**Lab Steps**

Task 1: Sign in to AWS Management Console

1. Click on the  button, and you will get redirected to AWS Console in a new browser tab.
2. On the AWS sign-in page,
   * Leave the Account ID as default. Never edit/remove the 12 digit Account ID present in the AWS Console. otherwise, you cannot proceed with the lab.
   * Now copy your **User Name** and **Password** in the Lab Console to the **IAM Username and Password** in AWS Console and click on the **Sign in** button.
3. Once Signed In to the AWS Management Console, Make the default AWS Region as **US East (N. Virginia) us-east-1.**

**Note :**If you face any issues, please go through [**FAQs and Troubleshooting for Labs**](https://www.whizlabs.com/labs/support-document/faqs-and-troubleshooting).

Task 2: Create a Lambda Function

1. Navigate to the   menu at the top, then click on **Lambda** under the **Compute** section.
2. Click on 
   * Select **Author from Scratch**
   * Function Name : Enter ***MyStepFunction\_lambda***
   * Runtime : Select **Python 3.8**
   * Under **Change default execution role**
   * Choose **Use an existing role**
   * Select **Lambda\_role\_<RANDOM\_NUMBER>**
   * Leave other options as default.
   * Click on 
3. Once the Lambda Function is created successfully, it will look like the screenshot below:

Graphical user interface, application

Description automatically generated

1. Under **Function code**:
   * Replace the existing code with the below python code.

|  |
| --- |
| import json  def lambda\_handler(event, context):  # TODO implement  return {  'statusCode': 200,  'body': json.dumps('You have successfully invoked the lambda function from Step Function.')  } |

1. Now save the code using by clicking on the **Deploy**button.
2. Now **copy** your lambda function **ARN** form the top right corner and place it in a text editor. This arn will be used later.

Graphical user interface, text, application

Description automatically generated

Task 3: Create a State Machine in Step Function

1. Navigate to the    menu at the top, then click on **Step Functions** in the **Application Integration** section.
2. Click on the  button (three parallel lines) in the top left corner and select 
3. Click on 
4. Define State Machine : select **Write your workflow in code**
5. Type : Select **Standard**
6. Definition : Replace the existing state machine json code with the below one.

|  |
| --- |
| {  "Comment": "Sample State machine code to invoke a lambda function",  "StartAt": "invokeLambda",  "States": {  "invokeLambda": {  "Type": "Task",  "Resource": "arn:aws:lambda:us-east-1:757712384777:function:MyStepFunction\_lambda",  "End": true  }  }  } |

1. Now replace the entire value of **Resource** key with the **lambda ARN** that you have copied and placed in the text edit.

Graphical user interface, text, application

Description automatically generated

1. Now on the right side the flow diagram will be as follows :

A picture containing bubble chart

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**Note :** if this image is not displayed, please click the  refresh button, to reload the diagram.

1. Now click on the 
2. Specify details:
   * Name : Enter ***MyStateMachine***
   * Permissions :
     + Execution role : select 
     + Existing roles : select **stepFunction\_lambda\_role-RANDOM\_NUMBER**
   * Leave everything as default.
3. Click on the 

Task 4: Test the Step function

1. Click on the 
2. New execution :
   * Enter an execution name : Enter ***SampleTest1***
   * Input : leave as default.
3. Click on the 
4. In the Graph inspector diagram, the colour of invokeLambda will become green (success) as shown in the image below.

Diagram

Description automatically generated

1. Click on the **invokeLambda** step.

Diagram

Description automatically generated

1. You will be able to see the below details in the right side column.

Graphical user interface, text, application, email

Description automatically generated

1. Now click on the **step output** tab in the right side and you will see the output from our lambda function.

Graphical user interface, text, application, email

Description automatically generated

**Completion and Conclusion**

1. You have successfully created a Lambda function.
2. You have successfully created a state machine in step function.
3. You have successfully tested the step function.

**End Lab**