



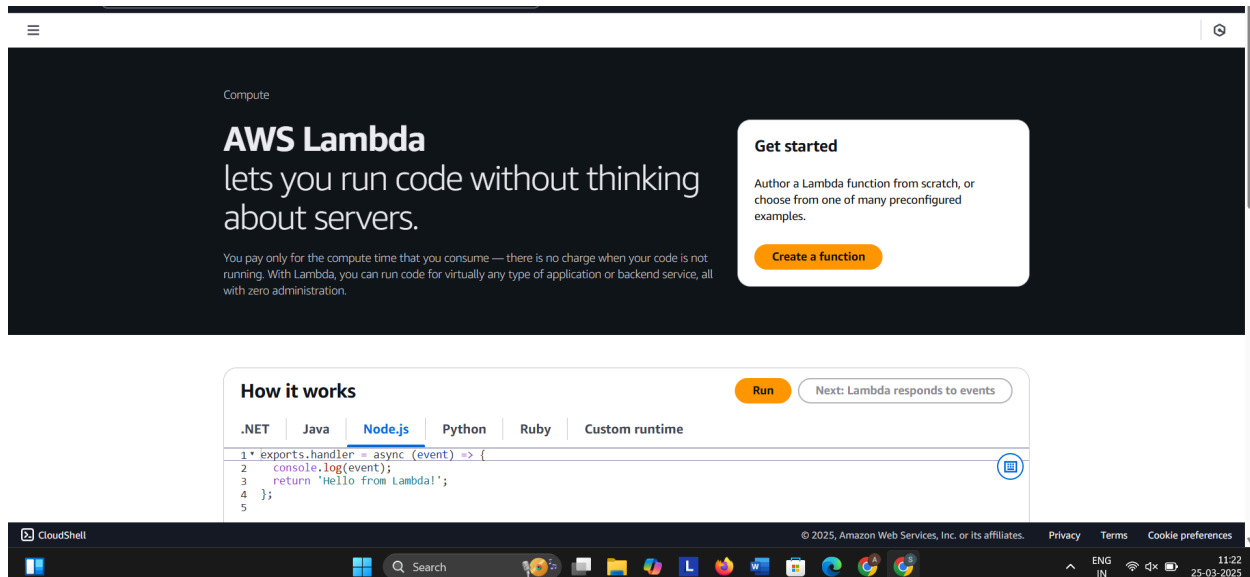
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## Practical 7(b)

**(Create a REST API with a Lambda proxy integration - Amazon API Gateway)**

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## Step1 : Sign in to the Lambda console

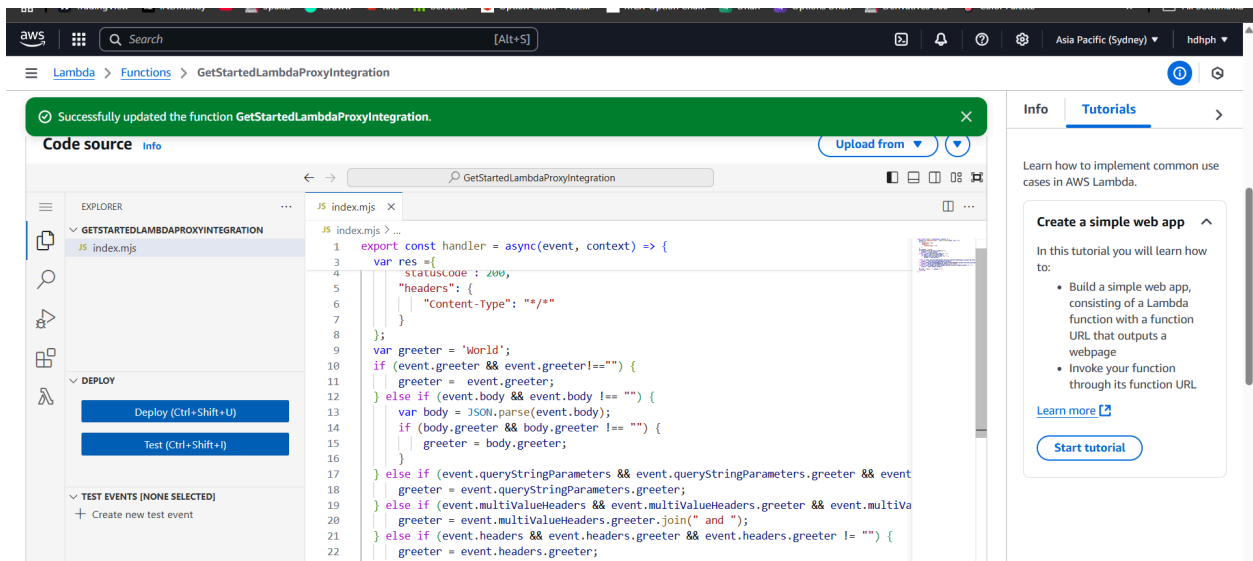


## Step2 : Choose Functions in the navigation pane.

1. Choose Create function.
2. Choose Author from scratch.
3. Under Basic information, do the following:
  - a. In Function name, enter **GetStartedLambdaProxyIntegration**.
  - b. For Runtime, choose either the latest supported Node.js or Python runtime.
  - c. Under Permissions, expand Change default execution role. For Execution role dropdown list, choose Create new role from AWS policy templates.
  - d. In Role name, enter **GetStartedLambdaBasicExecutionRole**.

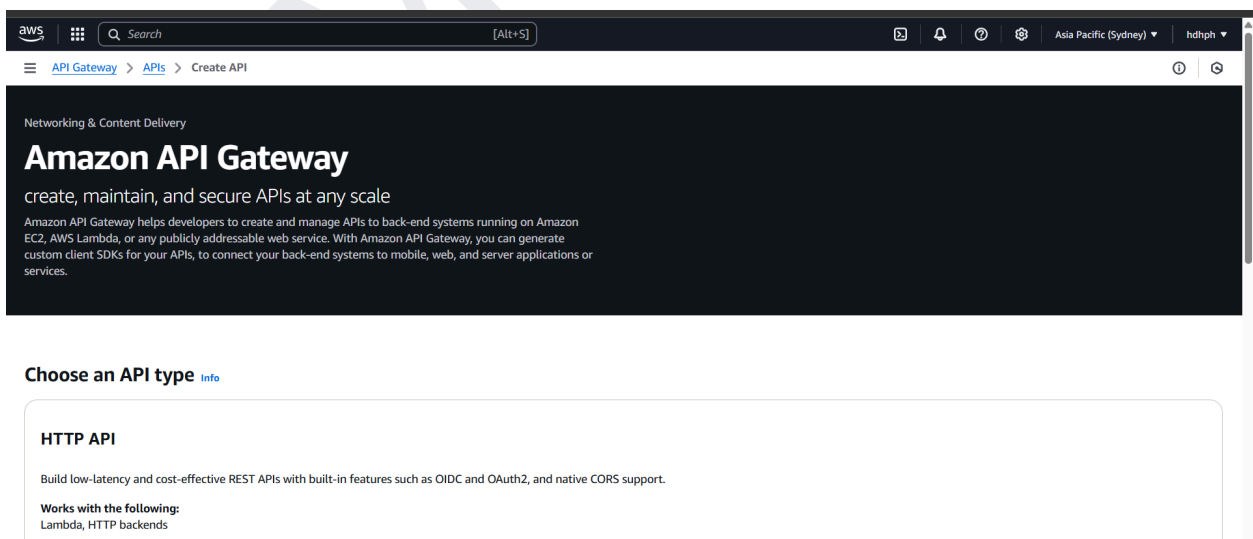
Step 3 : Choose Create function.

Step 4 : Under Function code, in the inline code editor, change the code .



# Create a "Hello, World!" API

Step 5 : Sign in to the API Gateway console.



Step 6 : Under REST API, choose Build.

1. For API name, enter **LambdaProxyAPI**.
2. (Optional) For Description, enter a description.
3. Keep API endpoint type set to Regional.
4. Choose Create API.

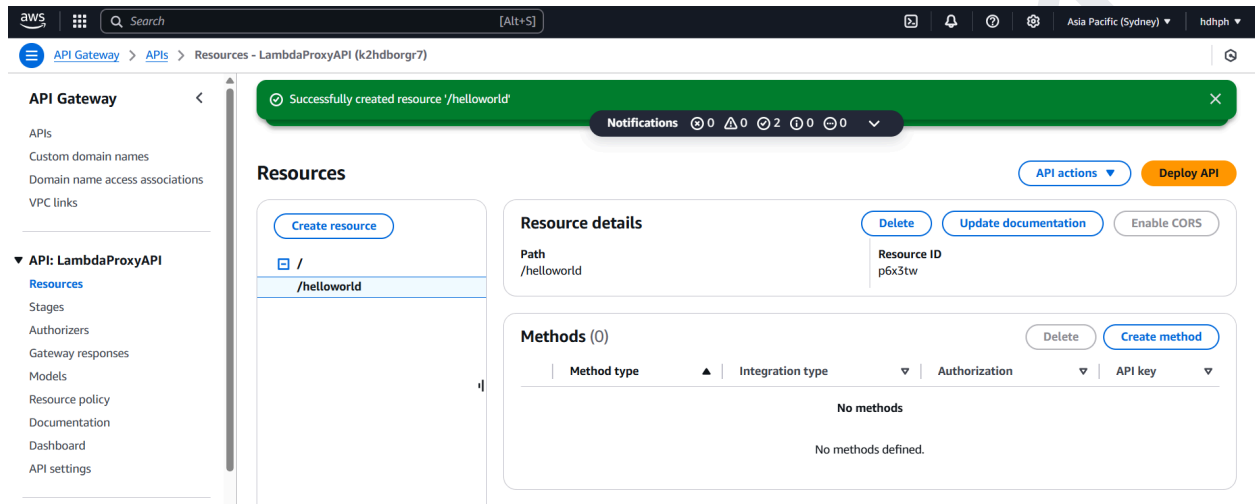
The screenshot shows the 'Create REST API' page in the AWS Management Console. The breadcrumb trail is 'API Gateway > APIs > Create API > Create REST API'. The page title is 'Create REST API' with an 'Info' link. Under 'API details', there are three radio button options: 'New API' (selected), 'Clone existing API', and 'Import API'. Below these, the 'API name' field contains 'LambdaProxyAPI'. The 'Description - optional' field is empty. The 'API endpoint type' dropdown is set to 'Regional'. A note at the bottom states: 'Regional APIs are deployed in the current AWS Region. Edge-optimized APIs route requests to the nearest CloudFront Point of Presence. Private APIs are only accessible from VPCs.'

Step 7 : Choose Create resource.

The screenshot shows the 'Resources' page for the 'LambdaProxyAPI' in the AWS Management Console. A green success message at the top reads: 'Successfully created REST API 'LambdaProxyAPI' (k2hdborg7)'. The left sidebar shows the 'API Gateway' menu with 'Resources' selected. The main content area has a 'Create resource' button and a table with one resource: a path '/' with resource ID 'dircswen7h'. To the right, the 'Resource details' section shows the path and ID. Below that, the 'Methods (0)' section shows 'No methods defined' with buttons for 'Delete' and 'Create method'. At the top right of the resource section are buttons for 'API actions', 'Deploy API', 'Update documentation', and 'Enable CORS'.

Step 8 : Choose Create resource.

1. Keep Proxy resource turned off.
2. Keep Resource path as /.
3. For Resource name, enter **helloworld**.
4. Keep CORS (Cross Origin Resource Sharing) turned off.
5. Choose Create resource.



**To create an ANY method**

1. Select the /helloworld resource, and then choose Create method.
2. For Method type, select ANY.
3. For Integration type, select Lambda function.
4. Turn on Lambda proxy integration.
5. For Lambda function, select the AWS Region where you created your Lambda function, and then enter the function name.
6. To use the default timeout value of 29 seconds, keep Default timeout turned on.  
To set a custom timeout, choose Default timeout and enter a timeout value between 50 and 29000 milliseconds.
7. Choose Create method.

## Create method

### Method details

#### Method type

ANY

#### Integration type

☒ Lambda function

Integrate your API with a Lambda function.



☐ HTTP

Integrate with an existing HTTP endpoint.



☐ Mock

Generate a response based on API Gateway mappings and transformations.



☐ AWS service

Integrate with an AWS Service.



☐ VPC link

Integrate with a resource that isn't accessible over the public internet.



☒ Lambda proxy integration

Send the request to your Lambda function as a structured event.

#### Lambda function

# Deploy and test the API

## To deploy your API

1. Choose Deploy API.
2. For Stage, select New stage.
3. For Stage name, enter **test**.
4. (Optional) For Description, enter a description.
5. Choose Deploy.
6. Under Stage details, choose the copy icon to copy your API's invoke URL.

API Gateway > APIs > Resources - LambdaProxyAPI (k2hdborg7)

PI Gateway

Pls

ustom domain names

omain name access associations

PC links

PI: LambdaProxyAPI

resources

tags

uthorizers

ateway responses

odels

esource policy

ocumentation

ashboard

PI settings

sage plans

Successfully created method 'ANY' in 'helloworld'. Redeploy your API for the update to take effect.

Resources

Create resource

/

/helloworld

ANY

/helloworld - ANY - Method execution

ARN: arn:aws:execute-api:southeast-2:703671894857:k2hdborg7/\*/helloworld

Resource ID: p6x3tw

API actions

Deploy API

Update documentation

Delete

Client

Method request

Integration request

Method response

Integration response

Proxy integration

Method request

Integration request

Integration response

Method response

Test

Deploy API

Create or select a stage where your API will be deployed. You can use the deployment history to revert or change the active deployment for a stage. [Learn more](#)

Stage

\*New stage\*

Stage name

test

A new stage will be created with the default settings. Edit your stage settings on the **Stage** page.

Deployment description

Cancel

Deploy



TradingViewINDmoneySpaisaGrowwKiteScreenerOption Chain - NSE...MCX-Option ChainDhanOptions DhanDerivatives 360Color Palette

awsSearch[Alt+S]

API GatewayAPIsLambdaProxyAPI (k2hdborg7)Stages

API Gateway

APIsCustom domain namesDomain name access associationsVPC links

▼ API: LambdaProxyAPIResourcesStagesAuthorizersGateway responsesModelsResource policyDocumentationDashboardAPI settings

Usage plansAPI keys

test

Stage detailsInfoEdit

Stage name

test

Rate Info

10000

Cache clusterInfo

Inactive

Burst Info

5000

Default method-level caching

Inactive

Invoke URL

https://k2hdborg7.execute-api.ap-southeast-2.amazonaws.com/test

Active deployment

sbd0ei on March 21, 2025, 21:26 (UTC+05:30)

Successfully created deployment for LambdaProxyAPI. This deployment is active for test.

Successfully created method 'ANY' in 'helloworld'. Redeploy your API for the update to take effect.

Notifications002000

Stage actionsCreate stage

22MP100

