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.

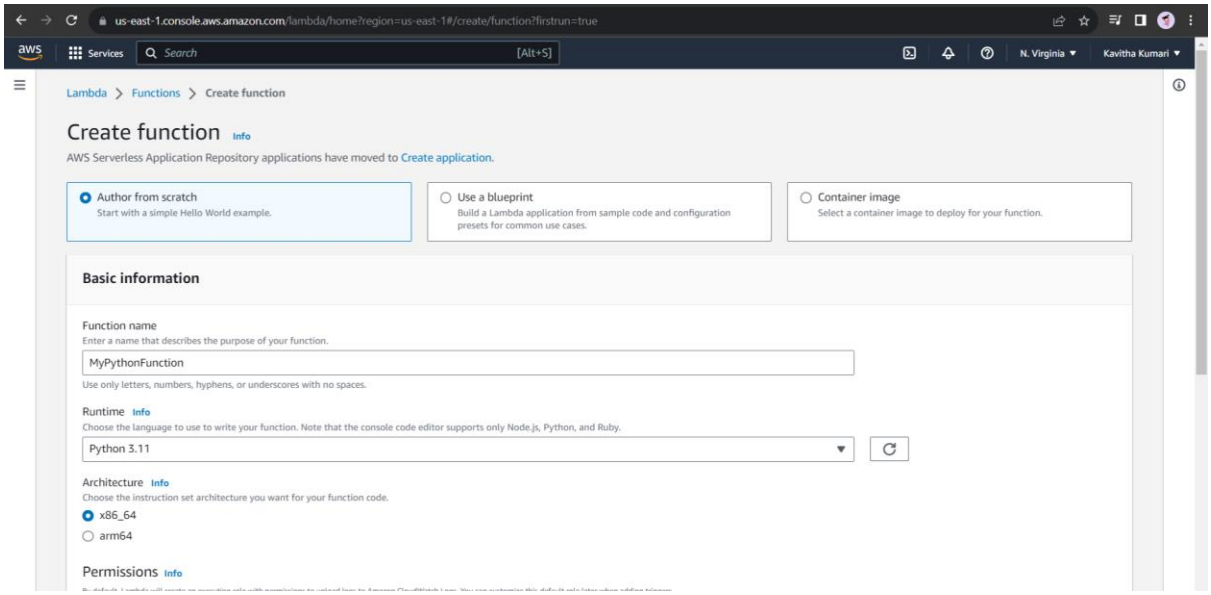
Tasks To Be Performed:

1. Create a sample Python Lambda function.

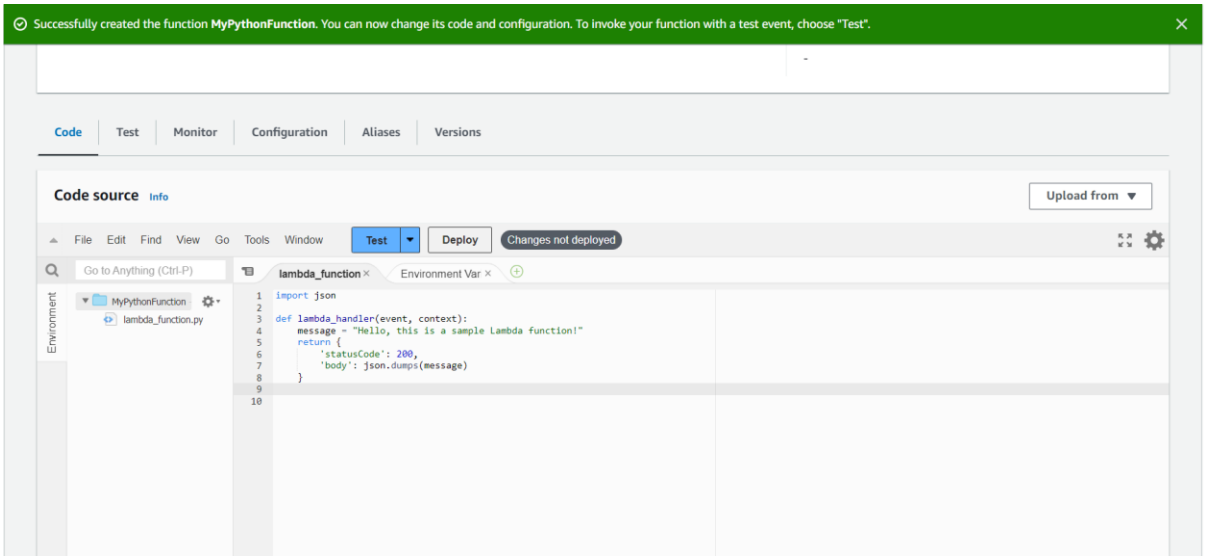
2. Set the Lambda Trigger as SQS and send a message to test invocations

Procedure: -

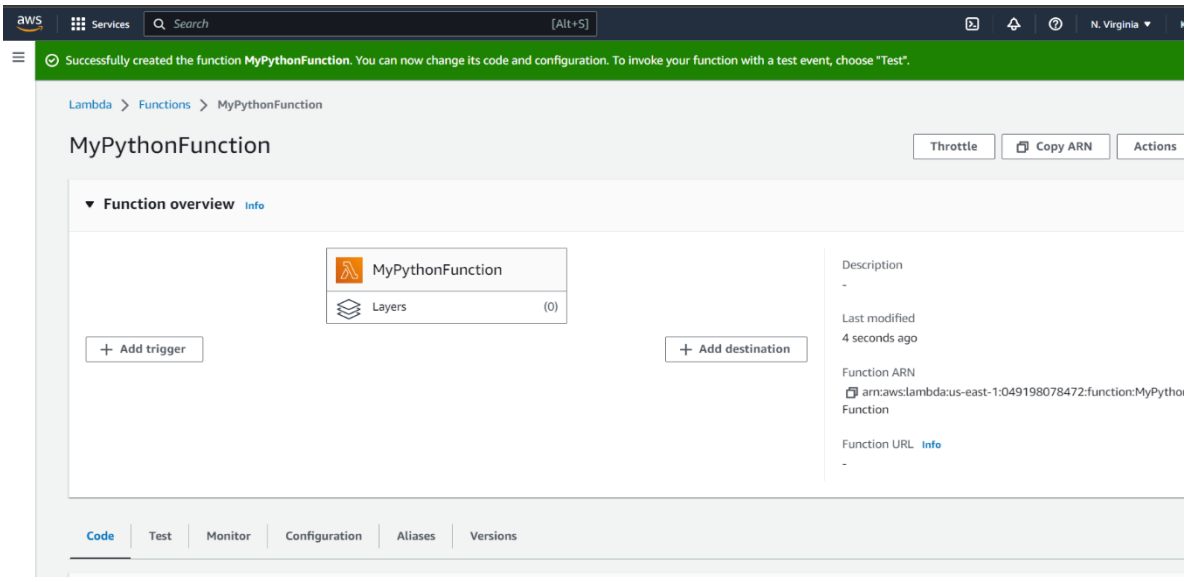
- Let us first create the Lambda function. Go to the AWS Management Console. Open the Lambda service.
- Click on "Create function."
- Choose "Author from scratch."
- Enter a name for your function, like "MyPythonFunction."
- For Runtime, select "Python" and choose the latest supported version.
- Under "Permissions," you can either choose an existing role with Lambda execution permissions or create a new role with basic Lambda permissions and also the basic permission of cloudWatch and SQS.
- Click on "Create function."



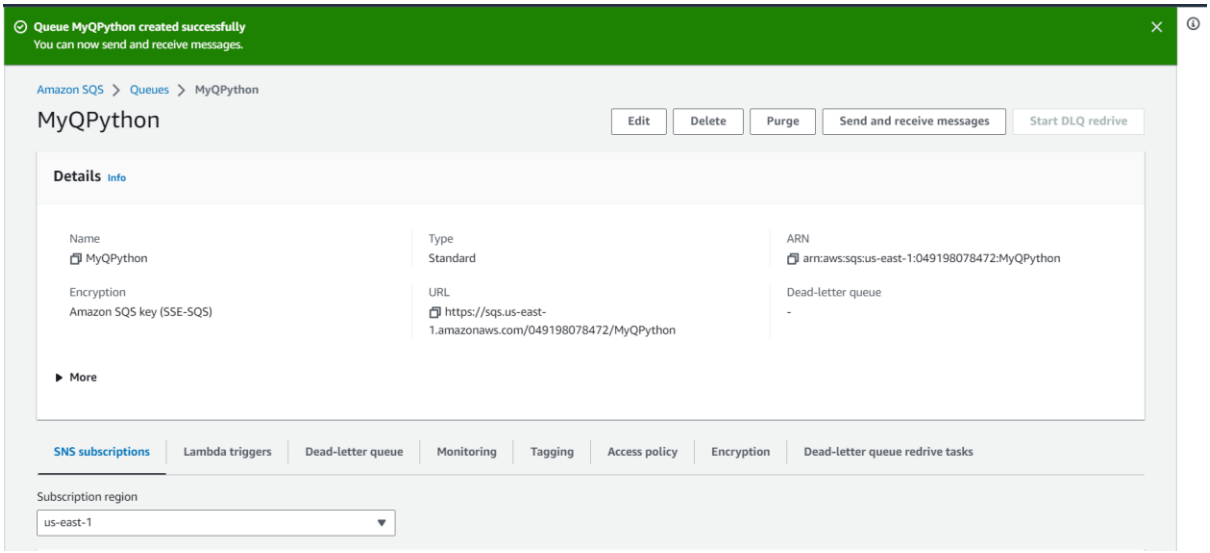
- In the code editor, you can write a simple Python function, such as:



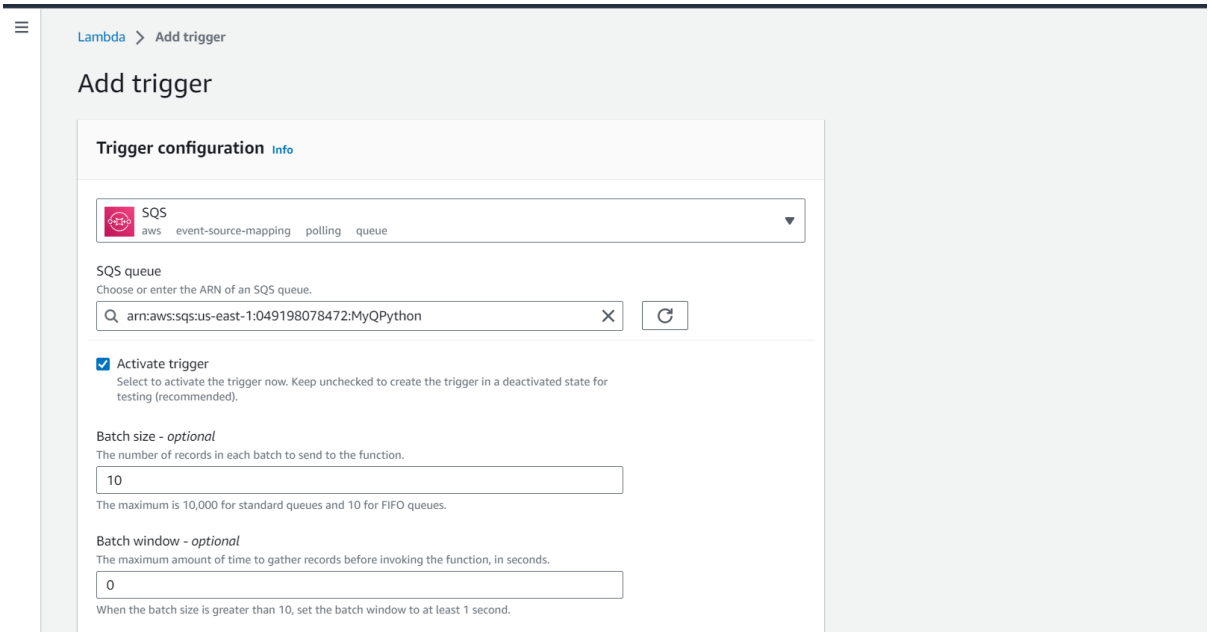
- Click on “deploy.”
- Now we need to Set up the Lambda Trigger as SQS.
- For this let us create an SQS service.
- Click on "create queue."

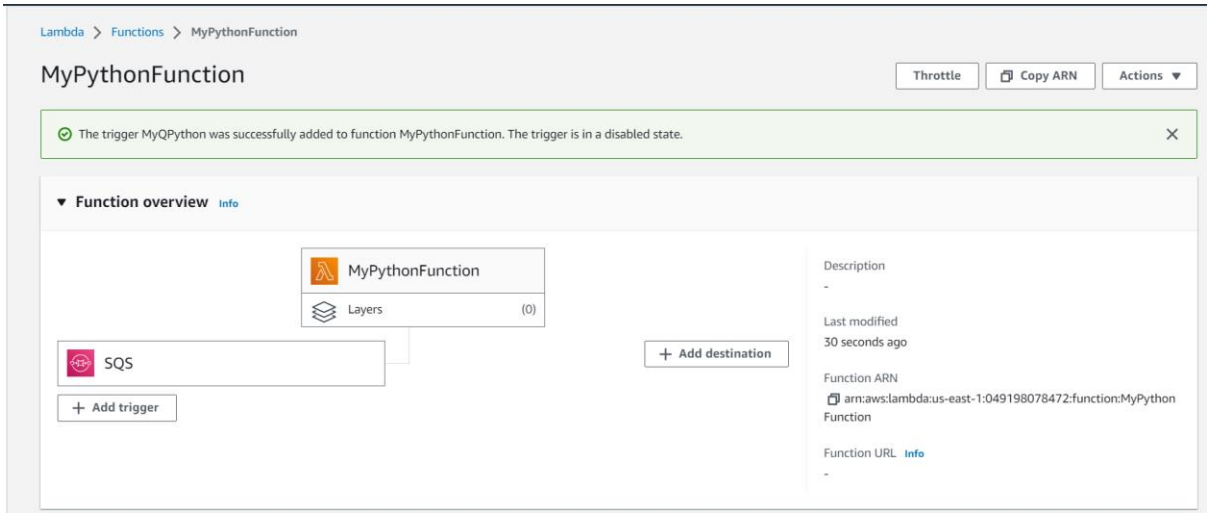


- Enter a name for your queue, like "MyQPython."
- Leave other settings as default and click on "Create queue."

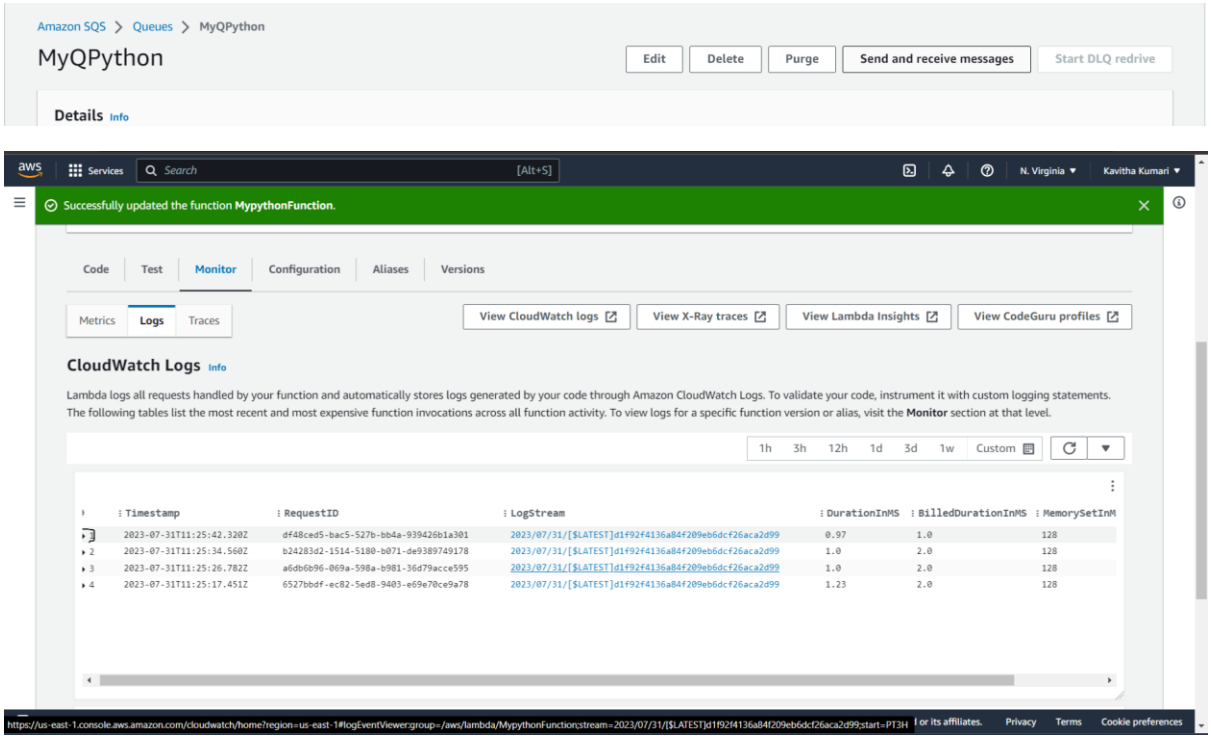


- Next, we need to set up the SQS trigger for our Lambda function:
- Go back to the Lambda service.
- Open your Lambda function (MyPythonFunction) that you created earlier.
- In the function configuration page, click on "Add trigger."
- Choose "SQS" as the trigger type.
- From the "Queue" dropdown, select the SQS queue you created earlier (MyQPython).
- Leave other settings as default, and click on "Add."

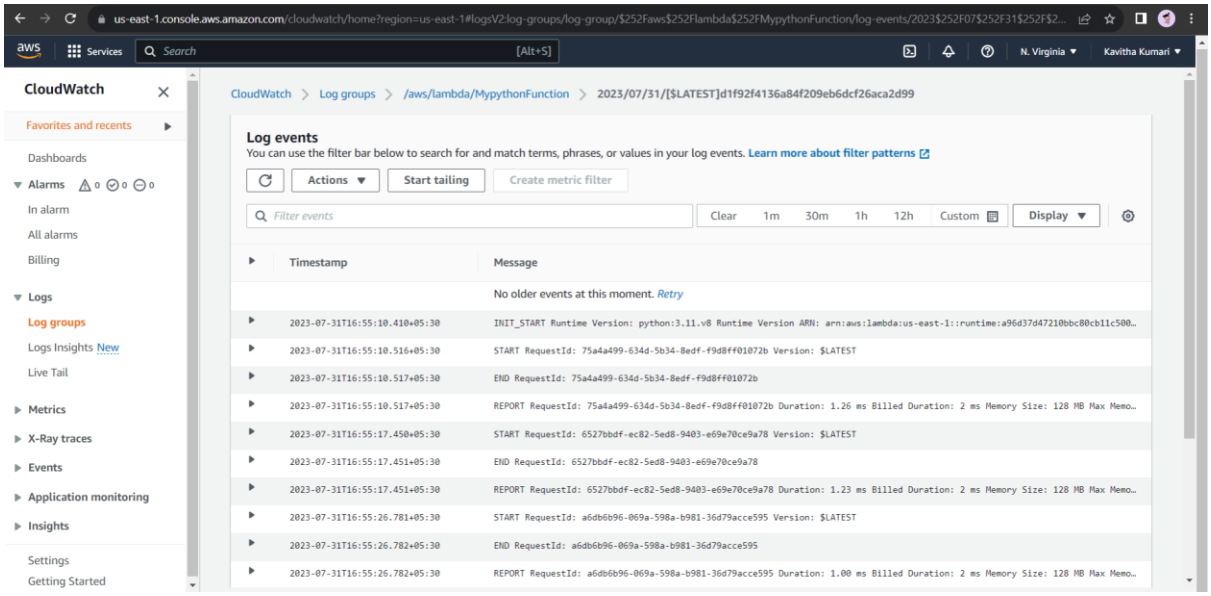




- Now, when a message is sent to the SQS queue (MyQPython), it will trigger the Lambda function (MyPythonFunction) and invoke it.
- Go to the AWS Management Console.
- Open the Amazon SQS service.
- Select your SQS queue (MyQpython) from the list.
- Click on "Send and receive messages" and then "Send a message."
- In the message body, you can enter any test message (e.g., "Test message for Lambda").
- Click on "Send message."
- After a moment, the Lambda function will be triggered and will process the message. You can check the function's logs in the AWS Lambda console to see the output.
- That is, it! You have successfully created a sample Python Lambda function and set up an SQS trigger to invoke it when messages are sent to the SQS queue.



- You can also click on **view CloudWatch logs** to view the detailed information.



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