-b321-de8edbf40a9e Version: SLATEST
END RequestID: cb47ef16-c9b2-49c7-b321-de8edbf40a9e
REPORT RequestID: cb47ef16-c9b2-49c7-b321-de8edbf40a9e Duration: 2.27 ms Billed Duration: 3 ms Memory Size: 128 MB Max Memory Used: 30 MB Init Duration: 101.96 ms

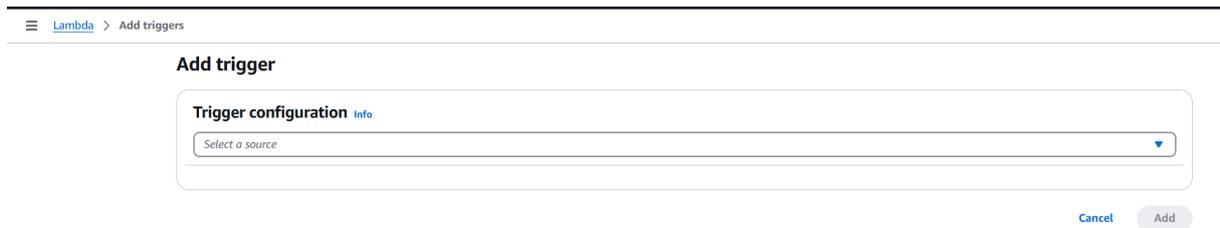
Request ID
cb47ef16-c9b2-49c7-b321-de8edbf40a9e

When you click on the test above the results
Then we need to create triggers.

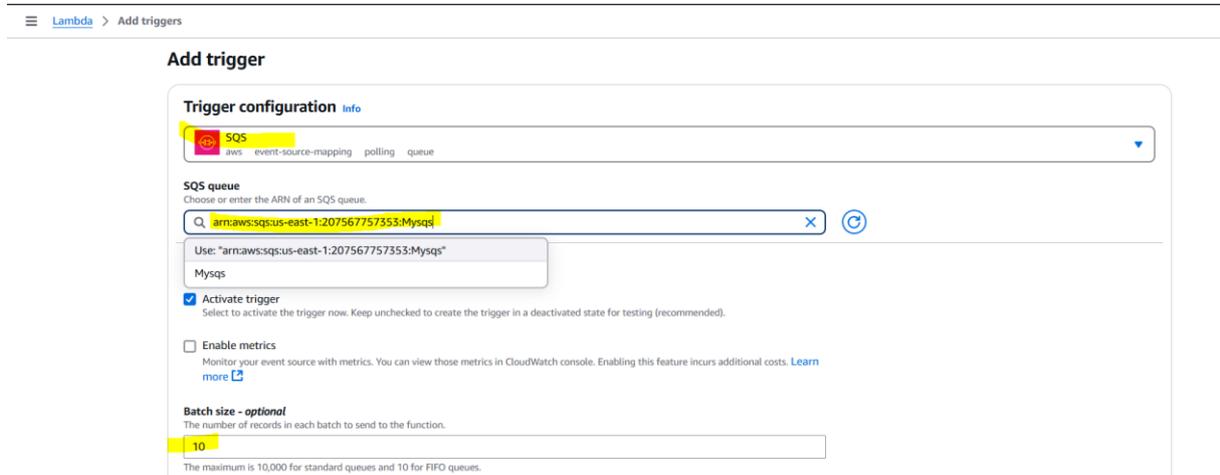
Add Trigger



We need to define the trigger configuration



We defined SQS Trigger Configuration.



Batch size - optional

The number of records in each batch to send to the function.

10

The maximum is 10,000 for standard queues and 10 for FIFO queues.

Batch window - optional

The maximum amount of time to gather records before invoking the function, in seconds.

0

When the batch size is greater than 10, set the batch window to at least 1 second.

Maximum concurrency - optional

The maximum number of concurrent function instances that the SQS event source can invoke.

2

Specify a value between 2 and 1000. To deactivate, leave the box empty.

Report batch item failures - optional

Allow your function to return a partial successful response for a batch of records.

Filter criteria - optional

Define the filtering criteria to determine whether or not to process an event. Each filter must be in a valid JSON format in filter rule syntax. Lambda processes an event if any one of the filters are met. Otherwise, Lambda discards the event. [Learn more](#)

Add

Report batch item failures - optional

Allow your function to return a partial successful response for a batch of records.

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Add

During trigger creation, Lambda translates your filter(s) into a single JSON structure containing all your filtering criteria.

Encrypt filter criteria with customer managed KMS key

Lambda will use this key to encrypt and decrypt your resources. [Learn more](#)

▼ Additional settings

Tags

A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources, track your AWS costs, and enforce attribute-based access control. No tags associated with the resource.

Add new tag

You can add up to 50 tags.

In order to read from the SQS trigger, your execution role must have proper permissions.

Cancel

Add

That's how you can create a Lambda function and adding the trigger.