Assignment 15

Create Serverless Computing Service using AWS Lambda

📝 Objective

To create and deploy a simple AWS Lambda function that prints a custom welcome message — demonstrating serverless computing on AWS.

🚀 Part 1: Creating the Lambda Function

✅ Step 1: Open Lambda Service

1. Log in to your AWS Console: https://aws.amazon.com/console/
2. In the **Search bar**, type **Lambda** and click on it.

Explanation:
AWS Lambda lets you run code without managing servers. You only focus on writing the function logic.

✅ Step 2: Create the Function

1. Click on the **"Create function"** button.
2. Select **"Author from scratch."**

✅ Step 3: Set Function Details

- **Function name**: e.g., func_x1
- **Runtime**: Choose **Python 3.9** or any preferred runtime (Node.js, etc.)

Tip: The runtime determines what programming language your Lambda function will use.

3. Scroll down and leave all other settings as **default**.
4. Click **Create function**.

✅ Step 4: Modify the Code

1. Wait for the function page to load. You'll be taken to the function dashboard.
2. Under the **Code** tab, locate and open the index.mjs or main file (for Python, it might be lambda_function.py).

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3. Replace any occurrence of the word **“lambda”** with **“sneha”** in the sample code.

✍ **Example (Node.js)**:

```
export const handler = async (event) => {
   const response = {
      statusCode: 200,
      body: JSON.stringify('Welcome from Sneha!'),
   };
   return response;
};
```

4. Click **File** > **Save** to save the code.

Part 2: Test the Lambda Function

✅ Step 5: Create and Run a Test Event

1. Click on the **Test** button (top-right).
2. Select **“Create new test event.”**
3. Give it an **Event name**, e.g., eve1.
4. Leave the default JSON data as is (you don’t need to change anything).
5. Click **Save**.
6. Now click **Test** to execute the Lambda function.

 Note: If you don’t see your message change (e.g., “sneha”), it means you haven’t deployed the latest code yet.

✅ Step 6: Deploy and Re-Test

1. Click the **Deploy** button to apply your code changes.
2. Click **Test** again to see the updated result.

🌐 Part 3: Expose Your Lambda Function via URL

✅ Step 7: Create Function URL

1. Go to the **Configuration** tab.
2. Under the left-side menu, click **Function URL**.
3. Click **Create function URL**.
4. For **Auth type**, choose **None**.
5. Click **Save**.

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✅ Step 8: Test the URL

1. Once the Function URL is created, click on it.
2. A new browser tab opens, showing your Lambda function output (e.g., "Welcome from Sneha!").

⚠ If you see an error, ensure your function code returns a valid HTTP response.

Part 4: Clean Up Resources

To avoid unnecessary AWS charges:

✅ Step 9: Delete Resources

1. Go back to **Configuration > Function URL** and **delete the URL**.
2. Then return to the **Lambda dashboard**, select your function, and click **Delete**.

Expected Output

- After deployment and testing, your function should return:

"Welcome from Sneha!"

- You should be able to view this output via the Test button and directly from the Function URL.