

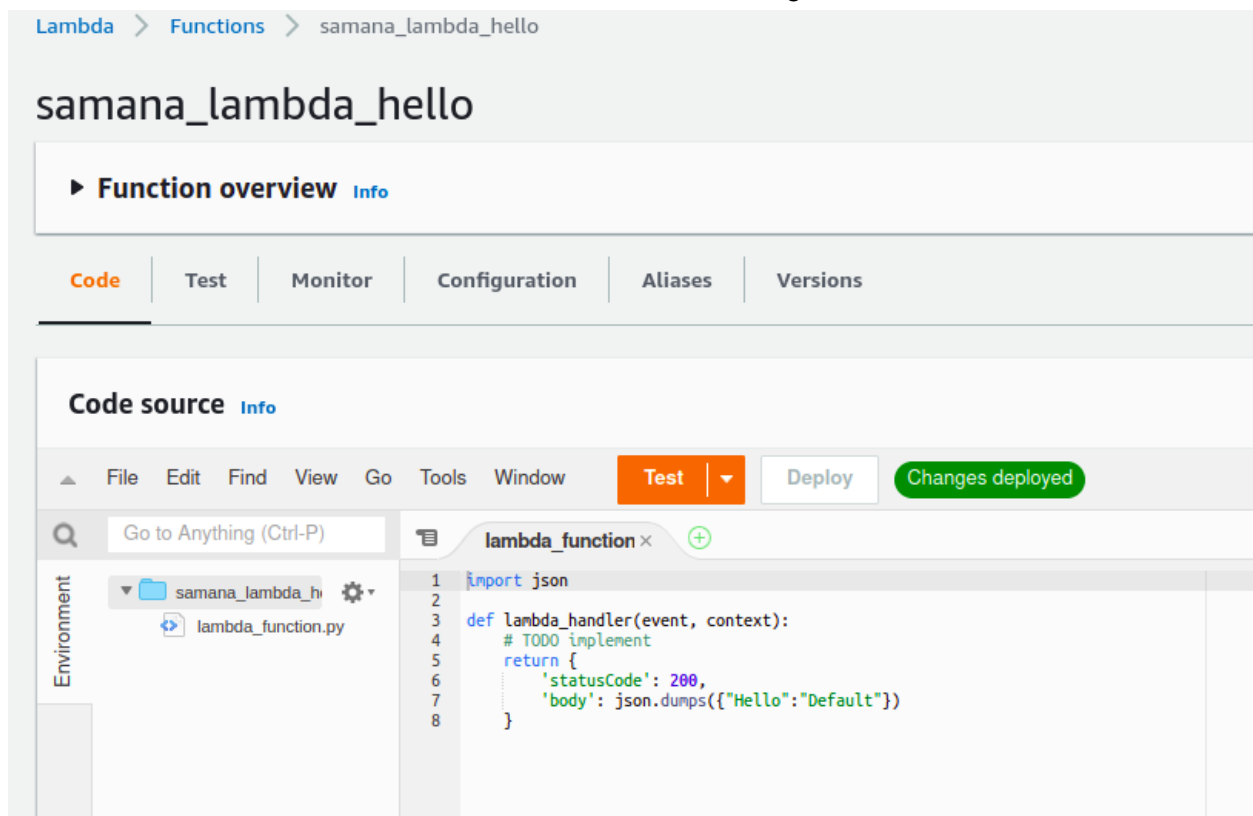
## 1.Create two lambda functions

- First lambda function returns 200 response as {"Hello":"Default"}
- Second lambda function returns 200 response as {"Hello": "{Dynamic route name}"}

## 2.Configure API gateway with that hits first lambda function on / and the second lambda function on /\*

1

The first lambda function was created which had the following block of code

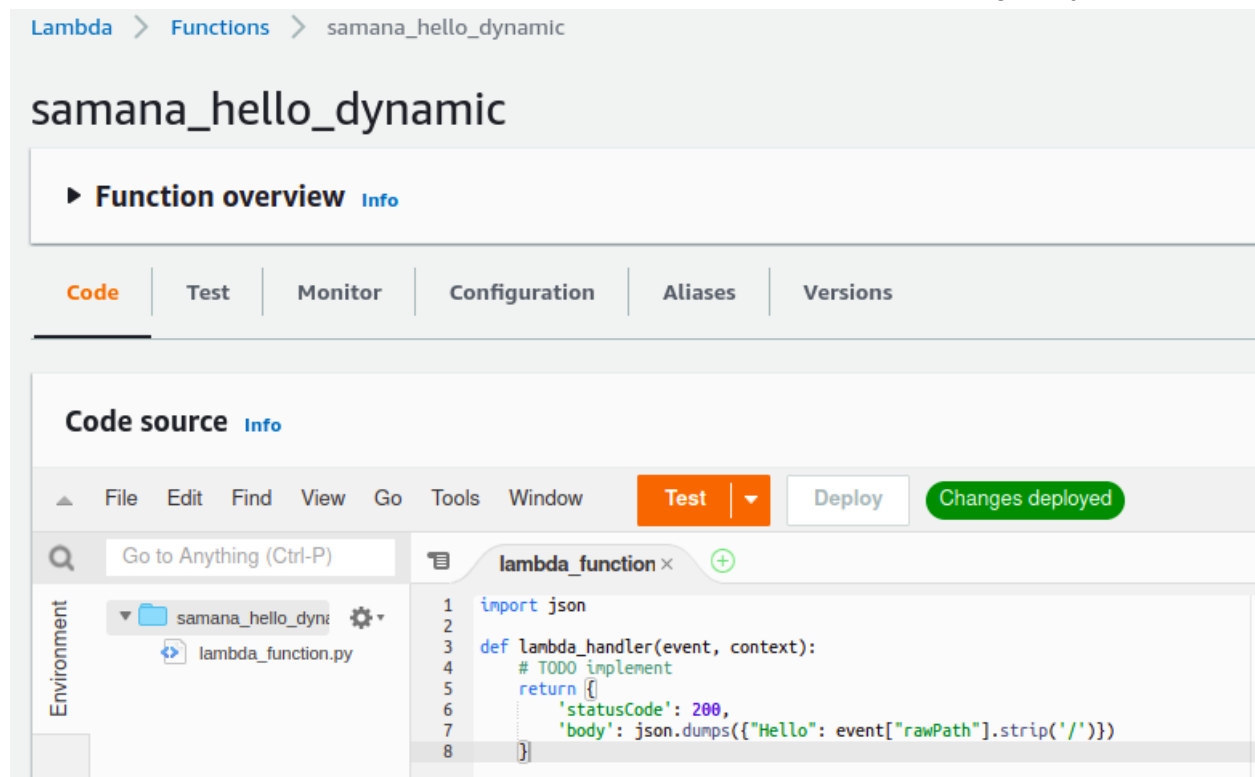


The screenshot displays the AWS Lambda console interface for a function named `samana_lambda_hello`. The breadcrumb navigation shows `Lambda > Functions > samana_lambda_hello`. Below the function name, there is a `Function overview` link and a tabbed interface with `Code`, `Test`, `Monitor`, `Configuration`, `Aliases`, and `Versions`. The `Code` tab is active, showing the `Code source` section. Below this, there is a toolbar with `File`, `Edit`, `Find`, `View`, `Go`, `Tools`, `Window`, `Test`, `Deploy`, and a `Changes deployed` button. The `Test` button is highlighted. The main editor area shows the Python code for the `lambda_handler` function, which returns a 200 status code and a JSON body containing `{\"Hello\": \"Default\"}`.

```
1 import json
2
3 def lambda_handler(event, context):
4     # TODO implement
5     return {
6         'statusCode': 200,
7         'body': json.dumps({'Hello': 'Default'})
8     }
```

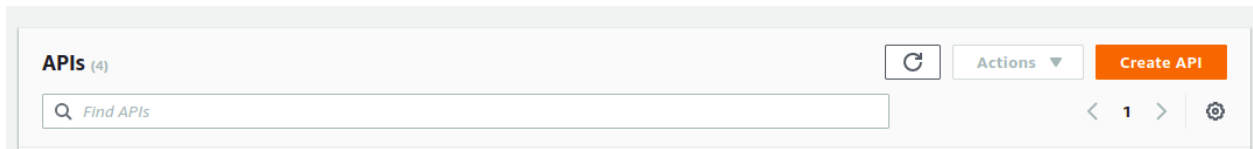
The second lambda function was created as follows:

The code returns Hello and the pathname entered after the root url of the target in json format.

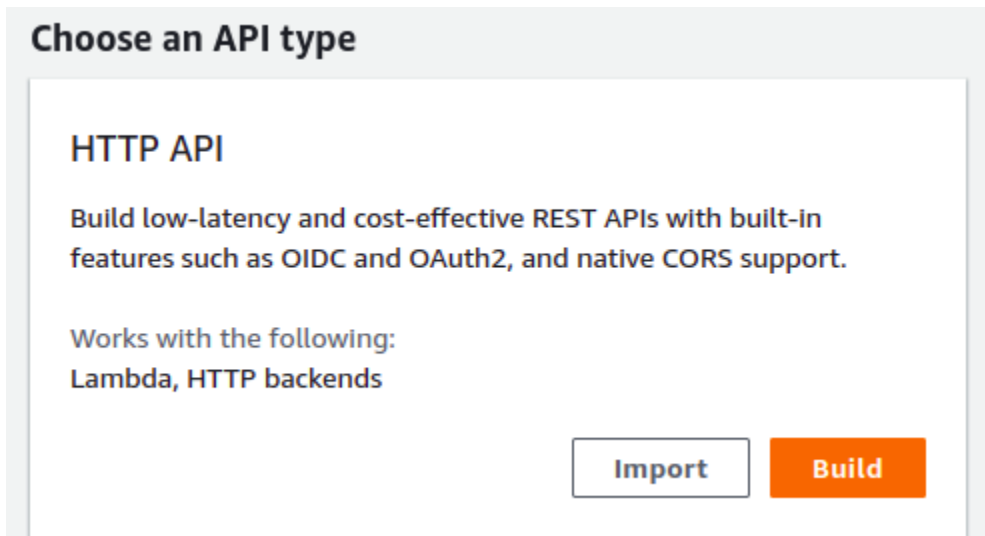


2

Now, we create an API as follows:



We choose the API type as HTTP API



We create two integrations i.e. our previously created lambda functions. These are the backend services that our API will communicate with.

## Create and configure integrations

Specify the backend services that your API will communicate with. These are called integrations. For a Lambda integration, API Gateway invokes the Lambda function and responds with the response from the function. For HTTP integration, API Gateway sends the request to the URL that you specify and returns the response from the URL.

### Integrations [Info](#)

Lambda ▼

Remove

AWS Region

Lambda function

Version [Learn more.](#)

us-east-1 ▼

Q samana\_lambda\_hello X

2.0 ▼

Lambda ▼

Remove

AWS Region

Lambda function

Version [Learn more.](#)

us-east-1 ▼

Q samana\_hello\_dynamic X

2.0 ▼

Add integration

Now we configure routes so that our API hits first lambda function on / and the second lambda function on /\*

## Configure routes

**Configure routes** [Info](#)

API Gateway uses routes to expose integrations to consumers of your API. Routes for HTTP APIs consist of two parts: an HTTP method and a resource path (e.g., GET /pets). You can define specific HTTP methods for your integration (GET, POST, PUT, PATCH, HEAD, OPTIONS, and DELETE) or use the ANY method to match all methods that you haven't defined on a given resource.

Method	Resource path	Integration target	
ANY ▼	/	→ samana_lambda_hello ▼	<button>Remove</button>
ANY ▼	/ {dynamic+}	→ samana_hello_dynamic ▼	<button>Remove</button>
<button>Add route</button>			

Thus an API gateway was created with the following url:  
<https://z2hphqr6xf.execute-api.us-east-1.amazonaws.com/>

### samanaAPIgateway Edit

#### API details

API ID	Protocol	Created
z2hphqr6xf	HTTP	2021-12-15
Description	Default endpoint	
No Description	Enabled	

#### Stages for samanaAPIgateway

Stage name	Invoke URL	Attached deployment	Auto deploy	Last updated
\$default	<a href="https://z2hphqr6xf.execute-api.us-east-1.amazonaws.com/">https://z2hphqr6xf.execute-api.us-east-1.amazonaws.com/</a>	4w3fxf	enabled	2021-12-15

After creating the API, triggers were automatically created on our lambda functions as follows:

Lambda > Functions > samana\_lambda\_hello

## samana\_lambda\_hello

► Function overview [Info](#)

Code | Test | Monitor | **Configuration** | Aliases | Versions

General configuration

**Triggers**


Permissions


Destinations

Environment variables

Tags

VPC

**Triggers (1)**  [Enable](#) [Disable](#)

<input type="checkbox"/>	Trigger
<input type="checkbox"/>	<div><b>API Gateway: samanaAPIgateway</b> arn:aws:execute-api:us-east-1:949263681218:z2hphqr6xf/*/*/ API endpoint: <a href="https://z2hphqr6xf.execute-api.us-east-1.amazonaws.com/">https://z2hphqr6xf.execute-api.us-east-1.amazonaws.com/</a> <a href="#">► Details</a></div>

Lambda > Functions > samana\_hello\_dynamic

## samana\_hello\_dynamic

► Function overview [Info](#)

Code | Test | Monitor | **Configuration** | Aliases | Versions

General configuration

**Triggers**


Permissions


Destinations

Environment variables

Tags

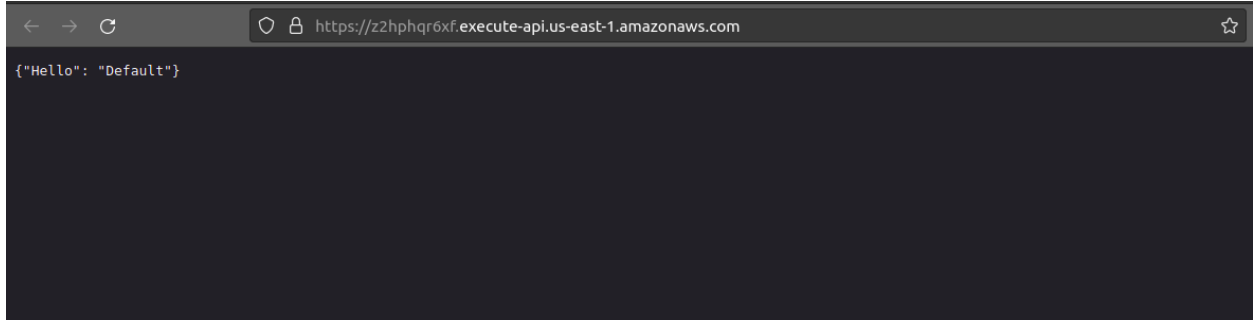
VPC

**Triggers (1)**  [Enable](#) [Disable](#) [Fix errors](#)

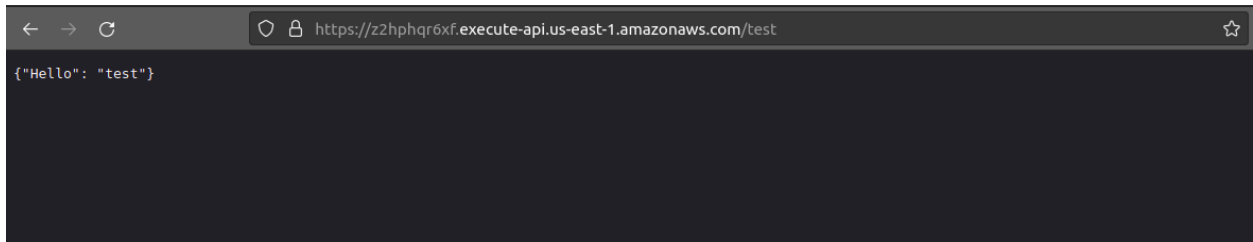
<input type="checkbox"/>	Trigger
<input type="checkbox"/>	<div><b>API Gateway: samanaAPIgateway</b> arn:aws:execute-api:us-east-1:949263681218:z2hphqr6xf/*/*/{dynamic+} API endpoint: <a href="https://z2hphqr6xf.execute-api.us-east-1.amazonaws.com/{dynamic+}">https://z2hphqr6xf.execute-api.us-east-1.amazonaws.com/{dynamic+}</a> <a href="#">► Details</a></div>

## Result:

Upon visiting the API invoke URL the following response was observed



Upon adding a path named test , `{"Hello": "test"}` result was observed



Similarly, Upon adding a path named test012345 , `{"Hello": "test012345"}` result was observed

