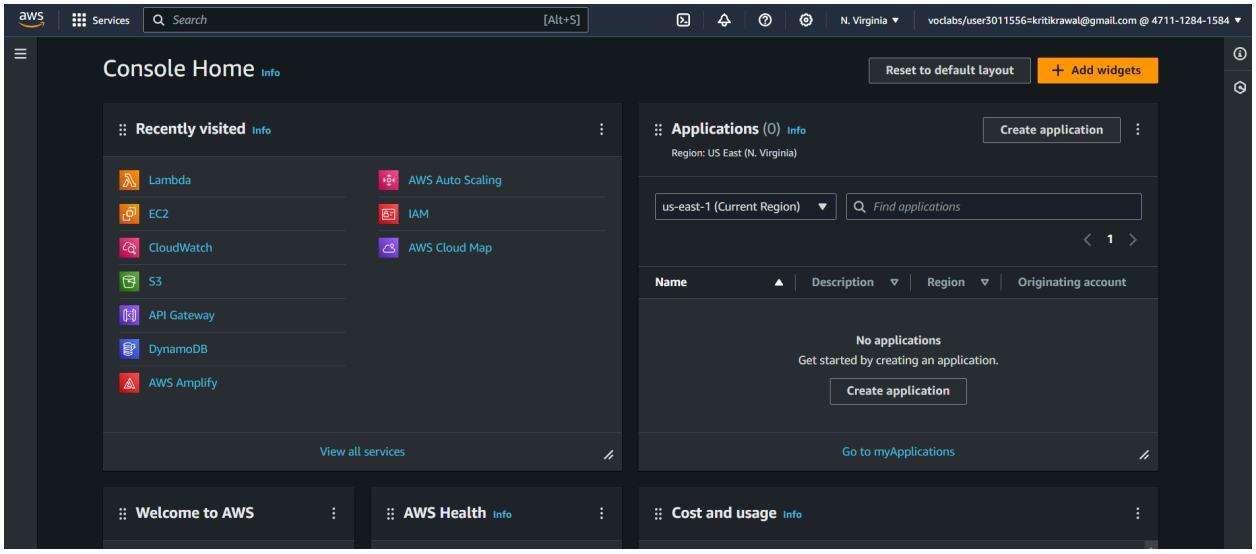
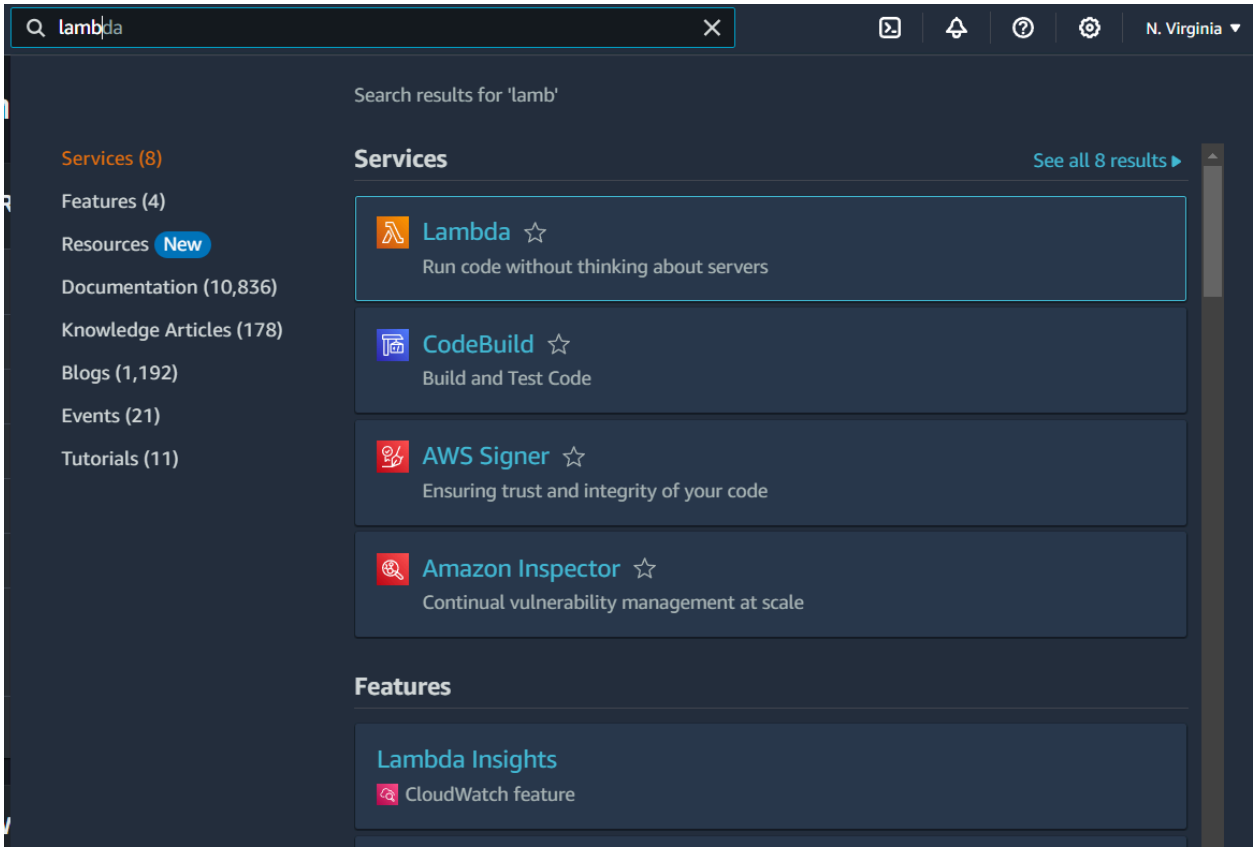
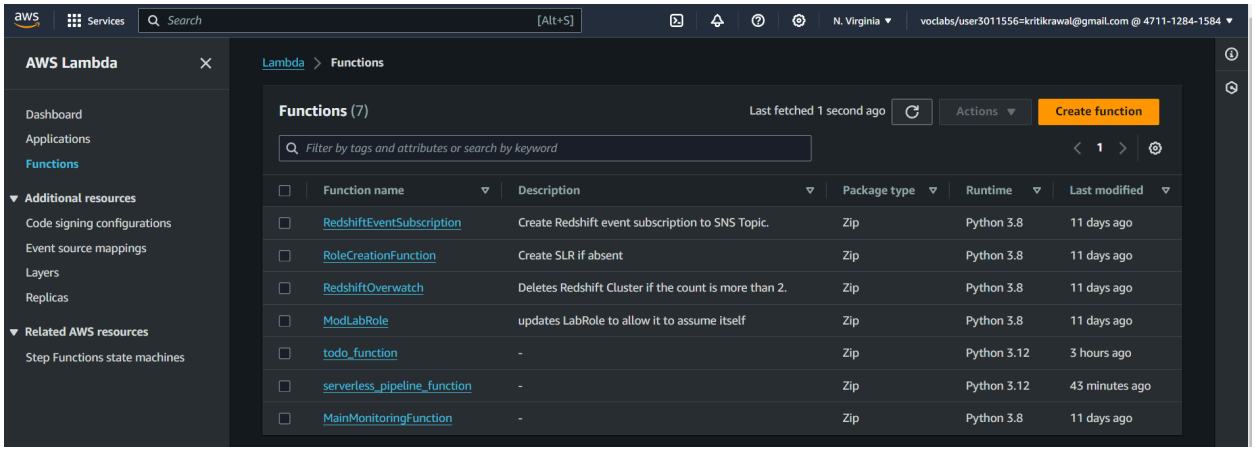
1. Navigate to https://us-east-1.console.aws.amazon.com/console/home?region=us-east-1



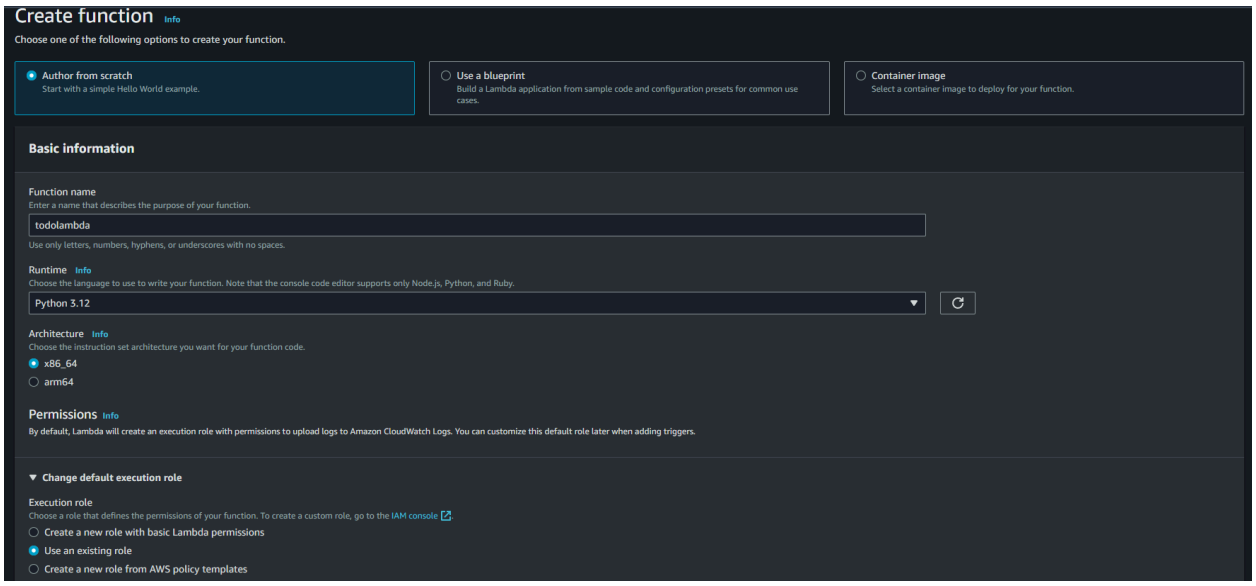
2. Search Lambda



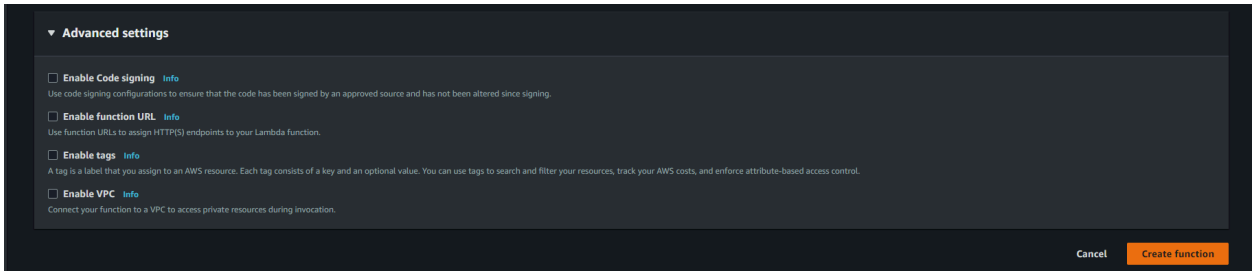
3. Click on the create function.



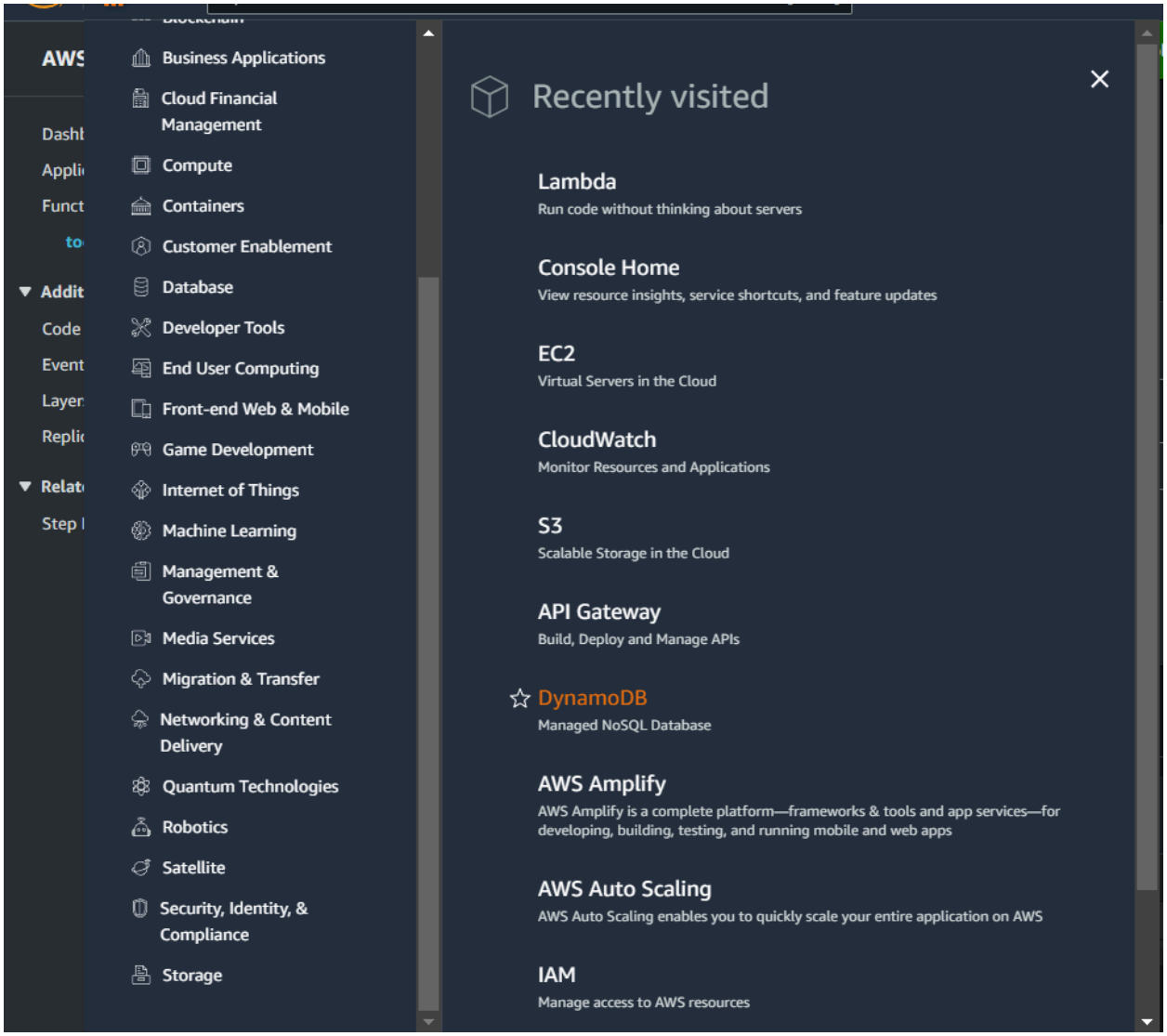
4. Specify the function name, select Python 3.12 in runtime and select Use an existing role in Change default execution role.



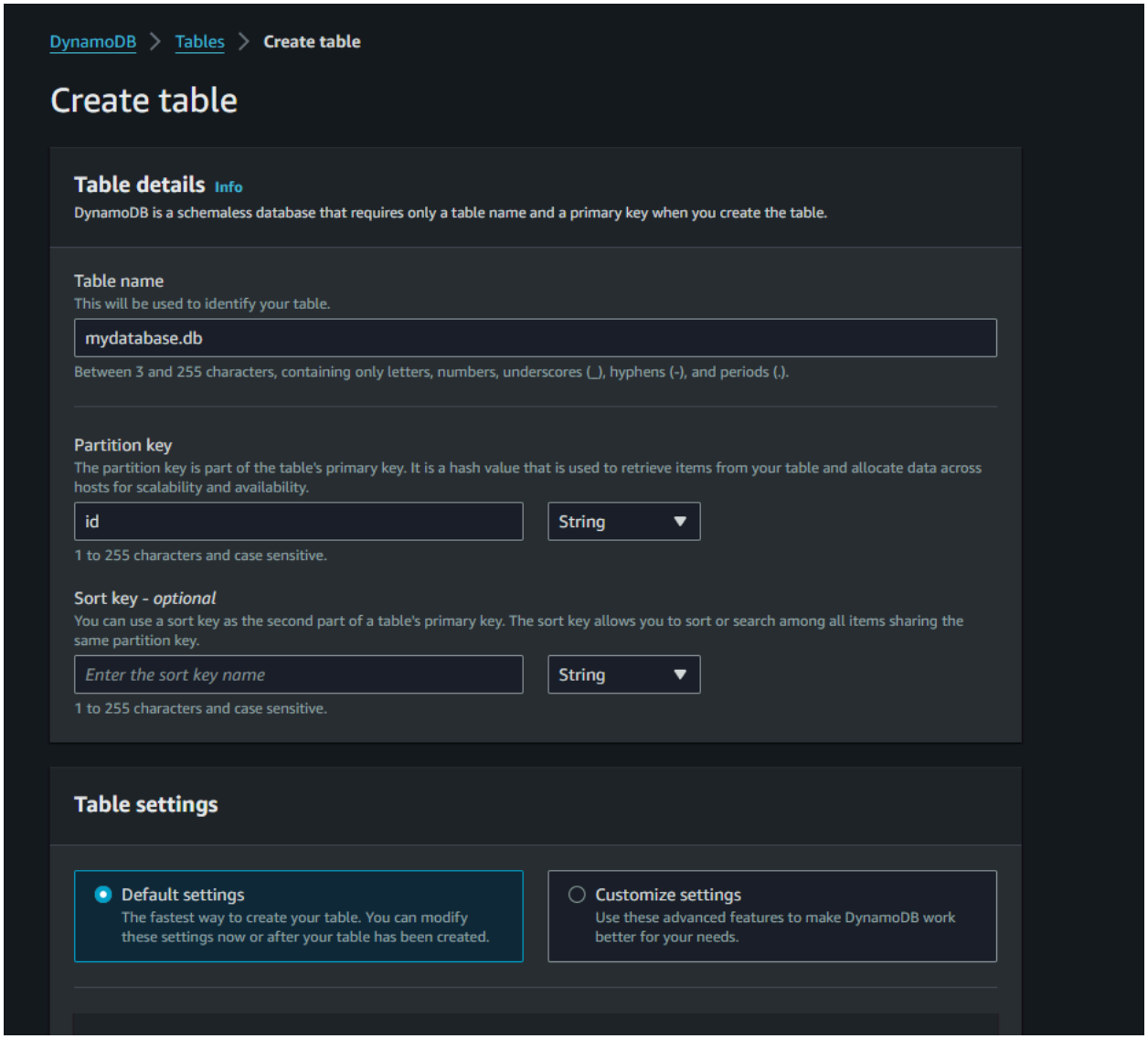
5. Create the function.



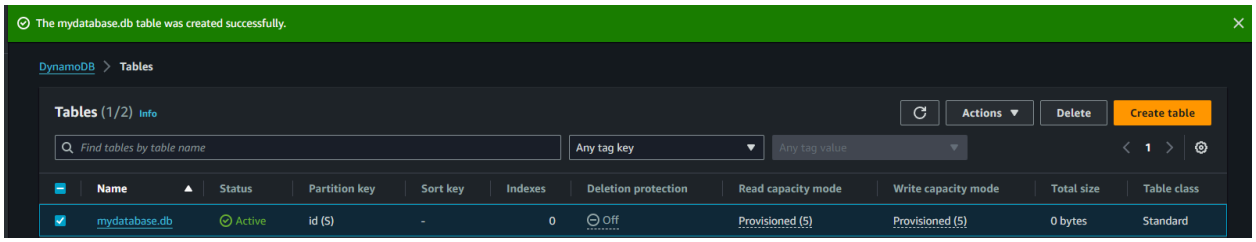
6. Select DynamoDB to create it.



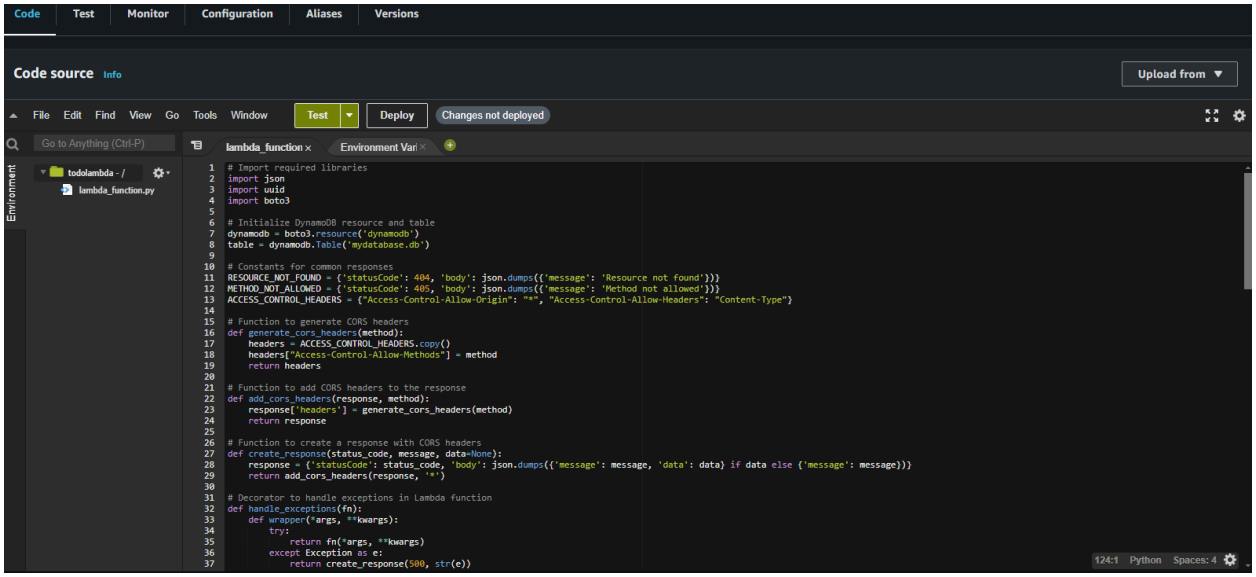
7. Create the table.



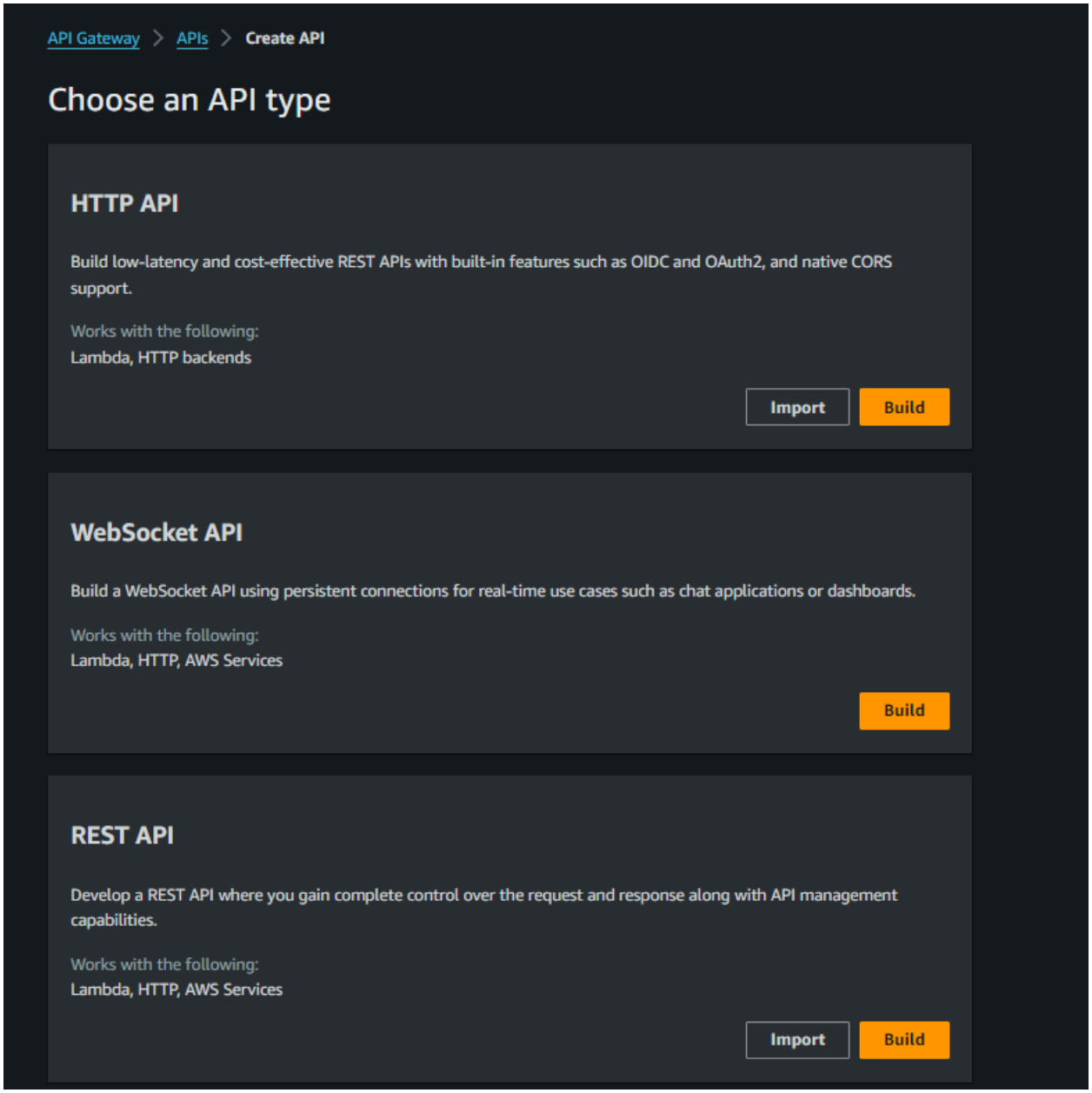
8. Check the table.



9. Write the code in the code source.



10. Go to choose an API gateway and choose REST API.



11. Create the API

API Gateway > APIs > Create API > **Create REST API**

Create REST API

API details

- (●) **New API** — Create a new REST API.
- ( ) **Clone existing API** — Create a copy of an API in this AWS account.
- ( ) **Import API** — Import an API from an OpenAPI definition.
- ( ) **Example API** — Learn about API Gateway with an example API.

API name

todo-api

Description - *optional*

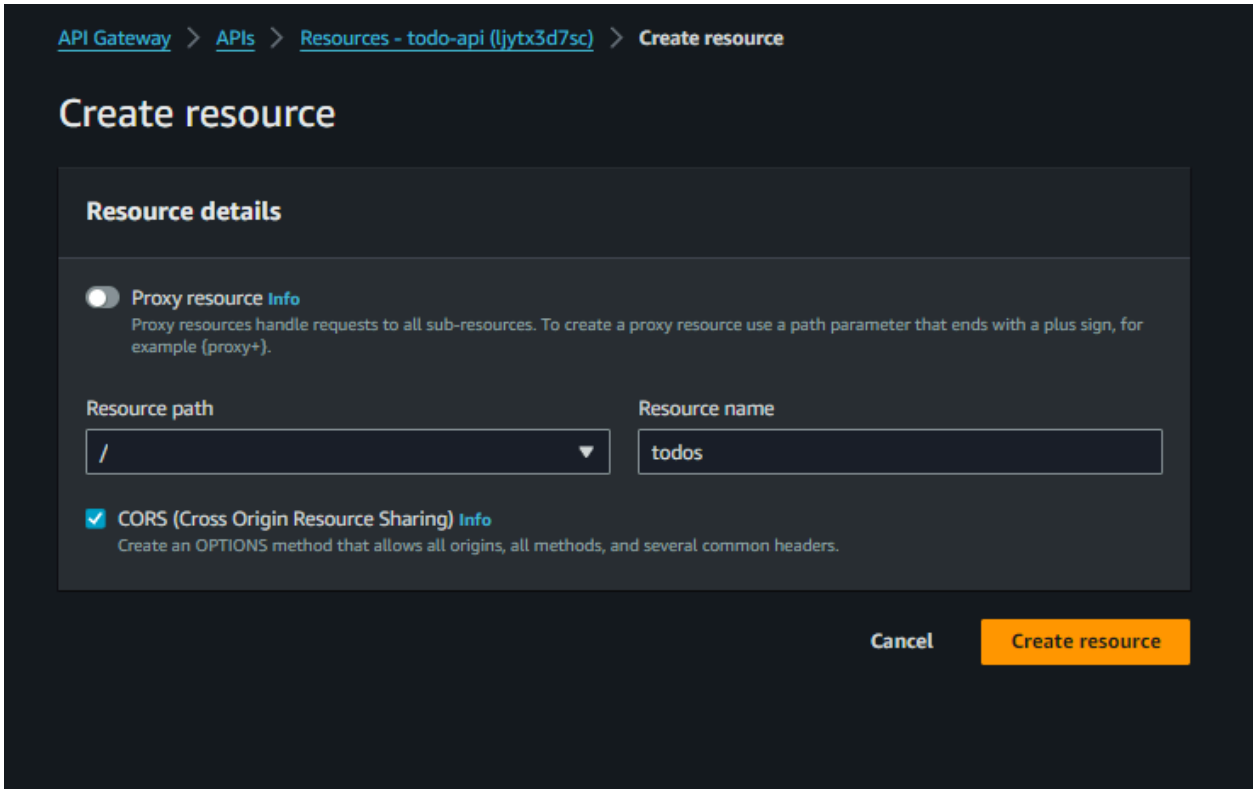
API endpoint type

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.

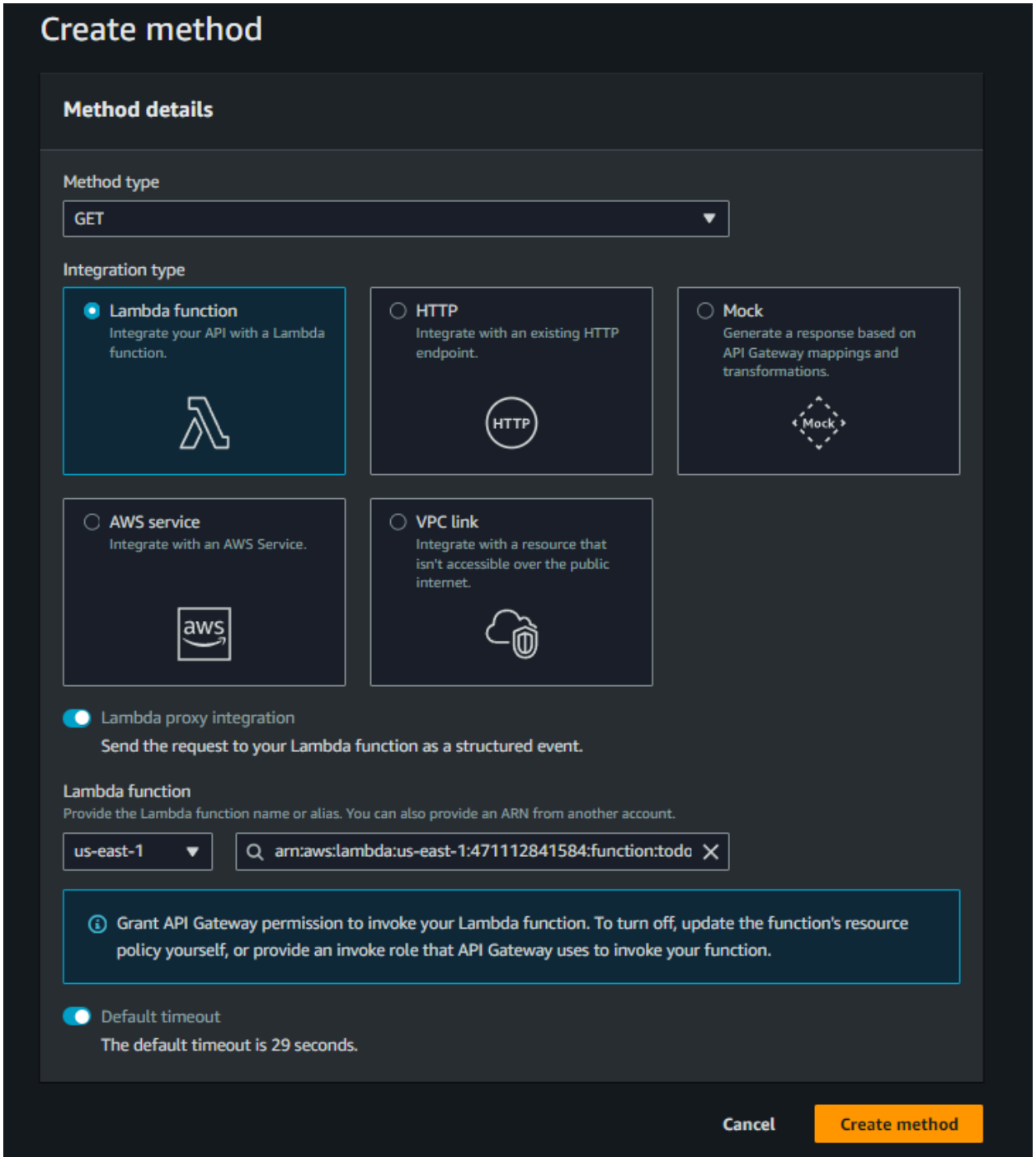
Regional

Cancel | Create API

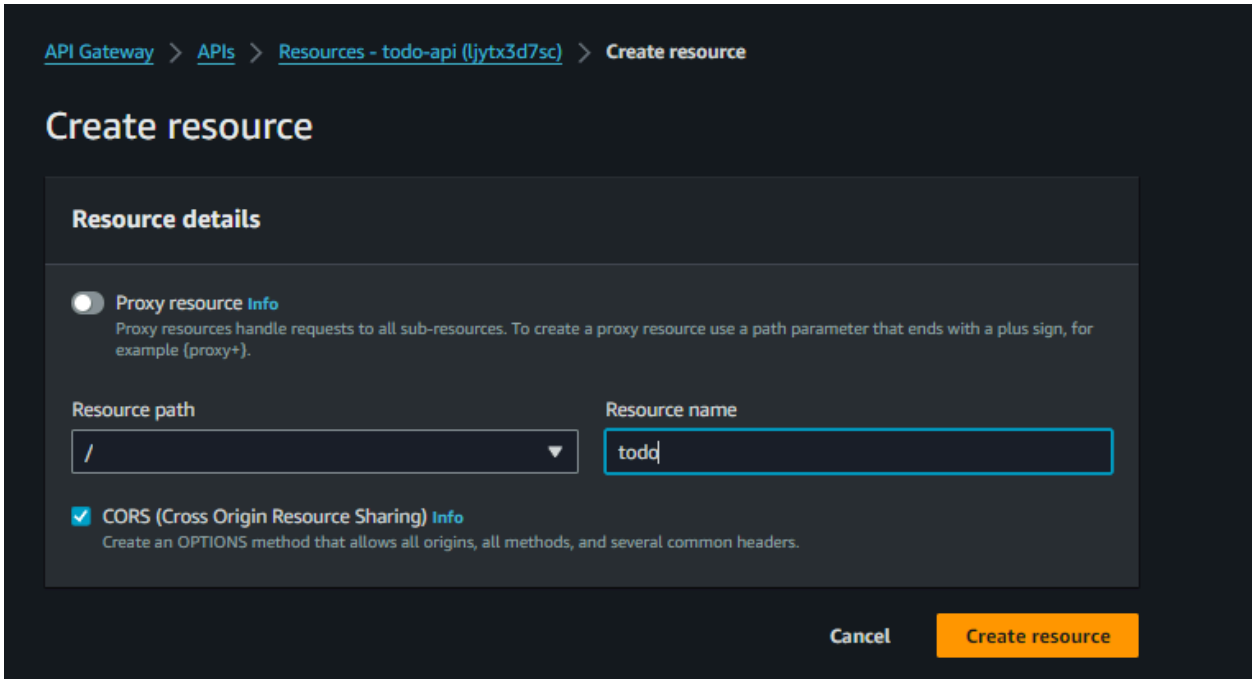
12. Choose on create resource and create the resource.



13. Go to create method and choose GET in method type and also choose the todo function.



14. Go to create resource and enter the resource name.



15. Create GET in todo.

API Gateway > APIs > Resources - todo-api (ljytx3d7sc) > **Create method**

Create method

Method details

Method type

GET

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

Provide the Lambda function name or alias. You can also provide an ARN from another account.

us-east-1 | arn:aws:lambda:us-east-1:471112841584:function:todo

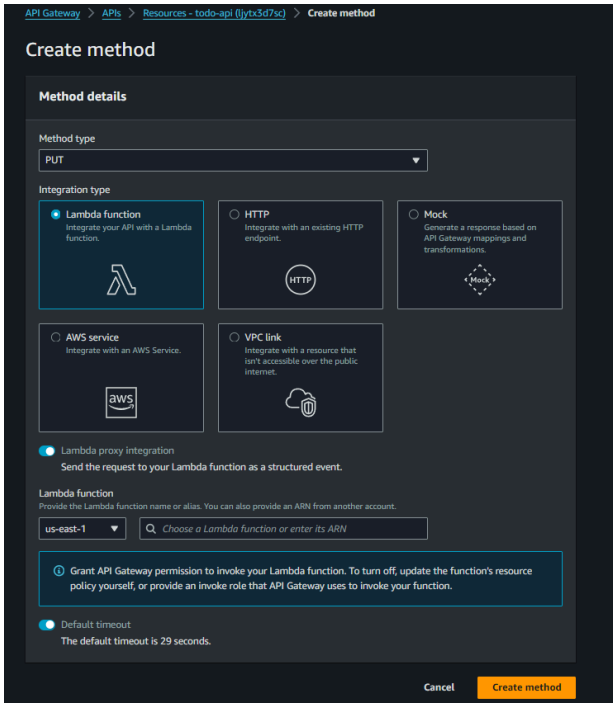
Grant API Gateway permission to invoke your Lambda function. To turn off, update the function's resource policy yourself, or provide an invoke role that API Gateway uses to invoke your function.

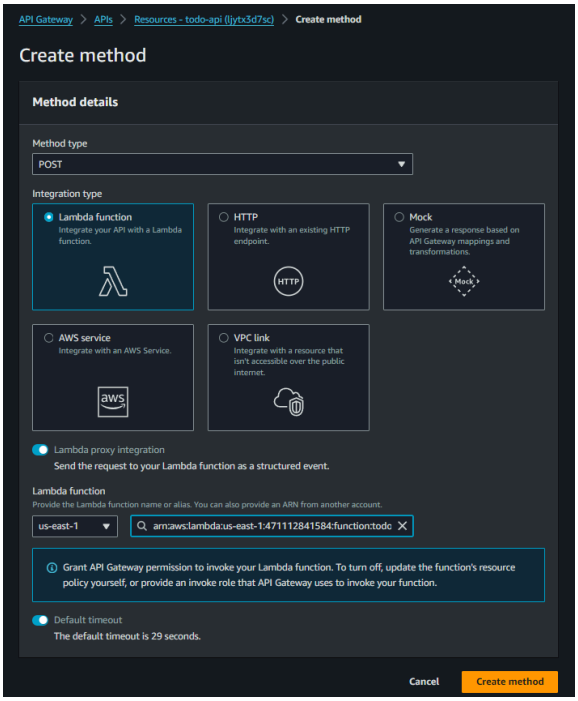
Default timeout

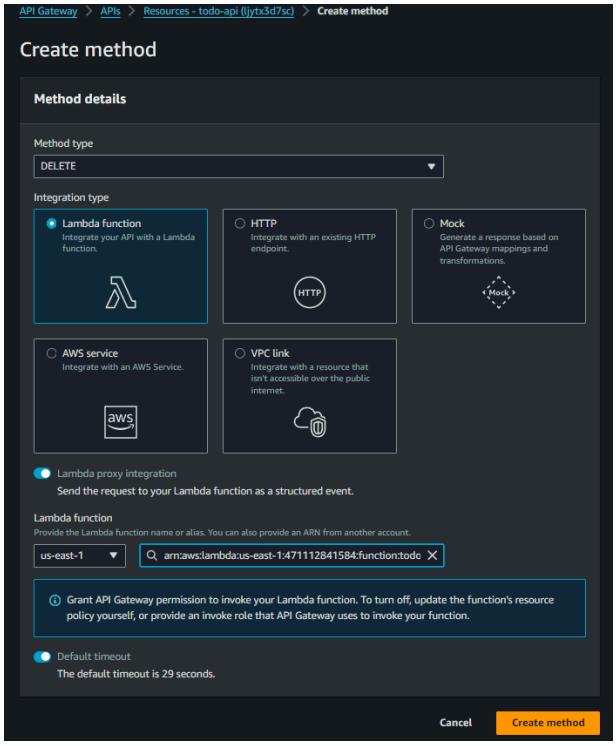
The default timeout is 29 seconds.

Cancel | Create method

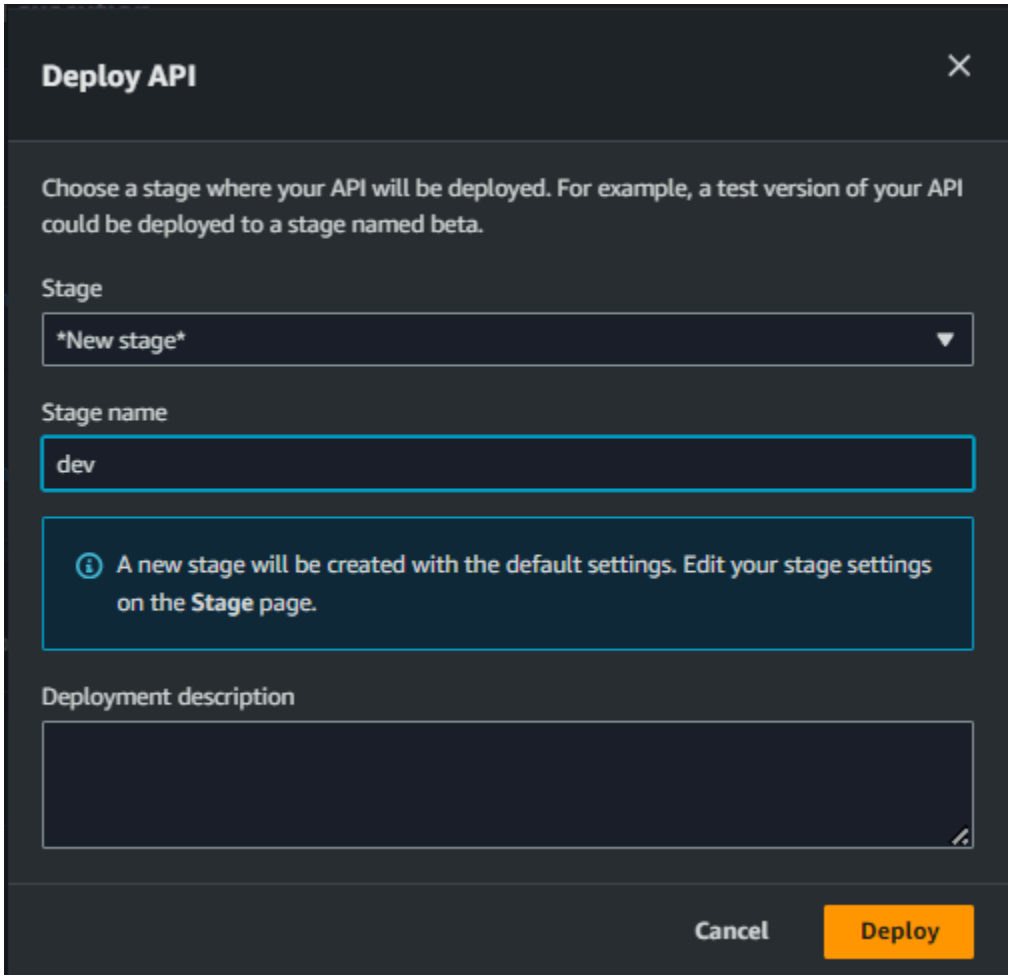
16. In the similar way create PUT, POST and DELETE.



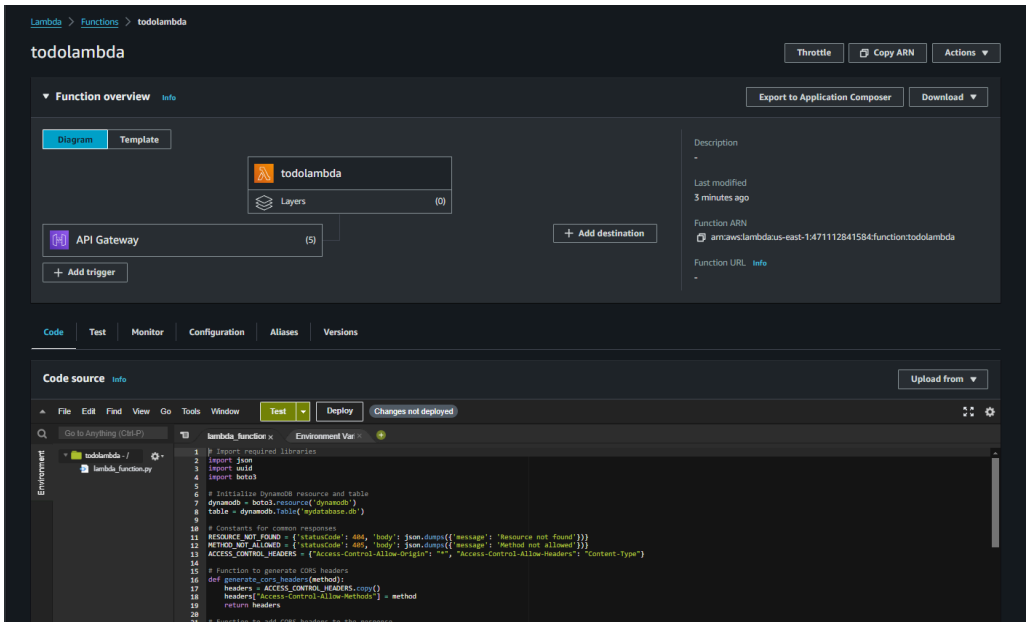




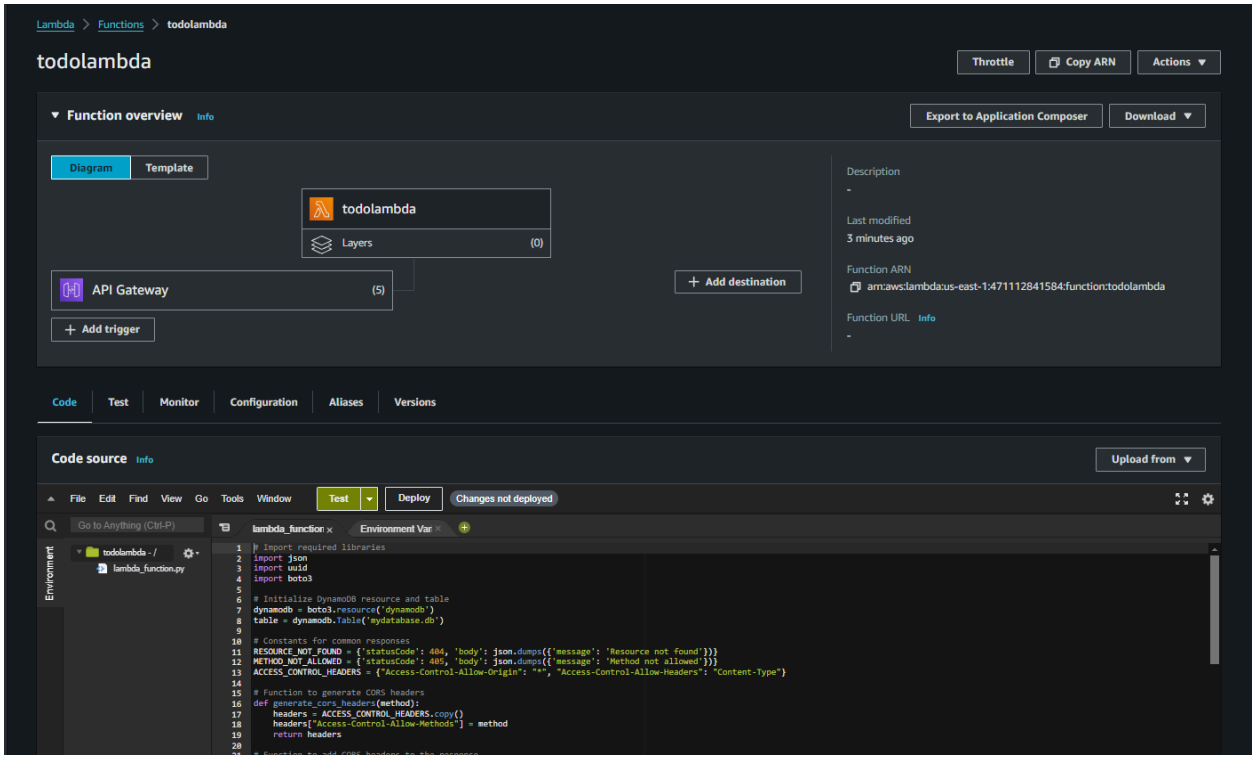
17. Deploy the API



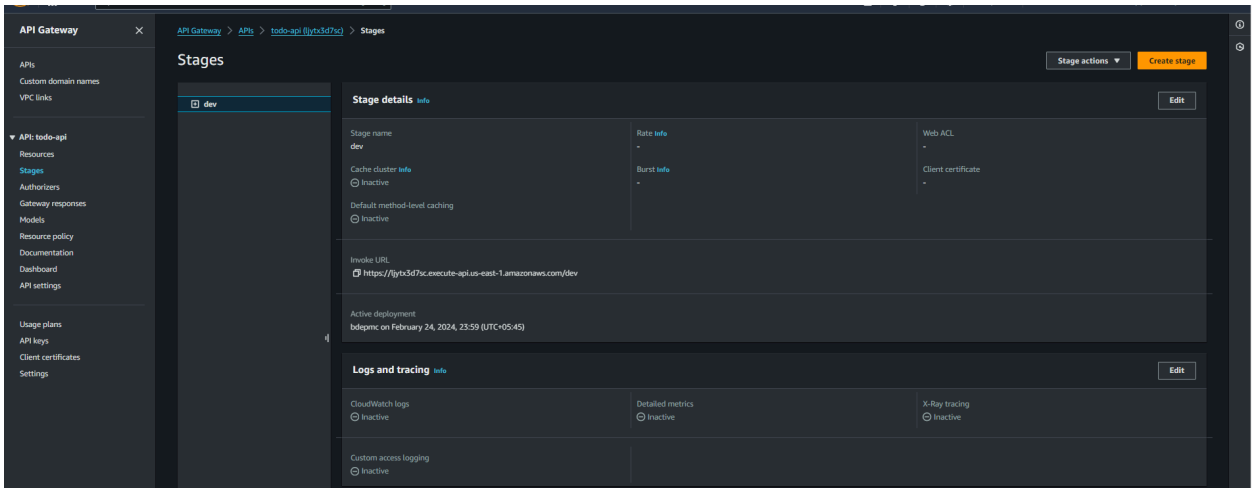
18. Go to the lambda function.



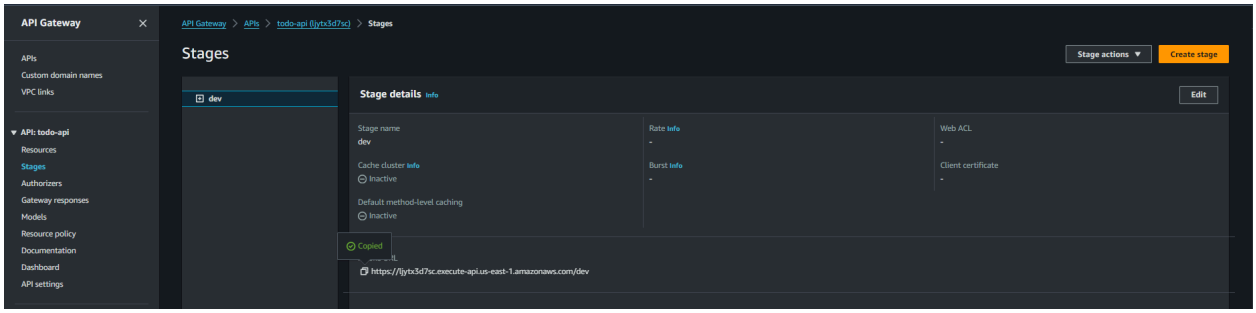
19. Click on deploy



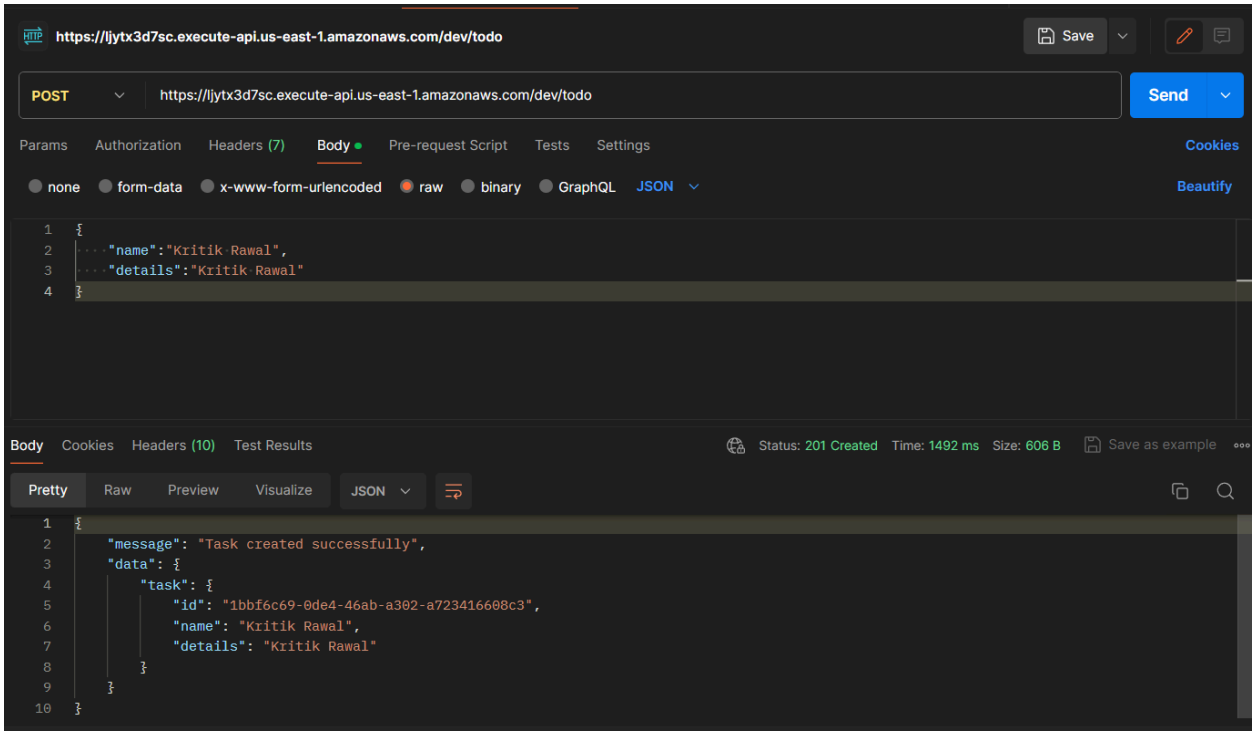
20. Go to API gateway and select stages.



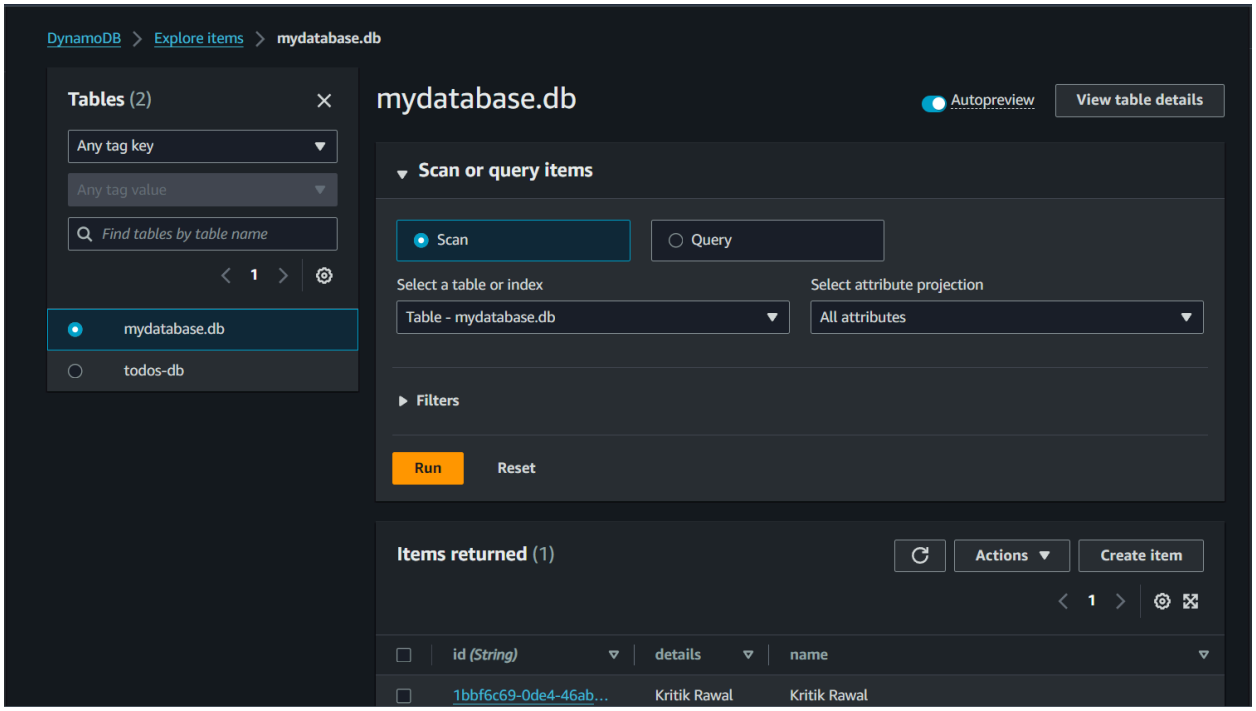
21. Copy the invoke URL.



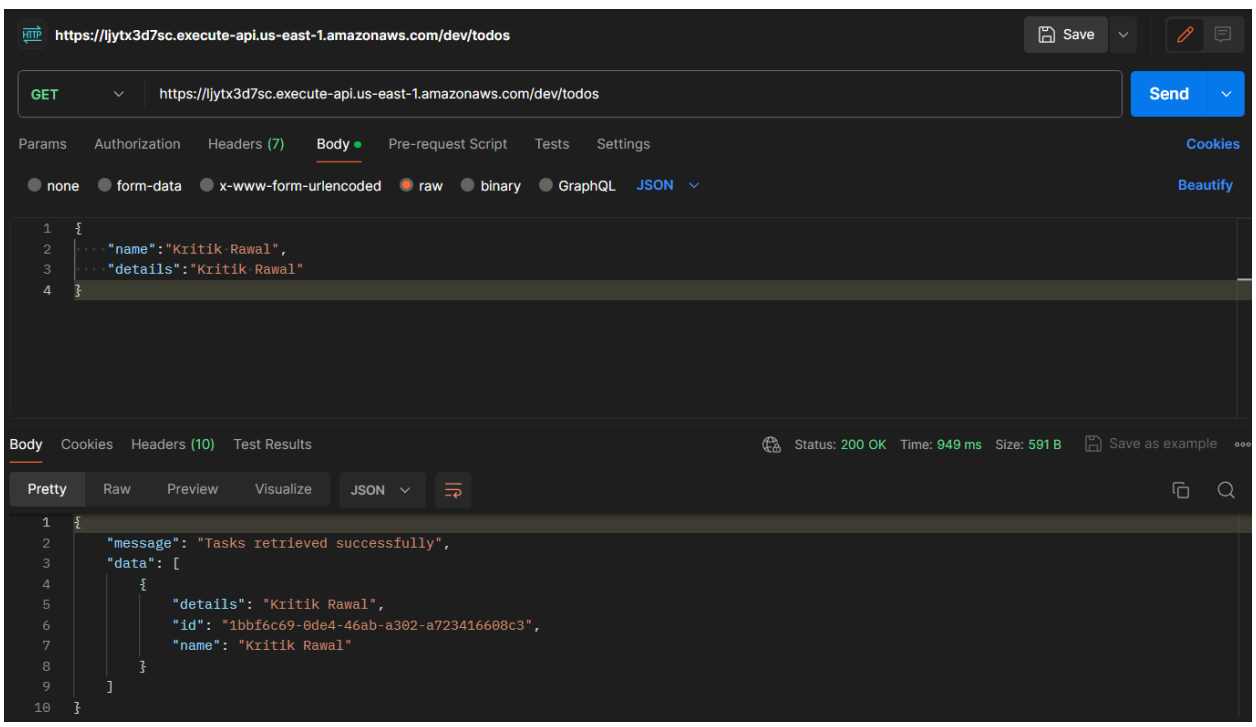
22. Go to postman and check.



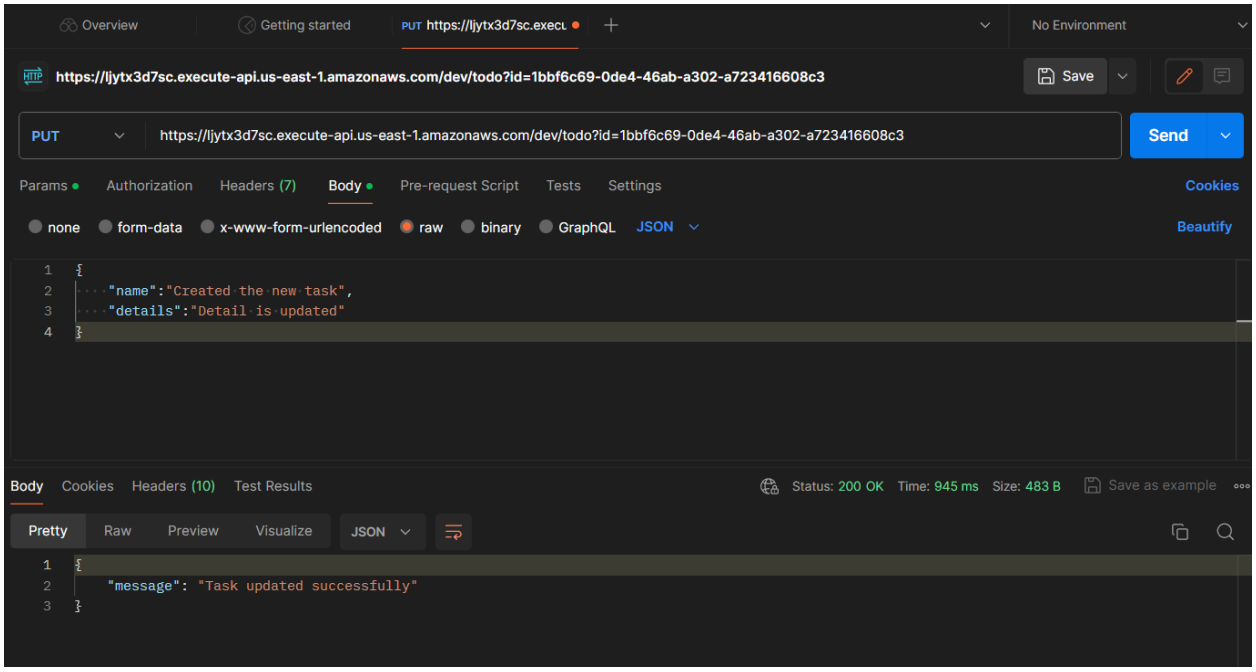
23. In the dynamodb check the items returned.



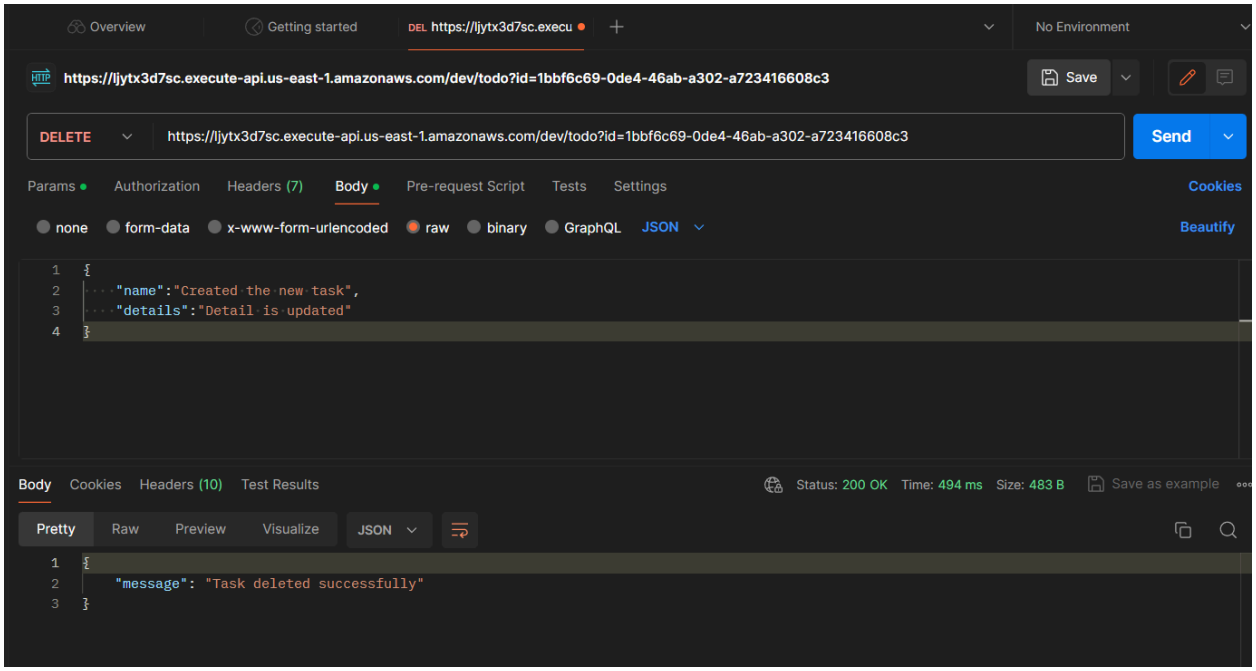
24. Send a GET request.



25. Send a POST request.



26. DELETE the request.



27. Refresh the page.