**Calculator Microservice with Node.js & Express**

**Introduction**

This project is a RESTful API microservice that performs basic arithmetic operations, including Addition, Subtraction, Multiplication, and Division. It is built using Node.js and Express.js, with Winston for logging.

**Project Setup**

**1. Create a Project Folder**

**2. Initialize a Node.js Project**

npm init -y

**3. Install Required Dependencies**

npm install express winston

**Winston Logger Setup**

A screen shot of a computer program

AI-generated content may be incorrect.

**Viewing Logs in Real-Time**

Get-Content logs/combined.log -Wait

A screen shot of a computer

AI-generated content may be incorrect.

**Setting Up Git and Pushing to GitHub**

git init

git add .

git commit -m "Initial commit"

git remote add origin https://github.com/AkankshaNunakani/sit737-2025-prac4p

git branch -M main

git push -u origin main

<https://github.com/AkankshaNunakani/sit737-2025-prac4p>

**Running the Server**

node server.js

**API Endpoints**

* **Addition:** <http://localhost:4000/add?num1=5&num2=3>

A computer screen shot of a computer

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* **Subtraction:** <http://localhost:4000/subtract?num1=10&num2=4>

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* **Multiplication:** <http://localhost:4000/multiply?num1=7&num2=2>

A computer screen shot of a white screen

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* **Division:** <http://localhost:4000/divide?num1=20&num2=5>

A screenshot of a computer

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**Conclusion**

This project demonstrates a simple arithmetic microservice using Node.js, Express, and Winston for logging. Logs provide a clear history of requests and errors, making debugging easier.