Simple Calculator Microservice Documentation

1. What It Does

This is a simple calculator API built with Node.js and Express. It can do:

- Addition (/add)

- Subtraction (/subtract)

- Multiplication (/multiply)

- Division (/divide)

2. How to Run

1. Make sure you have **Node.js** installed.

2. Download the code and run:

   npm install

   node server.js

3. The server will start at http://localhost:3040.

3. How to Use

Send a **GET** request with two numbers (num1 and num2) in the URL.

Examples:

- **Add two numbers:**

  GET /add?a=5&num2=3

  Response: {"status":"success","statusCode":200,"message":"Addition successful","data":{"result":8}}

- Subtract two numbers:

  GET /subtract?a=3&b=5

  Response: {"status":"success","statusCode":200,"message":"Subtraction successful","data":{"result":-2}}

- **Multiply two numbers**:

  GET /multiply?a=3&b=3

  Response: {"status":"success","statusCode":200,"message":"Multiplication successful","data":{"result":9}}

- **Divide two numbers:**

  GET /divide?a=3&b=5

  Response: {"status":"success","statusCode":200,"message":"Division successful","data":{"result":0.6}}

- **Error if input is invalid:**

  GET /add?a=abc&b=3

  Response: {"error":"Invalid input. Please provide two numbers."}

- **Error if the divisor is zero**:

  GET/divide?a=10&b=0

  Response: {"status":"error","statusCode":400,"message":"Division by zero is not allowed."}

4. Code Structure

- **server.js** – Main file with all the API routes.

- **package.json** – Lists required dependencies (only express).

5. Testing

You can test it with:

- **Browser:** Just open the URL (e.g., http://localhost:3000/add?a=2&b=3).