Task-1

Assignment 1: Automated Instance Management Using AWS Lambda and Boto3

Objective: In this assignment, you will gain hands-on experience with AWS Lambda and Boto3, Amazon's SDK for Python. You will create a

Lambda function that will automatically manage EC2 instances based on their tags.

Task: You're tasked to automate the stopping and starting of EC2 instances based on tags. Specifically:

1. Setup:

- Create two EC2 instances.

- Tag one of them as `Auto-Stop` and the other as `Auto-Start`.

2. Lambda Function Creation:

- Set up an AWS Lambda function.

- Ensure that the Lambda function has the necessary IAM permissions to describe, stop, and start EC2 instances.

3. Coding:

- Using Boto3 in the Lambda function:

- Detect all EC2 instances with the `Auto-Stop` tag and stop them.

- Detect all EC2 instances with the `Auto-Start` tag and start them.

4. Testing:

- Manually invoke the Lambda function.

- Confirm that the instance tagged `Auto-Stop` stops and the one tagged `Auto-Start` starts.

Instructions:

1. EC2 Setup:

- Navigate to the EC2 dashboard and create two new t2.micro instances (or any other available free-tier type).

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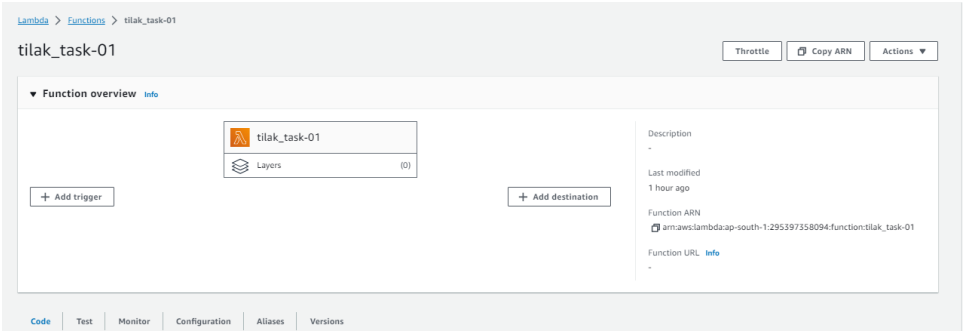
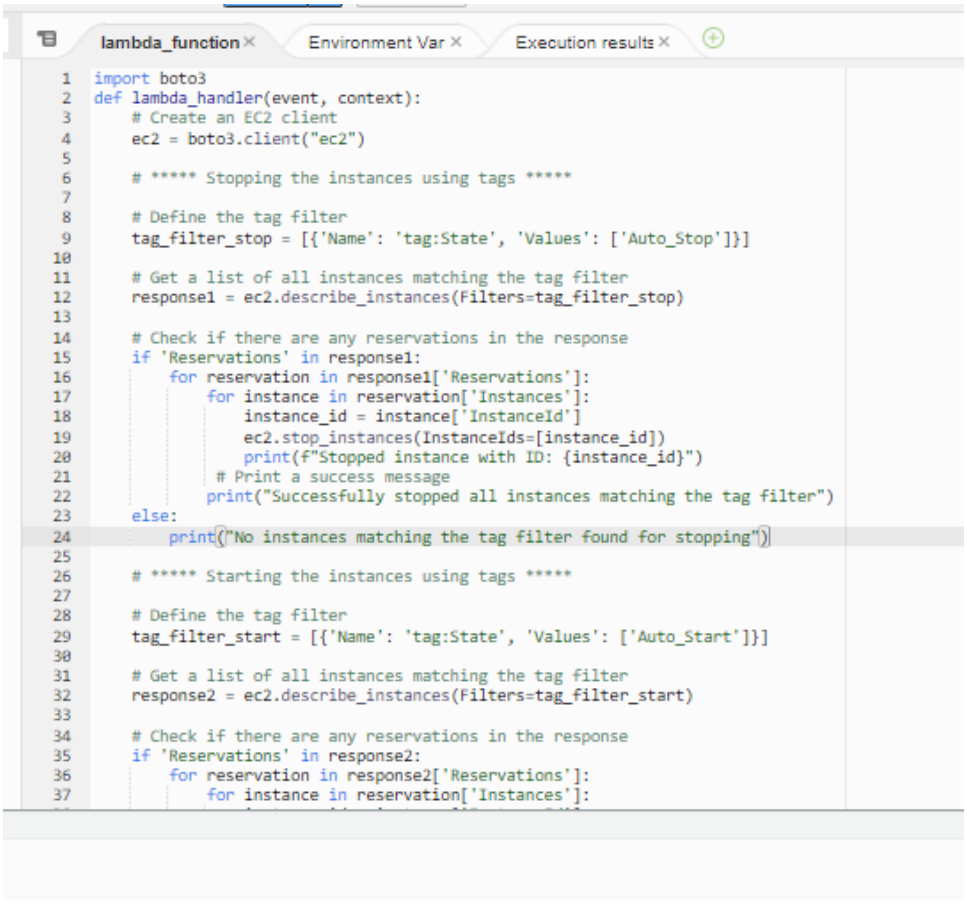
Step1:

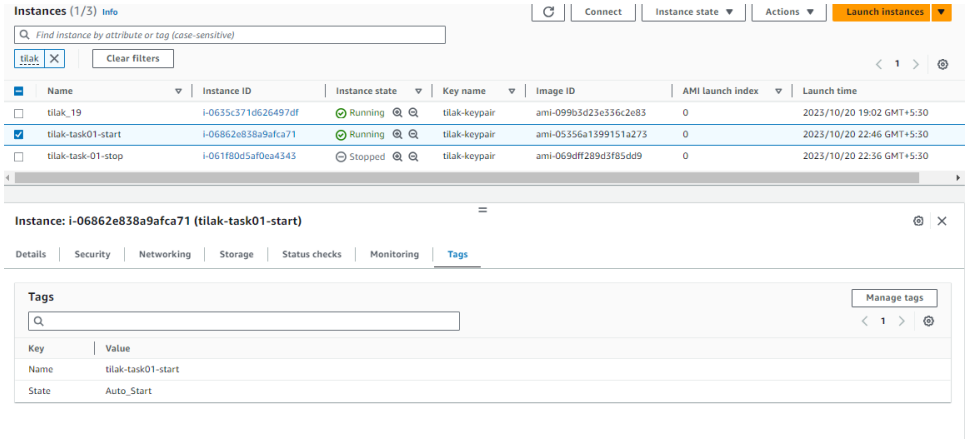
Create a New lambda Function as shown in the below screenshot

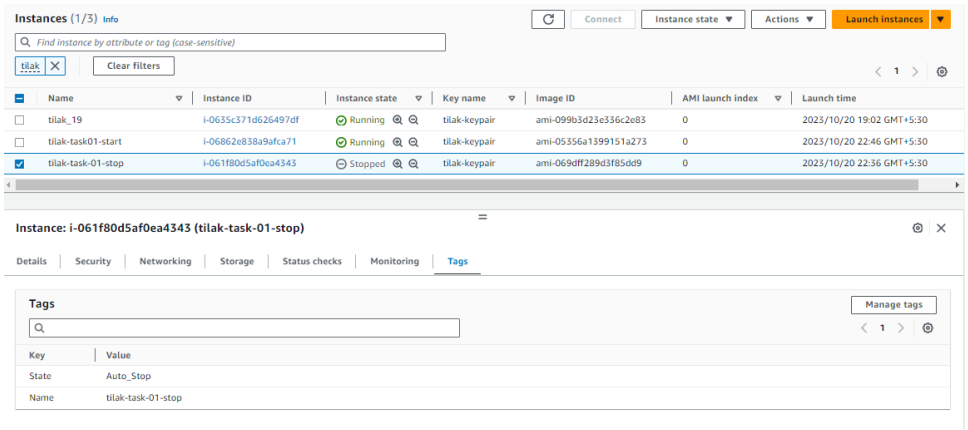


Below is the code updated in the Lambda function

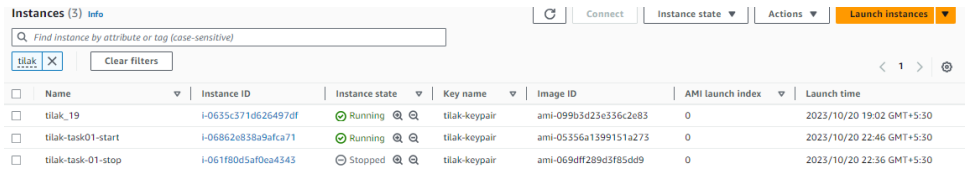


Now we will update the Tags for EC2 instance to Auto_start and Auto_Start the instances





Run the Code Manually to test the instances are starting and stopping.



Done