

## **First Week Warm up assignment**

### **Common requirement:**

- Use Spring Boot
- API should be tested using Postman
- Test Cases are required
- Upload in your Github account; add Readme files for each project with instructions of how to build, execute and sample request, response.

### **1. Hello <name>!! (Only Backend)**

**Description:** Given name in request, return greet at Hello <name>

#### **Conditions:**

- Pay attention to requirement (sample request/response)

#### **Sample Request - Response:**

Request: GET /greetapi/v1/hello

Response: { Hello World!! }

Request: GET /greetapi/v1/hello?name=Yogesh

Response: { Hello Yogesh!! }

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### **2. Rest API Based Calculator (Only Backend)**

**Description:** Provide API base calculator to support operations Addition, Subtraction, Multiplication, Division, Square, Square root, factorial, min-max

#### **Conditions:**

- Pay attention to requirement (sample request/response)

#### **Sample Request - Response:**

Request: GET /calculatorapi/v1/addition?number1=12&number2=15

Response: { "answer": 27, "detail": "12 + 15 = 27" }

Request: GET /calculatorapi/v1/subtraction?number1=12&number2=15

Response: { "answer": -3, "detail": "12 - 15 = -3" }

Request: GET /calculatorapi/v1/multiplication?number1=12&number2=15

Response: { "answer": 180, "detail": "12 \* 15 = 180" }

Request: GET /calculatorapi/v1/division?number1=12&number2=15

Response: { "answer": 0.8, "detail": "12 / 15 = 0.8" }

Request: GET /calculatorapi/v1/square/{5}

Response: { "answer": 25, "detail": "square of 5 = 25" }

Request: GET /calculatorapi/v1/squareroot/{225}

Response: { "answer": 15, "detail": "squareroot of 225 = 15" }

Request: GET /calculatorapi/v1/factorial/{5}

Response: { "answer": 120, "detail": "5! = 120" }

Request: POST /calculatorapi/v1/min-max

Body { "numbers" : [10,-5,7,15,-7,-6,16,19,-15,9] }

Response: { "min": -15, "max": 19 }

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