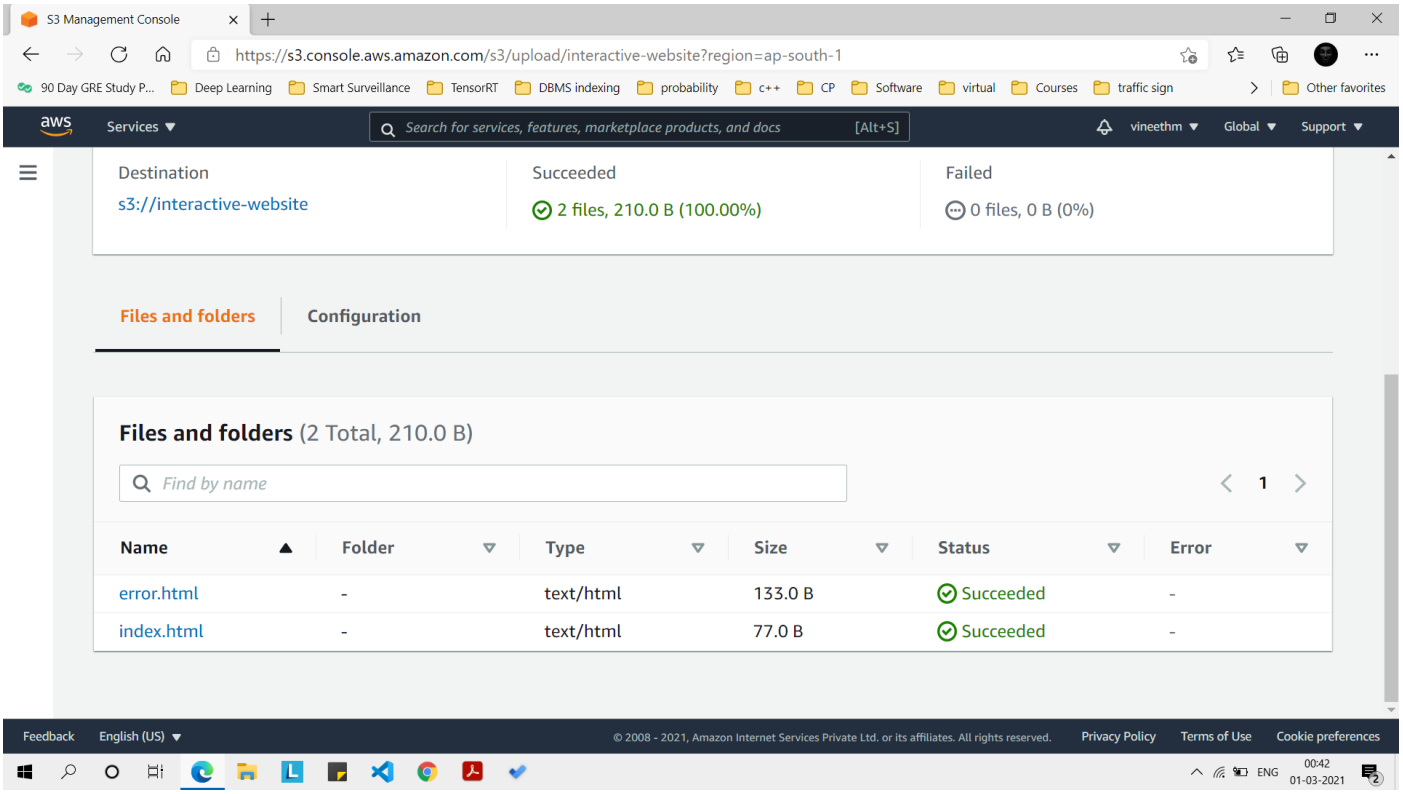
Lab Assignment – 07

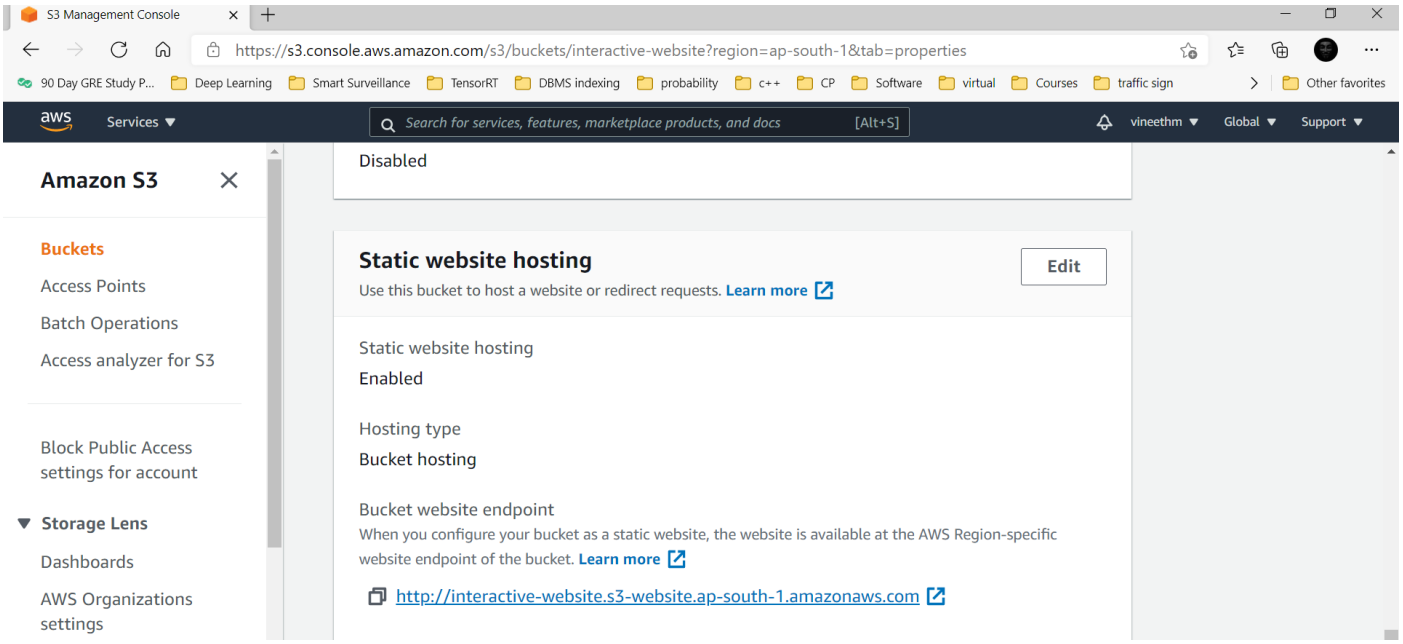
Create and Deploy interactive web application using S3, Lambda, API Gateway and DynamoDB

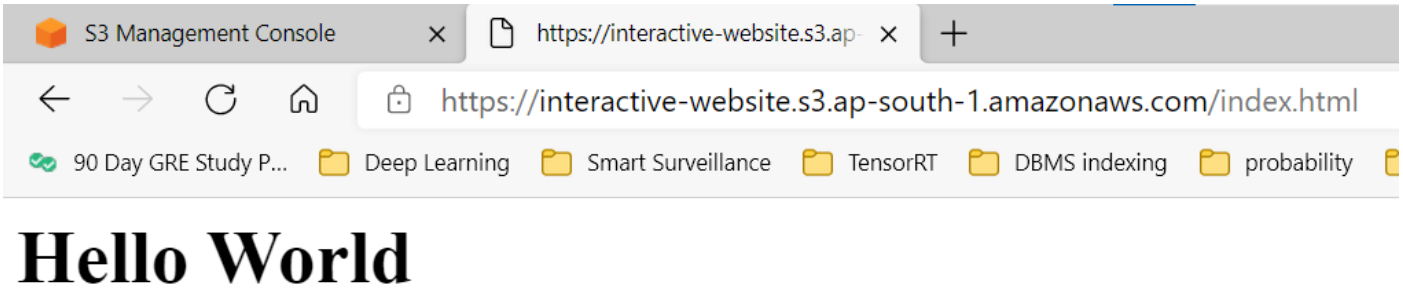
Task-1: Create a S3 bucket and upload 2 object files(website code files).

Note:

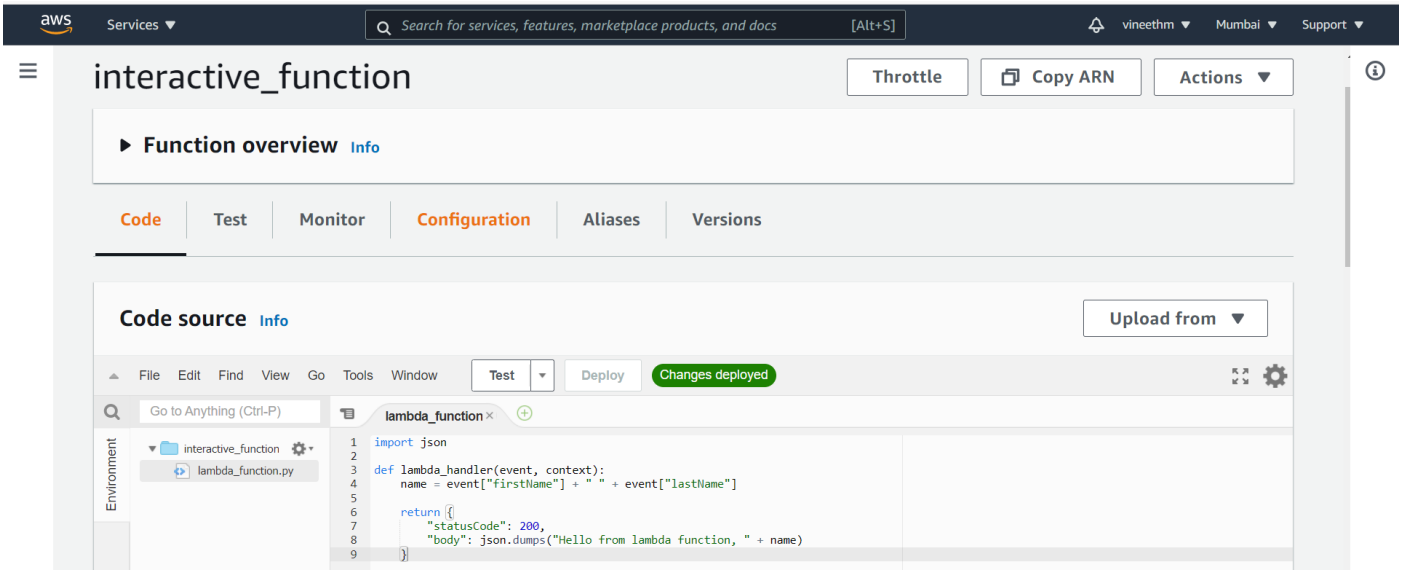
a) Both the objects should be public.
b) Enable static website function from S3 properties by supplying both the files.
c) Copy the end points of the static website function and check whether the website is displayed in the web browser.







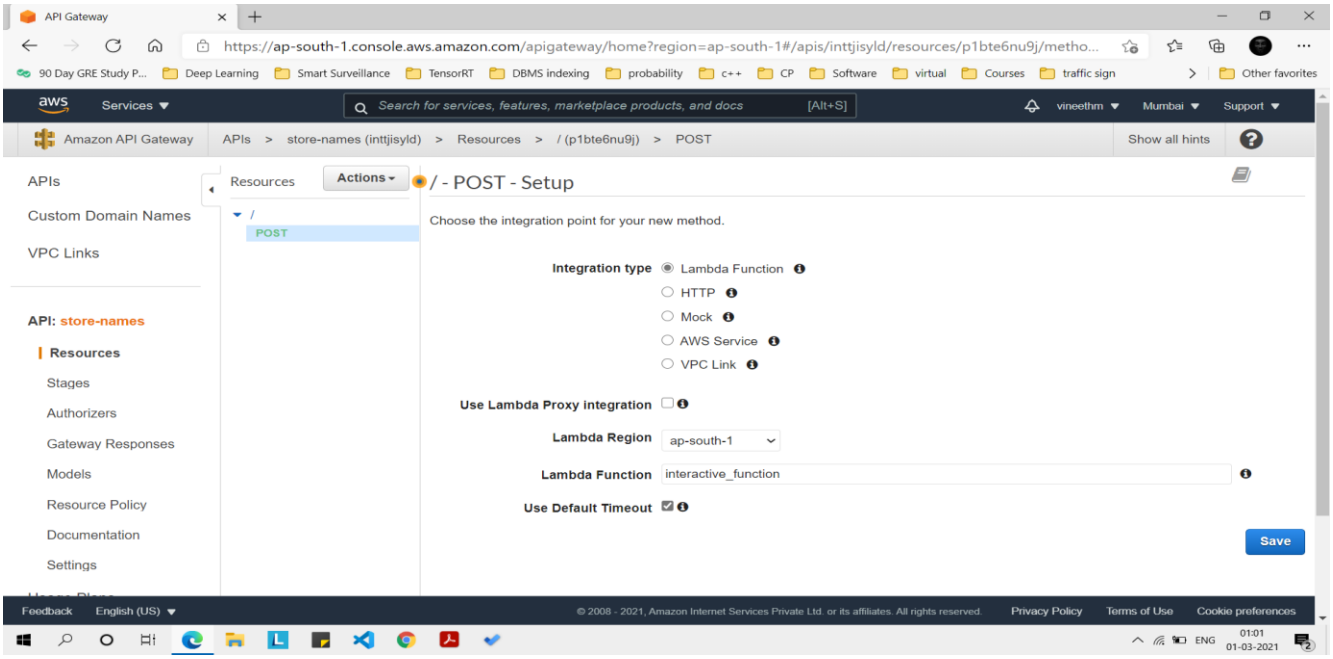
Task-2: Create a Lambda function and write the necessary code.

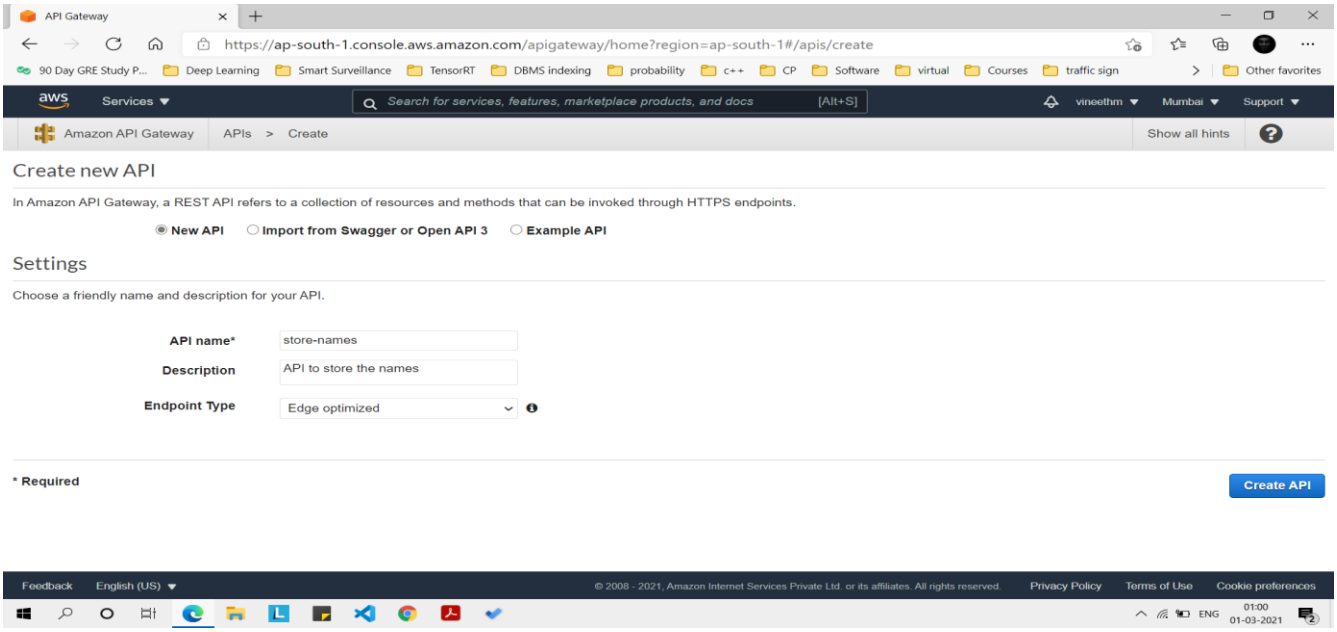


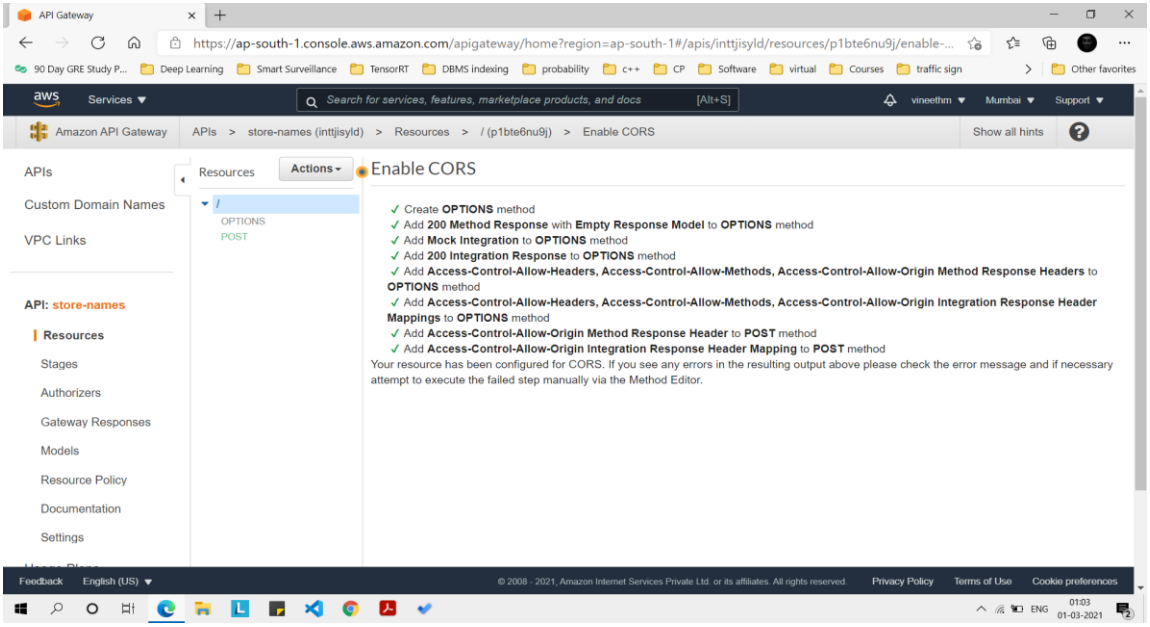
Task-3: Go to AWS API Gateway and create a new API selecting the REST API option.

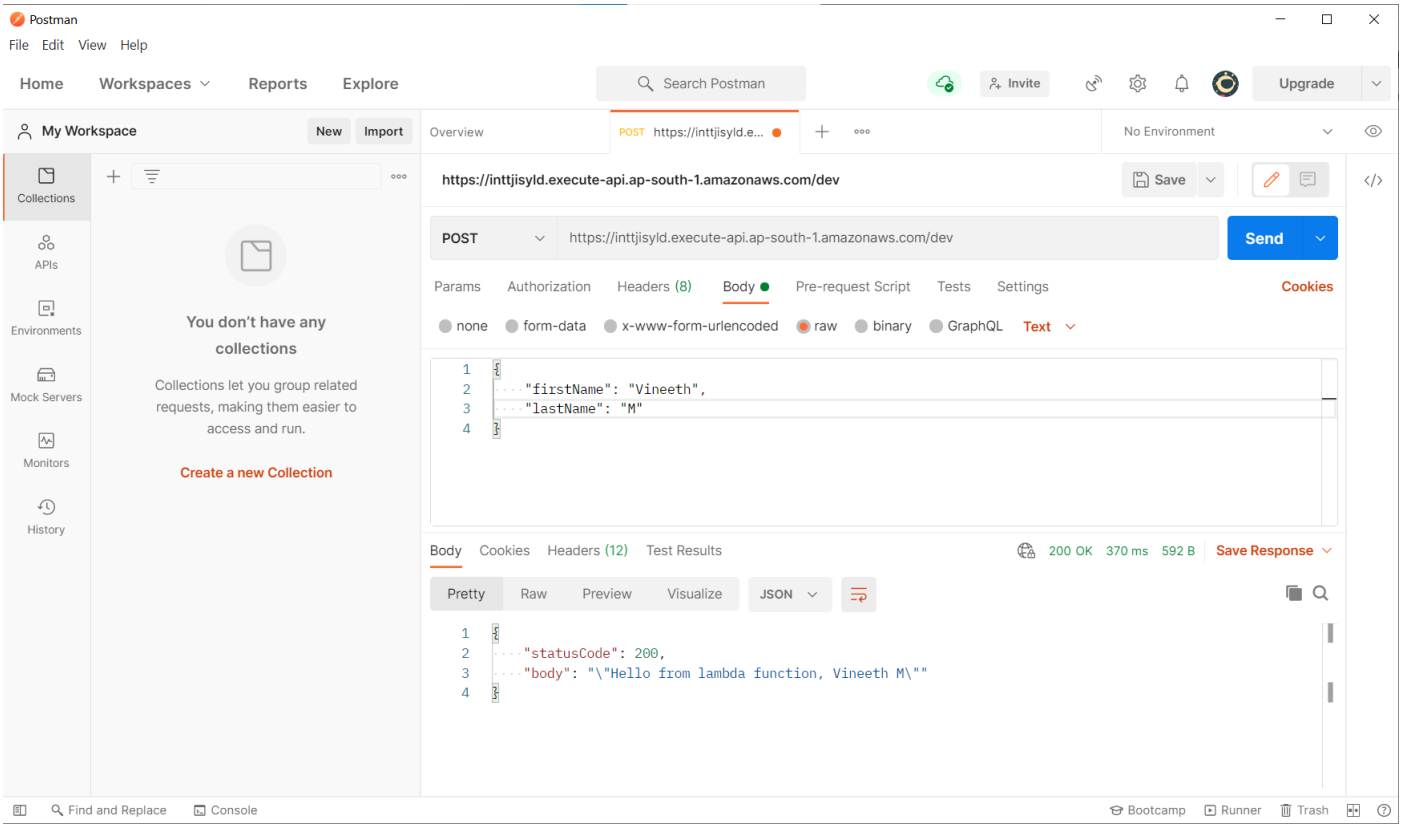
Note:

a) Select edge optimized.
b) Go to action and select create method, choose post option and select Lambda function name as the integration type.
c) Go to action and enable the CORS(for cross region connectivity of the end user)
d) Deploy the API.
e) Check the invoke url of the API using web browser.





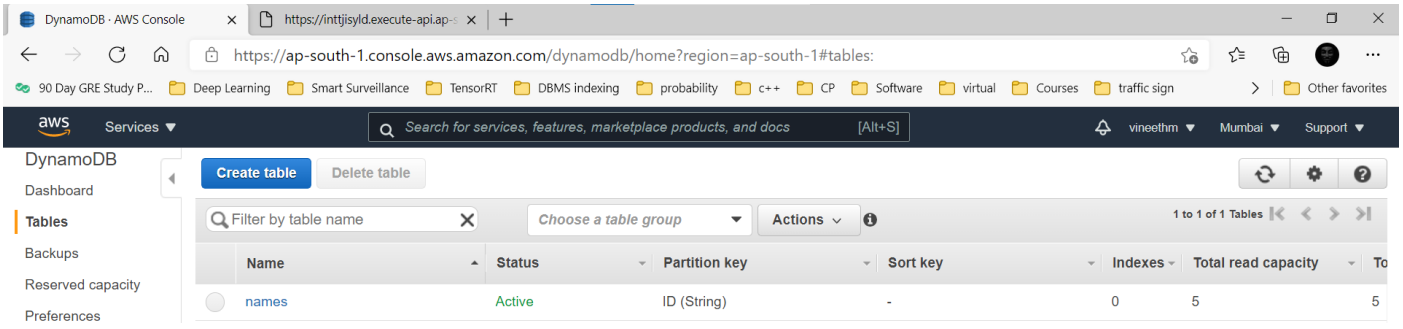

API Gateway
https://ap-south-1.console.aws.amazon.com/apigateway/home?region=ap-south-1#/apis/inttjisyld/resources/p1bte6nu9j/enable-...
Services
Search for services, features, marketplace products, and docs [Alt+S]
Amazon API Gateway
APIs > store-names (inttjisyld) > Resources > / (p1bte6nu9j) > Enable CORS
Show all hints
APIs
Custom Domain Names
VPC Links
API: store-names
Resources
Stages
Authorizers
Gateway Responses
Models
Resource Policy
Documentation
Settings
Resources
Actions
Enable CORS
OPTIONS
POST
✓ Create OPTIONS method
✓ Add 200 Method Response with Empty Response Model to OPTIONS method
✓ Add Mock Integration to OPTIONS method
✓ Add 200 Integration Response to OPTIONS method
✓ Add Access-Control-Allow-Headers, Access-Control-Allow-Methods, Access-Control-Allow-Origin Method Response Headers to OPTIONS method
✓ Add Access-Control-Allow-Headers, Access-Control-Allow-Methods, Access-Control-Allow-Origin Integration Response Header Mappings to OPTIONS method
✓ Add Access-Control-Allow-Origin Method Response Header to POST method
✓ Add Access-Control-Allow-Origin Integration Response Header Mapping to POST method
Your resource has been configured for CORS. If you see any errors in the resulting output above please check the error message and if necessary attempt to execute the failed step manually via the Method Editor.
Feedback
English (US)
Privacy Policy
Terms of Use
Cookie preferences


Postman
File Edit View Help
Home
Workspaces
Reports
Explore
Search Postman
Invite
Upgrade
My Workspace
New
Import
Overview
POST https://inttjisyld.e...
No Environment
Collections
APIs
Environments
Mock Servers
Monitors
History
You don't have any collections
Collections let you group related requests, making them easier to access and run.
Create a new Collection
https://inttjisyld.execute-api.ap-south-1.amazonaws.com/dev
Save
POST
https://inttjisyld.execute-api.ap-south-1.amazonaws.com/dev
Send
Params
Authorization
Headers (8)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
Text
1 {
2 "firstName": "Vineeth",
3 "lastName": "M"
4 }
Body
Cookies
Headers (12)
Test Results
200 OK
370 ms
592 B
Save Response
Pretty
Raw
Preview
Visualize
JSON
1 {
2 "statusCode": 200,
3 "body": "\"Hello from lambda function, Vineeth M\""
4 }
Find and Replace
Console
Bootcamp
Runner
Trash

Task-4: Go to DynamoDB and create a Table, keeping the primary key as ‘ID’.

Note:

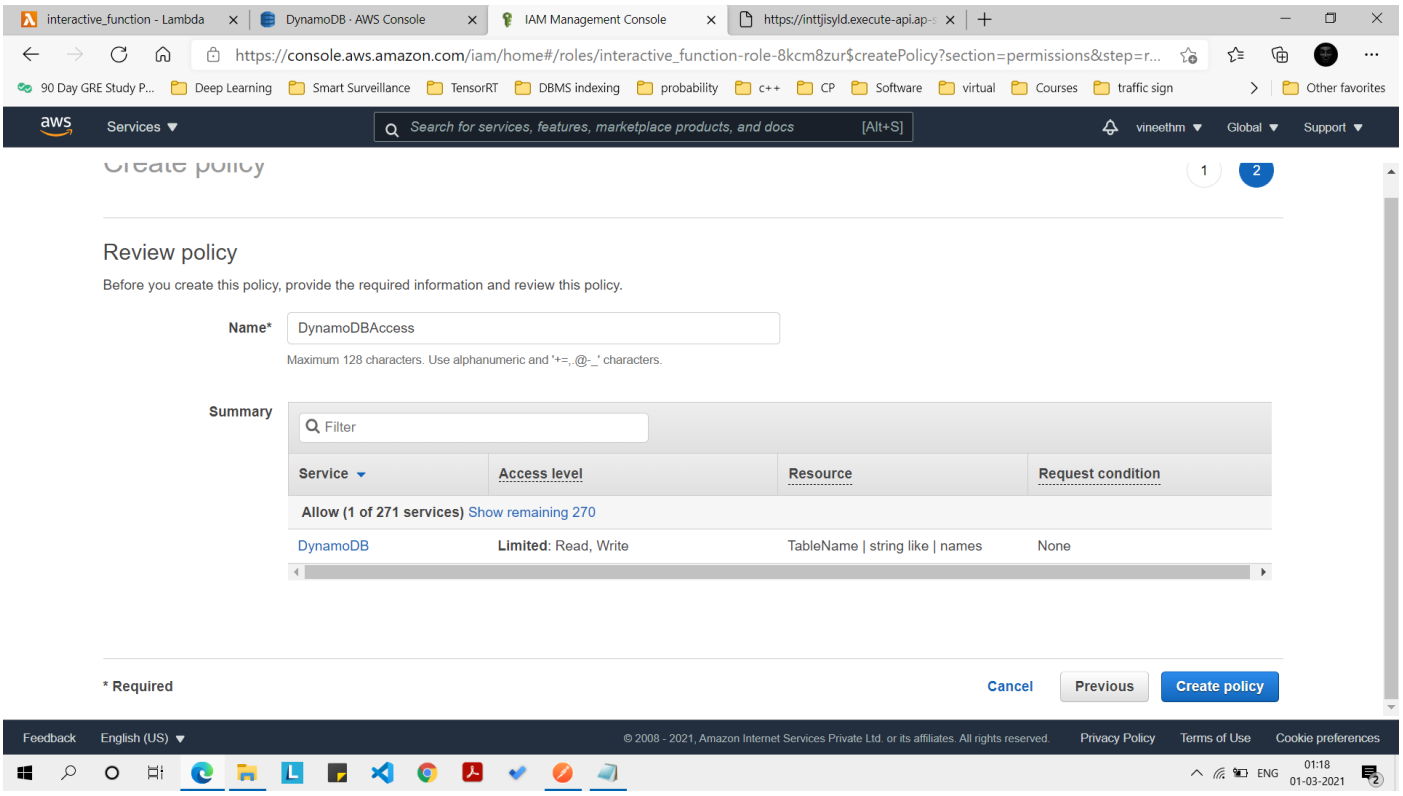
a) Copy the ARN point of the DynamoDB table.
b) The ARN point will be accessible by the lambda function as per the IAM policy.



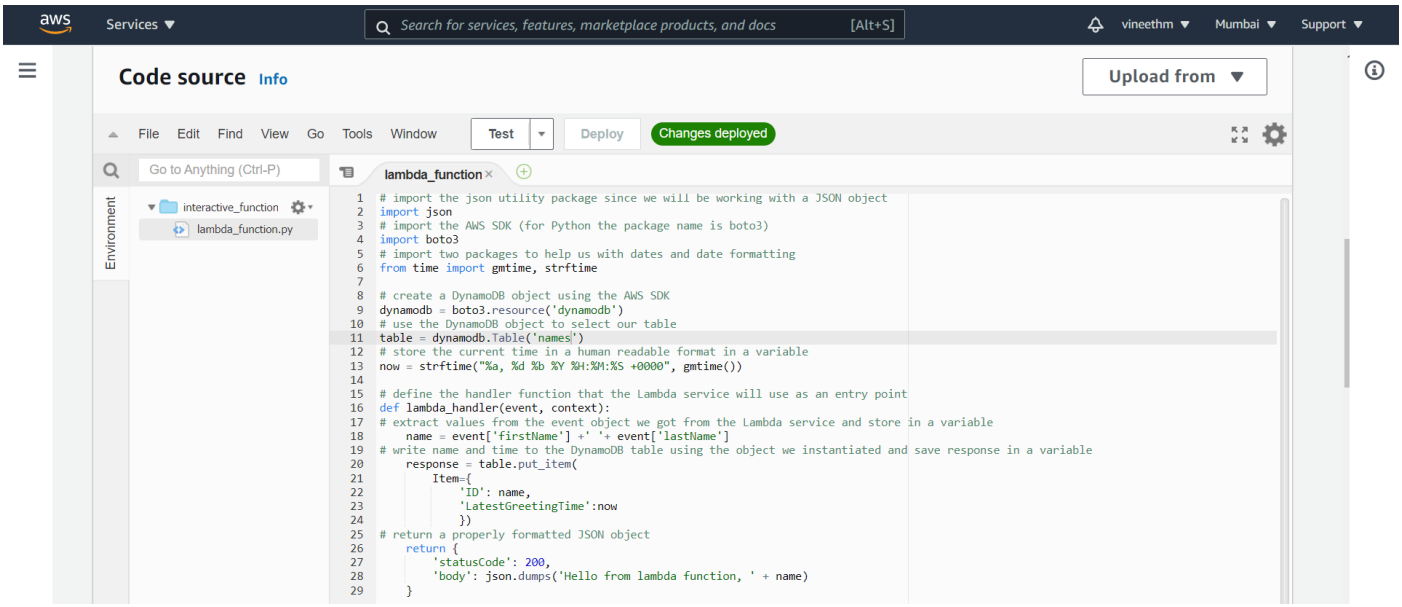
Task-5: Go to the created Lambda function and click on the permission tab.

Note:

a) Click on add inline policy, a json editor will open.
b) Copy the custom policy as given in the file.
c) In the policy JSON editor, supply the ARN point of the DynamoDB table as resource name.



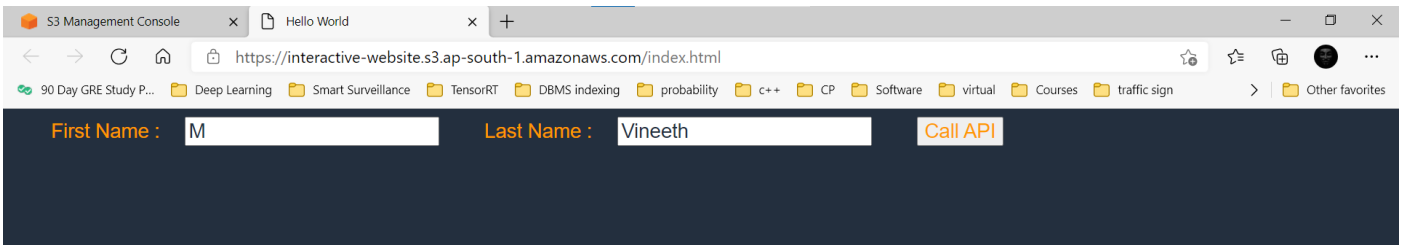
Task-6: Go back to the created Lambda function and update the code.

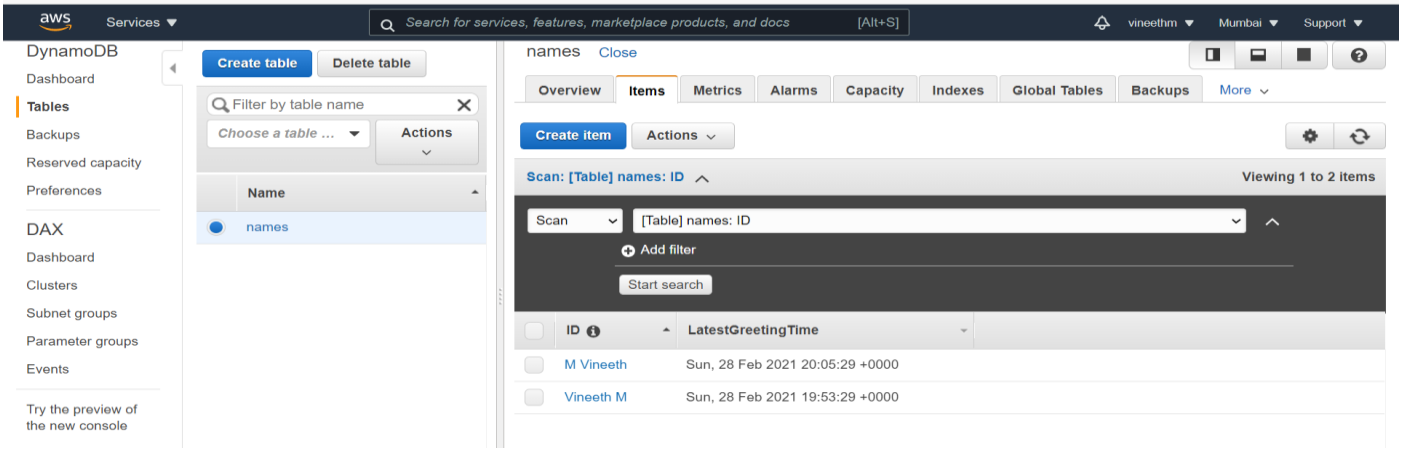


Task-7: Go to the created S3 bucket and upload the index.html file (interactive one).

Done. Uploading a new file with the same name as the already uploaded file in the bucket replaces the file in the bucket with the newly uploaded file.

Task-8: When the interactive website page opens, provide some input and check if the entries are stored in the DynamoDB.




aws
Services
Search for services, features, marketplace products, and docs
[Alt+S]
vineethm
Mumbai
Support
DynamoDB
Dashboard
Tables
Backups
Reserved capacity
Preferences
DAX
Dashboard
Clusters
Subnet groups
Parameter groups
Events
Try the preview of the new console
Create table
Delete table
Filter by table name
Choose a table ...
Actions
Name
names
names
Close
Overview
Items
Metrics
Alarms
Capacity
Indexes
Global Tables
Backups
More
Create item
Actions
Scan: [Table] names: ID
Viewing 1 to 2 items
Scan
[Table] names: ID
Add filter
Start search
ID
LatestGreetingTime
M Vineeth
Sun, 28 Feb 2021 20:05:29 +0000
Vineeth M
Sun, 28 Feb 2021 19:53:29 +0000