**🔹 Short Explanation of AWS Lambda in Cloud Computing**

**AWS Lambda** is a **serverless computing** service provided by **Amazon Web Services (AWS)**. It allows you to **run code without provisioning or managing servers**. You just upload your function code, and Lambda handles everything — from execution to scaling.

**✅ Key Features of AWS Lambda:**

* **Serverless**: No need to manage servers.
* **Event-driven**: Runs in response to events (like file uploads, API calls).
* **Auto-scaling**: Automatically scales based on the number of requests.
* **Pay-per-use**: You are only charged for the time your code runs (measured in milliseconds).

**🛠️ Steps to Create Documentation in AWS Lambda (With Simple Example)**

To create documentation **related to a Lambda function**, such as API documentation, or just describing the function's purpose and usage, follow these steps:

**🔄 A. If Creating Lambda Function with API Gateway (Common for Documentation):**

**Step 1: Log in to AWS Console**

* Go to <https://aws.amazon.com>
* Navigate to **Lambda** under **Services**.

**Step 2: Create a Lambda Function**

* Click on **“Create function”**
* Choose **Author from scratch**
* Give your function a name (e.g., MyDocFunction)
* Select a **Runtime** (e.g., Python, Node.js)
* Click **Create Function**

**Step 3: Add Your Function Code**

* In the inline code editor, write your function logic.

python

Copy code

def lambda\_handler(event, context):

return {

'statusCode': 200,

'body': 'This function generates API documentation.'

}

**Step 4: Add an API Gateway Trigger**

* Scroll to **“Function overview”**
* Click **+ Add trigger**
* Select **API Gateway**
* Choose “Create a new API” > REST API or HTTP API
* Deployment stage: prod
* Click **Add**

**Step 5: Test the Function**

* Go to the **API Gateway link** provided
* Open it in a browser or use tools like **Postman**
* You should see the response from the Lambda function.

**Step 6: Create Documentation (Optional)**

Use tools like:

* **Swagger / OpenAPI**: Create an OpenAPI spec for your API (you can host it on S3 or via API Gateway).
* **Postman**: Create API docs based on your request/response.
* **Manually write documentation** in Markdown or HTML, and host it in **S3 bucket** or GitHub.

**📄 Example of Lambda Function Documentation (Template)**

markdown

Copy code

# Lambda Function: MyDocFunction

\*\*Purpose:\*\*

This function provides documentation for the API built using AWS Lambda and API Gateway.

## Request

- \*\*Method:\*\* GET

- \*\*Endpoint:\*\* https://abc123.execute-api.region.amazonaws.com/prod

- \*\*Headers:\*\* None

## Response

```json

{

"statusCode": 200,

"body": "This function generates API documentation."

}

**Usage**

* Triggered via HTTP API Gateway
* Returns a plain text message