Assignment 8 – Lambda

Today's tasks:

1. Clean up everything that you created in your AWS account including VPC, NAT gateway, Elastic IP, EC2, ALB, target groups, ASG etc.
2. Create a "YourName" lambda.
3. Implement versioning and alias on the lambda. Different versions will print out different logs. In the alias, do 50:50 routing to the lambda versions.
4. Create a "Course" Lambda.

Bonus task:

5. Trigger Lambda instead of SNS in the S3 event notification. Don't forget to add resource based policy to the Lambda that allows SNS to invoke the Lambda.

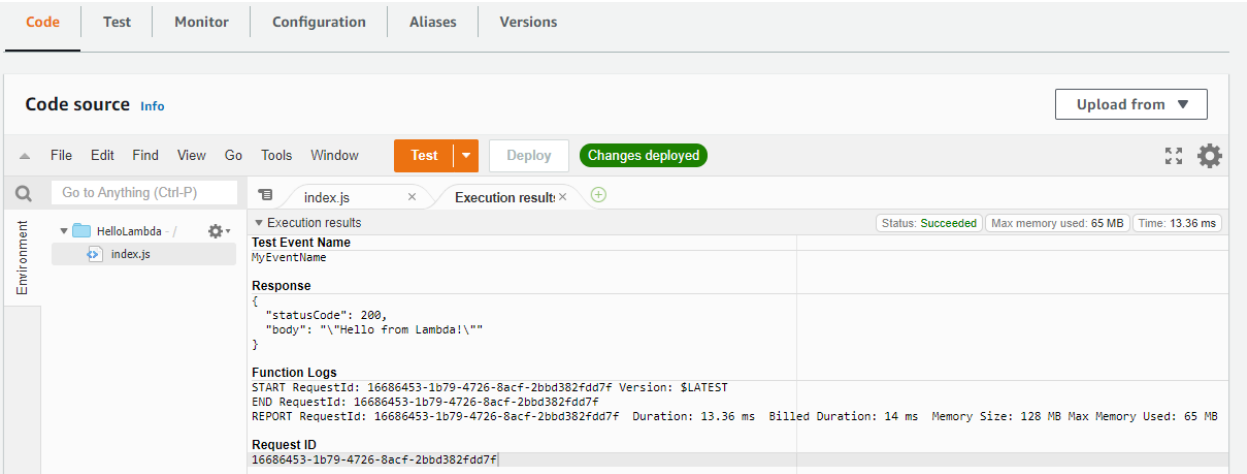
Submit items below in one pdf file:

1. Submit screenshots.

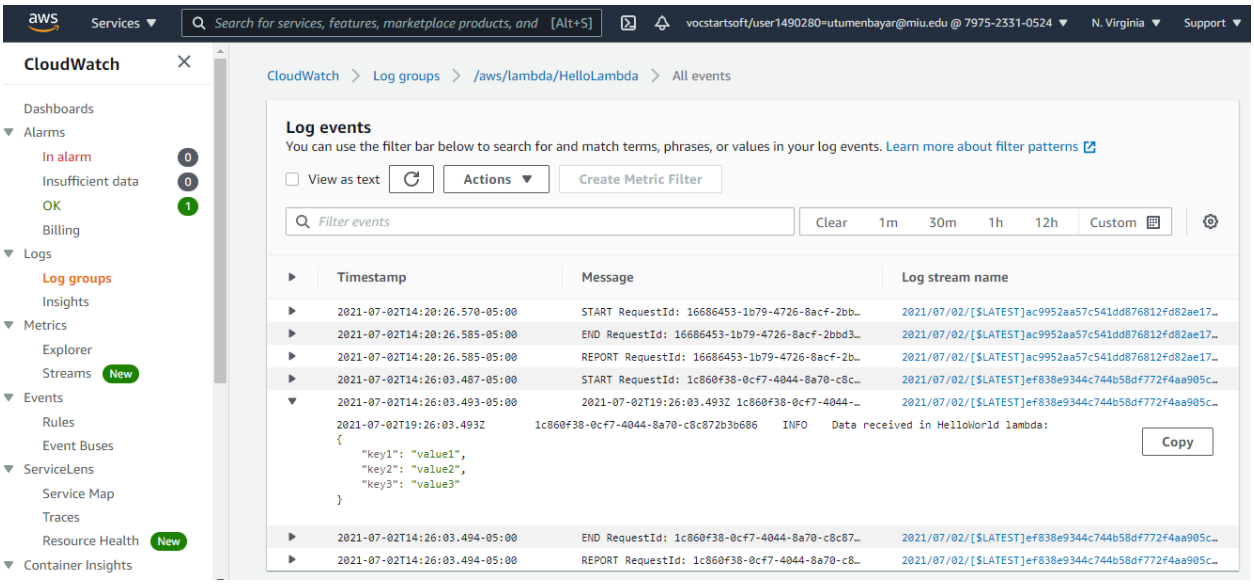
Insturction 1. Create a Lambda

Create your first lambda **HelloLambda** in NodeJS**.** Refer:
https://docs.aws.amazon.com/lambda/latest/dg/getting-started-create-function.html

1. After creation, click on the index.js
2. Remove **// TODO implement**.
3. Log the event out on log. **console.log(JSON.stringify(event));**
4. Change **JSON.stringify('Hello from Lambda!')** with **JSON.stringify('Hello Lambda!')**
5. Hit **Deploy**
6. Click on **Test**
7. In Configure test event popup, give it name **MyEventName**, click on **Create.**
8. Click on **Test** again. Under the hood, it submits the data in the event that you created.
9. Submit the screenshot after execution like below



10. Click on **Monitor** tab
11. Click on **View logs in CloudWatch**. It redirects to AWS CloudWatch, Log Group named **/aws/lambda/HelloLambda** that is created when you created the lambda. Click on the orange **Search log group** button. That is how we see the logs on the cloud on AWS.
12. Submit the screenshot of the log.



13. Create a lambda for your website **<YourName>Lambda.** Submit the same screenshots.
    a. Copy code for <YourName>Lambda below
14. Create a lambda class **CourseLambda**. Submit the same screenshots.
    a. Copy code for CourseLambda below

The **HelloLambda** NodeJS code below on the index.js file:

```
exports.handler = async (event) => {
    console.log("Data received in HelloWorld lambda: " + JSON.stringify(event));
    const response = {
        statusCode: 200,
        body: JSON.stringify('Hello from Lambda!'),
    };
    return response;
};
```

The **<YourName>Lambda** NodeJS code below on the index.js file:

```
exports.handler = async (event) => {
    console.log("Data received in <YourName> lambda: " + JSON.stringify(event));
    const response = {
        statusCode: 200,
        body: JSON.stringify('Hello from Your Name Lambda!'),
    };
    return response;
};
```

The **CourseLambda** NodeJS code below on the index.js file:

```
exports.handler = async (event) => {
    console.log("Data received in Course lambda: " + JSON.stringify(event));
    const response = {
        statusCode: 200,
        body: JSON.stringify('Hello from Course Lambda!'),
    };
    return response;
};
```