Don Bosco Institute of Technology, Mumbai 400070
Department of Information Technology
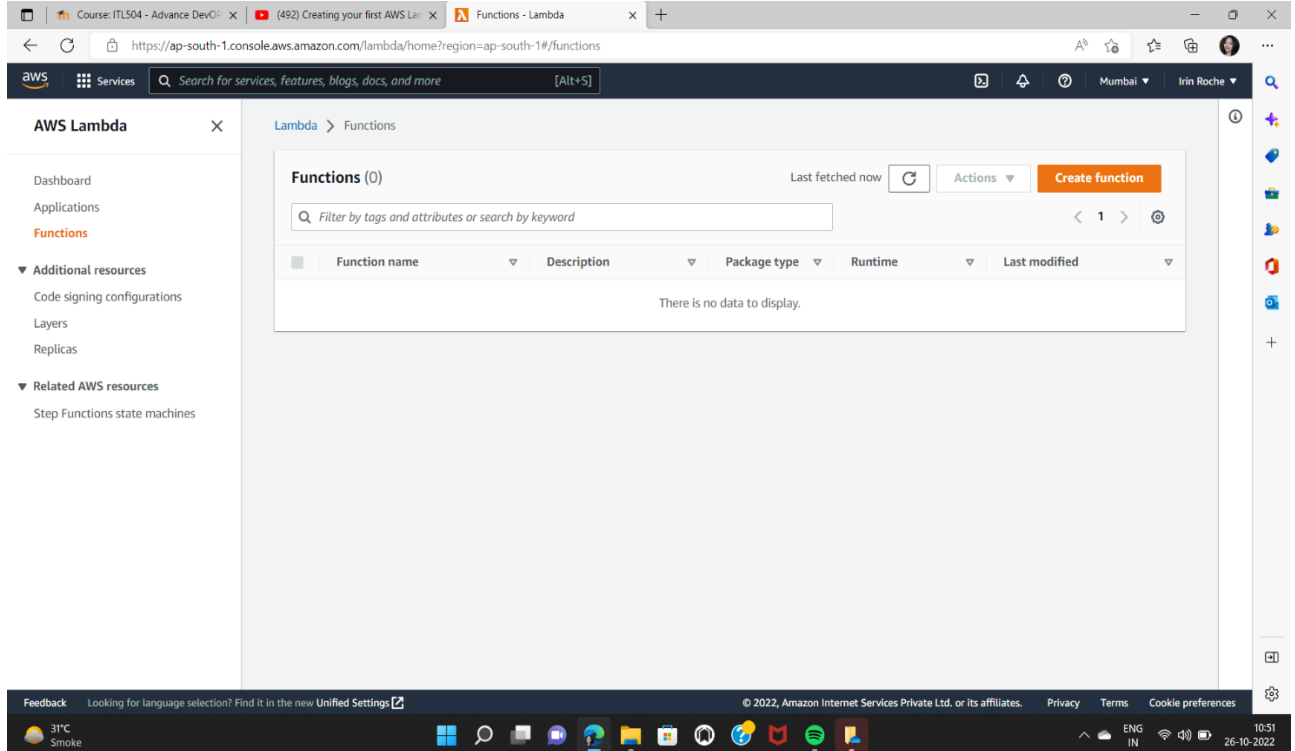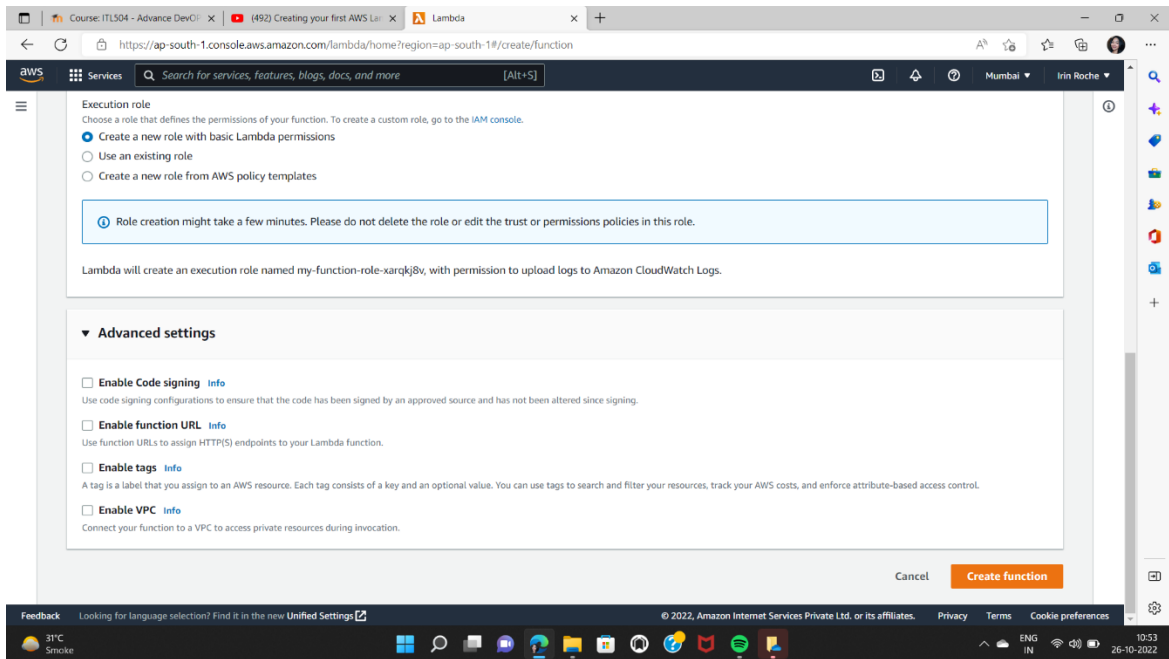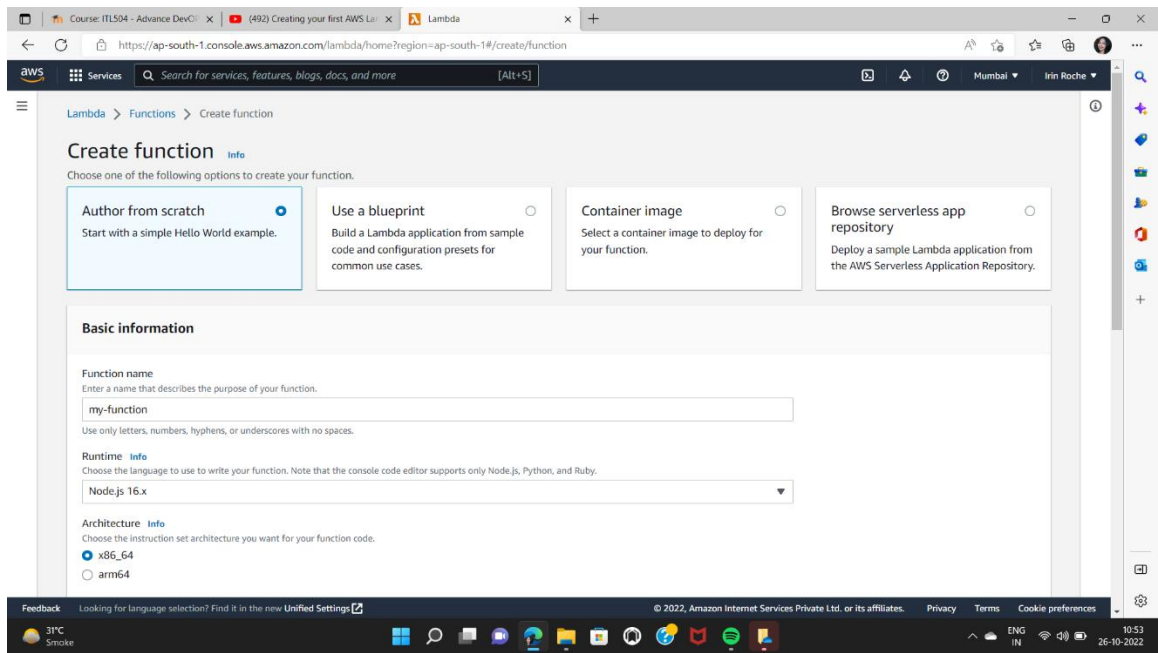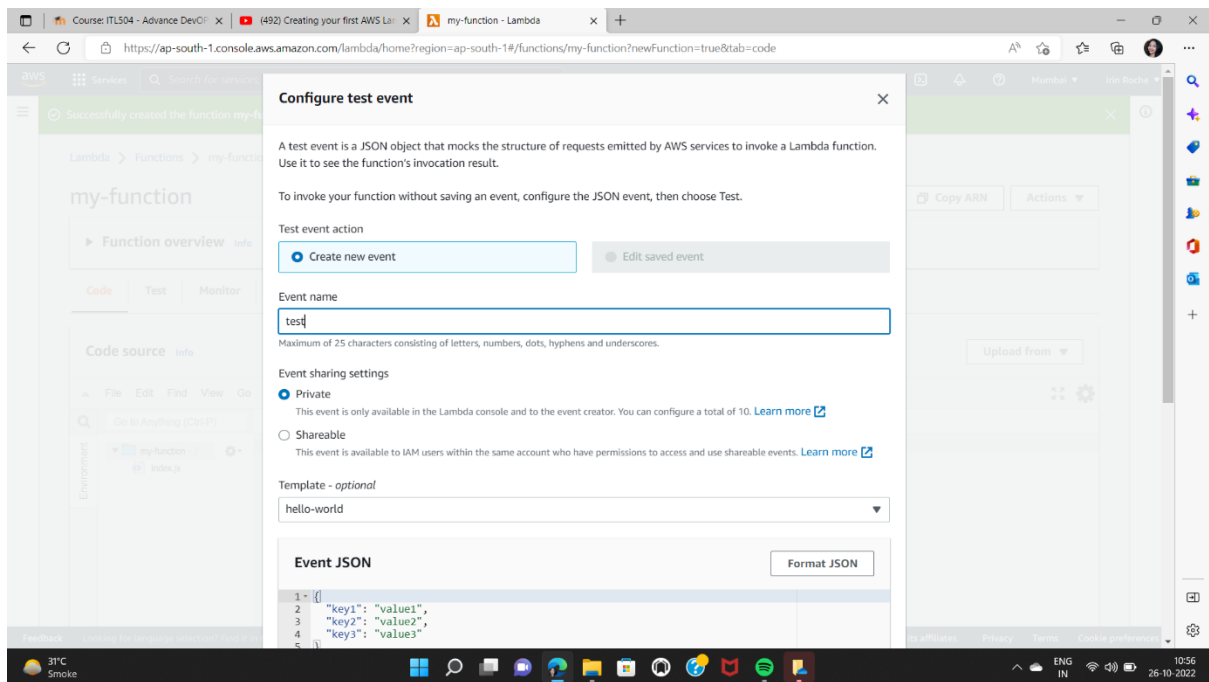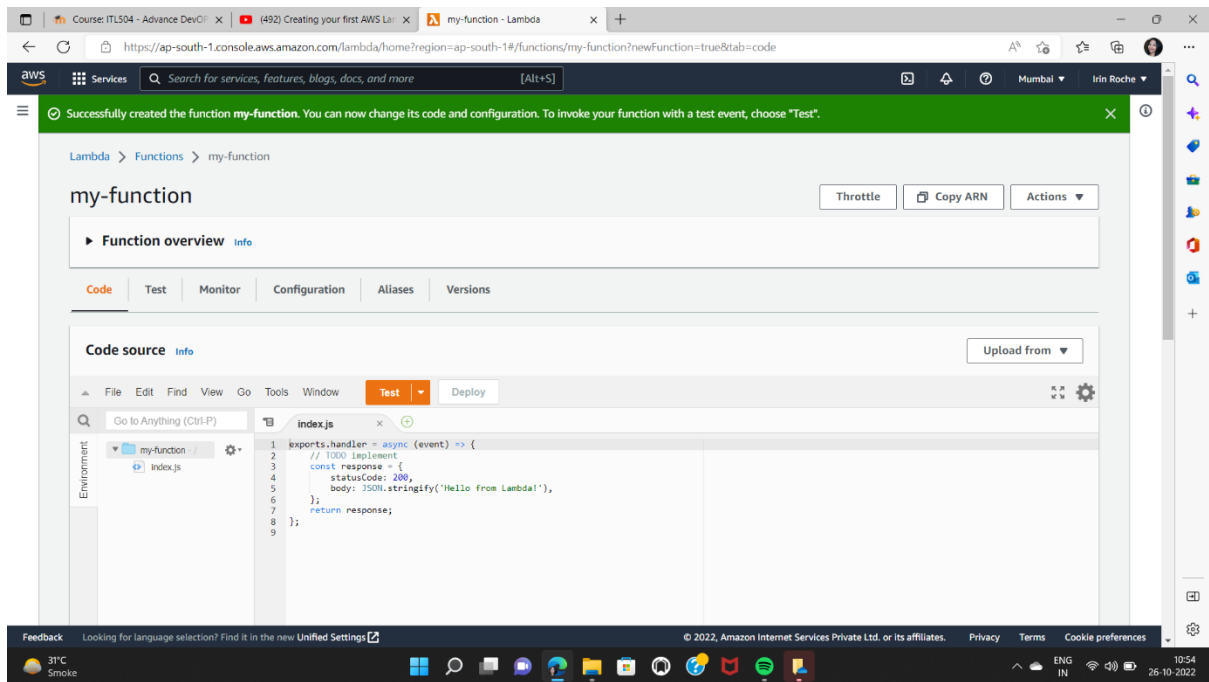
Name: Irin Roche
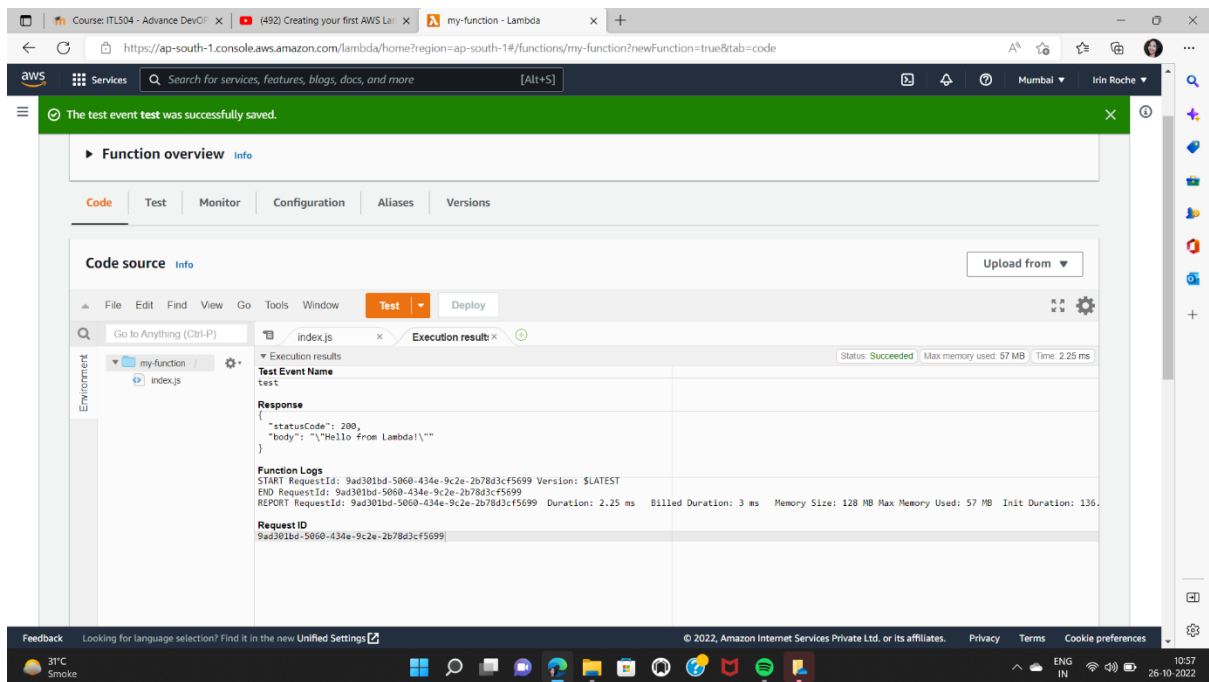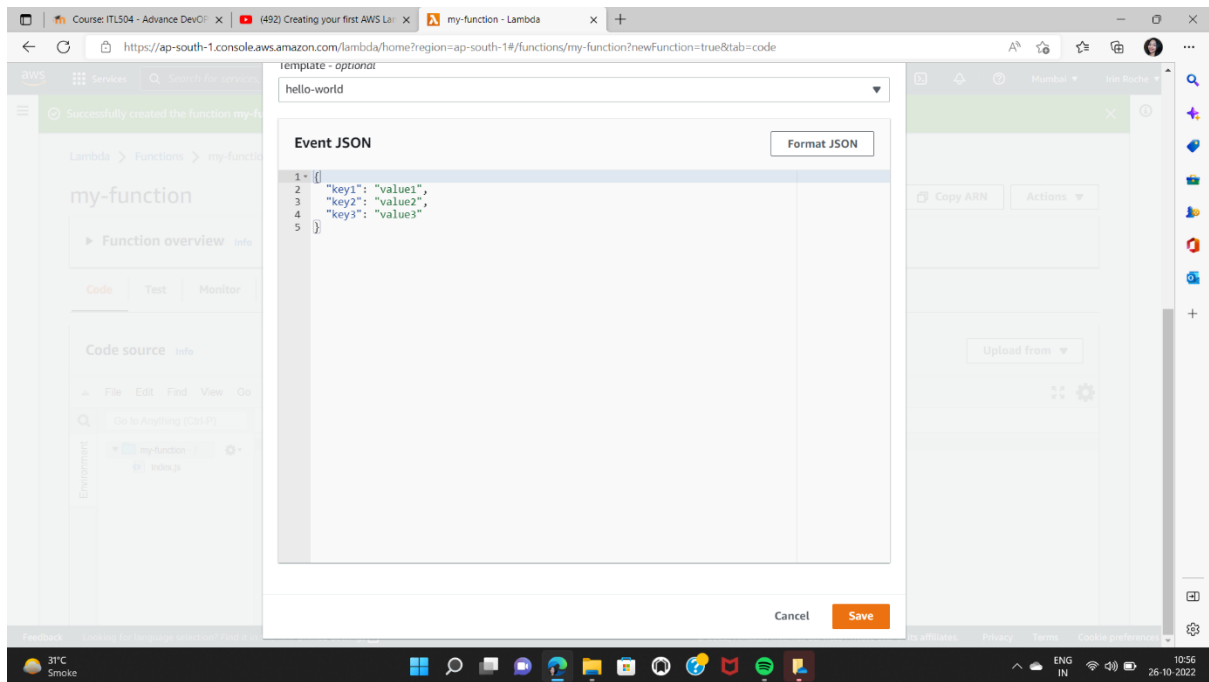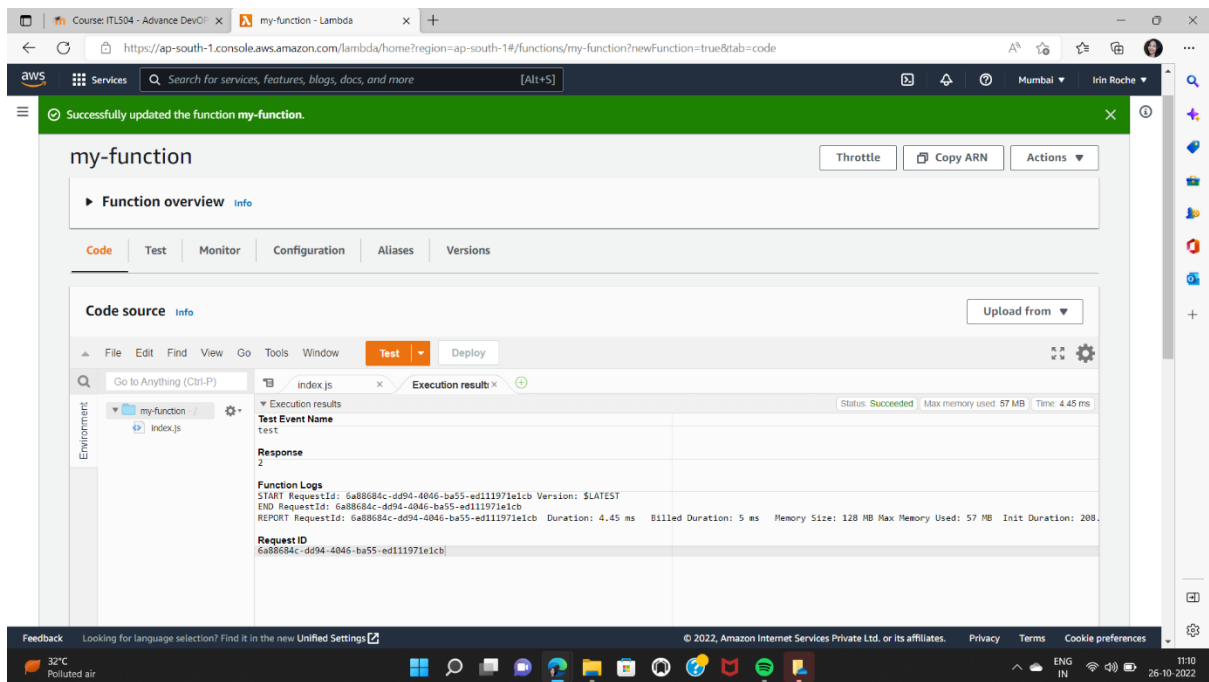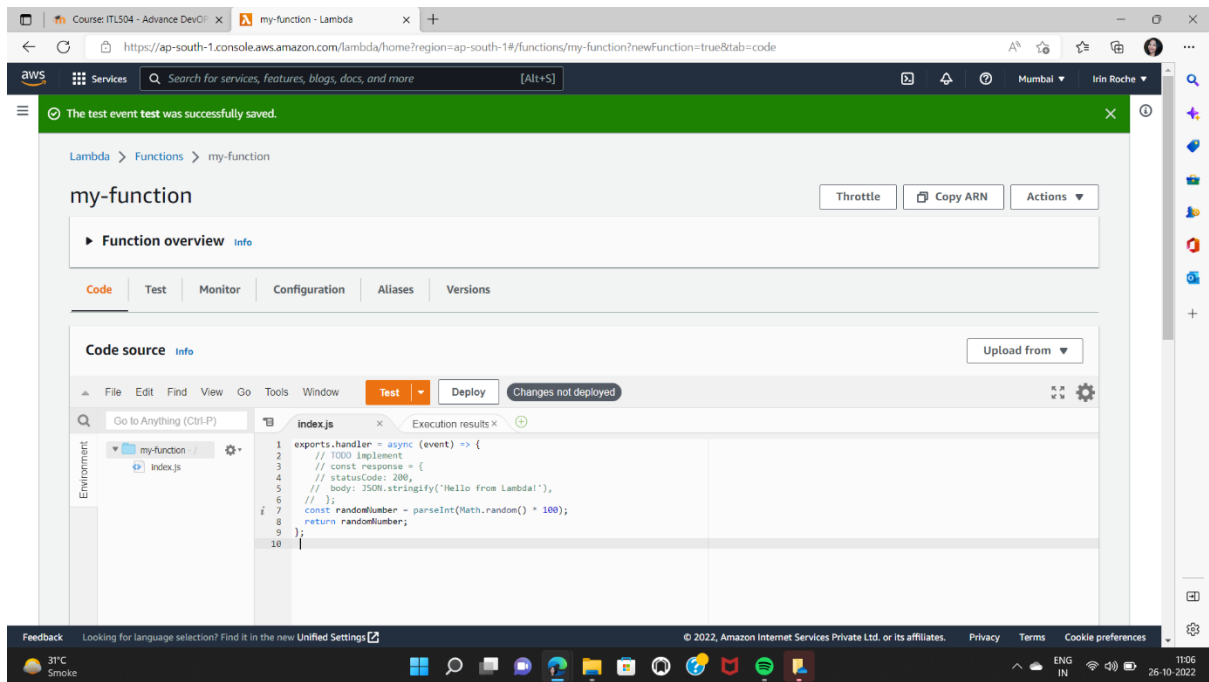## Sem: 5, Branch: IT, Batch: 1

Experiment No.11   22_Irin Roche

To understand AWS Lambda, its workflow, and various functions and create your first Lambda functions using Python / Java / Nodejs

aws   Services   Search for services, features, blogs, docs, and more   [Alt+S]   Mumbai ▼   Irin Roche ▼

⊘ Successfully created the function **my-function**. You can now change its code and configuration. To invoke your function with a test event, choose "Test".   ✕

Lambda > Functions > my-function

my-function

Throttle   ⎘ Copy ARN   Actions ▼

▶ **Function overview** Info

Code   Test   Monitor   Configuration   Aliases   Versions

Code source Info

Upload from ▼

File   Edit   Find   View   Go   Tools   Window   **Test** ▼   Deploy

Go to Anything (Ctrl-P)

index.js ✕

▼ 📁 my-function /   ⚙▾
   <> index.js

```
1  exports.handler = async (event) => {
2      // TODO implement
3      const response = {
4          statusCode: 200,
5          body: JSON.stringify('Hello from Lambda!'),
6      };
7      return response;
8  };
9
```

Configure test event   ✕

A test event is a JSON object that mocks the structure of requests emitted by AWS services to invoke a Lambda function. Use it to see the function's invocation result.

To invoke your function without saving an event, configure the JSON event, then choose Test.

Test event action

● Create new event   ○ Edit saved event

Event name

test

Maximum of 25 characters consisting of letters, numbers, dots, hyphens and underscores.

Event sharing settings

● Private
This event is only available in the Lambda console and to the event creator. You can configure a total of 10. Learn more ☐

○ Shareable
This event is available to IAM users within the same account who have permissions to access and use shareable events. Learn more ☐

Template - optional

hello-world ▼

Event JSON   Format JSON

```
1 ▾ {
2     "key1": "value1",
3     "key2": "value2",
4     "key3": "value3"
5
```

Top screenshot:

Course: ITL504 - Advance DevOl | my-function - Lambda | +

https://ap-south-1.console.aws.amazon.com/lambda/home?region=ap-south-1#/functions/my-function?newFunction=true&tab=code

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⊘ Successfully updated the function **my-function**.

my-function | Throttle | Copy ARN | Actions ▼

▶ Function overview Info

Code | Test | Monitor | Configuration | Aliases | Versions

Code source Info | Upload from ▼

File Edit Find View Go Tools Window | Test ▼ | Deploy

Go to Anything (Ctrl-P) | index.js ✕ | Execution result: ✕

my-function
 index.js

▼ Execution results | Status: Succeeded | Max memory used: 58 MB | Time: 22.80 ms

Test Event Name
test

Response
84

Function Logs
START RequestId: 491ff8b1-d8ee-4675-83c4-804479600549 Version: $LATEST
END RequestId: 491ff8b1-d8ee-4675-83c4-804479600549
REPORT RequestId: 491ff8b1-d8ee-4675-83c4-804479600549 Duration: 22.80 ms Billed Duration: 23 ms Memory Size: 128 MB Max Memory Used: 58 MB

Request ID
491ff8b1-d8ee-4675-83c4-804479600549

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32°C
Polluted air | 11:10 ENG IN 26-10-2022

Bottom screenshot:

Course: ITL504 - Advance DevOl | my-function - Lambda | +

https://ap-south-1.console.aws.amazon.com/lambda/home?region=ap-south-1#/functions/my-function?tab=code

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Lambda > Functions > my-function

my-function | Throttle | Copy ARN | Actions ▼

▶ Function overview Info

Code | Test | Monitor | Configuration | Aliases | Versions

Code source Info | Upload from ▼

File Edit Find View Go Tools Window | Test ▼ | Deploy

Go to Anything (Ctrl-P) | index.js ✕ | Execution results ✕

my-function
 index.js

```
1  exports.handler = async (event) => {
2      // TODO implement
3      // const response = {
4      //   statusCode: 200,
5      //   body: JSON.stringify('Hello from Lambda!'),
6      // };
7      const randomNumber = parseInt(Math.random() * 100);
8      console.log("This is my random number: ", randomNumber);
9      return randomNumber;
10 };
11
```

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Smoke | 11:29 ENG IN 26-10-2022

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https://ap-south-1.console.aws.amazon.com/lambda/home?region=ap-south-1#/functions/my-function?newFunction=true&tab=monitoring

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⊘ Successfully updated the function **my-function**. ✕

Lambda > Functions > my-function

my-function

Throttle   Copy ARN   Actions ▼

▶ Function overview   Info

Code   Test   **Monitor**   Configuration   Aliases   Versions

Metrics   **Logs**   Traces

View logs in CloudWatch ↗   View X-Ray traces in ServiceLens ↗   View Lambda Insights ↗

CloudWatch Logs Insights   Info

Lambda logs all requests handled by your function and automatically stores logs generated by your code through Amazon CloudWatch Logs. To validate your code, instrument it with custom logging statements. The following tables list the most recent and most expensive function invocations across all function activity. To view logs for a specific function version or alias, visit the **Monitor** section at that level.

1h   3h   12h   1d   3d   1w   Custom   ↻   ▼   Add to dashboard

Recent invocations

#	Timestamp	RequestID	LogStream	DurationInMS	BilledDurationInMS	Memor
▶ 1	2022-10-26T05:47:02.672Z	be34c0f7-6e9f-4db0-a195-ac03081e716c	2022/10/26/[$LATEST]252863744a6d4895bd4e9d51d4e46c6c	31.0	32.0	128
▶ 2	2022-10-26T05:40:29.471Z	491ff8b1-d8ee-4675-83c4-804479600549	2022/10/26/[$LATEST]244a2ae59f384e10bf38a8d763396458	22.8	23.0	128
▶ 3	2022-10-26T05:40:14.129Z	6a88684c-dd94-4046-ba55-ed111971e1cb	2022/10/26/[$LATEST]244a2ae59f384e10bf38a8d763396458	4.45	5.0	128
▶ 4	2022-10-26T05:38:36.189Z	3ab848a2-bc37-4b25-bdeb-db56257d3381	2022/10/26/[$LATEST]41d9ebd54d8243ba948530b4babd9079	1.21	2.0	128
▶ 5	2022-10-26T05:36:38.167Z	12cc1aff-9a97-47d8-840f-c9e488e3805a	2022/10/26/[$LATEST]41d9ebd54d8243ba948530b4babd9079	2.69	3.0	128

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Course: ITL504 - Advance DevOp   my-function - Lambda   +

https://ap-south-1.console.aws.amazon.com/lambda/home?region=ap-south-1#/functions/my-function?newFunction=true&tab=monitoring

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⊘ Successfully updated the function **my-function**. ✕

▶ Function overview   Info

Code   Test   **Monitor**   Configuration   Aliases   Versions

Metrics   **Logs**   Traces

View logs in CloudWatch ↗   View X-Ray traces in ServiceLens ↗   View Lambda Insights ↗

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▶ 2	2022-10-26T05:40:29.471Z	491ff8b1-d8ee-4675-83c4-804479600549	2022/10/26/[$LATEST]244a2ae59f384e10bf38a8d763396458	22.8	23.0	128
▶ 3	2022-10-26T05:40:14.129Z	6a88684c-dd94-4046-ba55-ed111971e1cb	2022/10/26/[$LATEST]244a2ae59f384e10bf38a8d763396458	4.45	5.0	128
▶ 4	2022-10-26T05:38:36.189Z	3ab848a2-bc37-4b25-bdeb-db56257d3381	2022/10/26/[$LATEST]41d9ebd54d8243ba948530b4babd9079	1.21	2.0	128
▶ 5	2022-10-26T05:36:38.167Z	12cc1aff-9a97-47d8-840f-c9e488e3805a	2022/10/26/[$LATEST]41d9ebd54d8243ba948530b4babd9079	2.69	3.0	128

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▶ 5	2022-10-26T05:36:38.167Z	12cc1aff-9a97-47d8-840f-c9e488e3805a	2022/10/26/[$LATEST]41d9ebd54d8243ba948530b4babd9079	2.69	3.0	128

Most expensive invocations in GB-seconds (memory assigned * billed duration)

#	Timestamp	RequestID	LogStream	BilledDurationInMS	MemorySetInMB	Bill
▶ 1	2022-10-26T05:47:02.672Z	be34c0f7-6e9f-4db0-a195-ac03081e716c	2022/10/26/[$LATEST]252863744a6d4895bd4e9d51d4e46c6c	32.0	128	0.004
▶ 2	2022-10-26T05:40:29.471Z	491ff8b1-d8ee-4675-83c4-804479600549	2022/10/26/[$LATEST]244a2ae59f384e10bf38a8d763396458	23.0	128	0.002
▶ 3	2022-10-26T05:40:14.129Z	6a88684c-dd94-4046-ba55-ed111971e1cb	2022/10/26/[$LATEST]244a2ae59f384e10bf38a8d763396458	5.0	128	0.000
▶ 4	2022-10-26T05:36:38.167Z	12cc1aff-9a97-47d8-840f-c9e488e3805a	2022/10/26/[$LATEST]41d9ebd54d8243ba948530b4babd9079	3.0	128	0.000
▶ 5	2022-10-26T05:38:36.189Z	3ab848a2-bc37-4b25-bdeb-db56257d3381	2022/10/26/[$LATEST]41d9ebd54d8243ba948530b4babd9079	2.0	128	0.000

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	@billedDuration	32.0				
	@duration	31.0				
	@ingestionTime	1666763227513				
	@initDuration	138.49				
	@log	516279017078:/aws/lambda/my-function				
	@logStream	2022/10/26/[$LATEST]252863744a6d4895bd4e9d51d4e46c6c				
	@maxMemoryUsed	5.7E7				
	@memorySize	1.28E8				

#	Timestamp	RequestID	LogStream	BilledDurationInMS	MemorySetInMB	Bill
▶ 1	2022-10-26T05:47:02.672Z	be34c0f7-6e9f-4db0-a195-ac03081e716c	2022/10/26/[$LATEST]252863744a6d4895bd4e9d51d4e46c6c	32.0	128	0.004
▶ 2	2022-10-26T05:40:29.471Z	491ff8b1-d8ee-4675-83c4-804479600549	2022/10/26/[$LATEST]244a2ae59f384e10bf38a8d763396458	23.0	128	0.002
▶ 3	2022-10-26T05:40:14.129Z	6a88684c-dd94-4046-ba55-ed111971e1cb	2022/10/26/[$LATEST]244a2ae59f384e10bf38a8d763396458	5.0	128	0.000
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