## **Timestamp Addition**

#### How I Solved It:

#### 1. Get the Current Date and Time:

 I used JavaScript's Date object to get the current date and time. The Date object provides methods to retrieve the year, month, day, hours, minutes, and seconds.

#### 2. Format the Date and Time:

- I had to format the date and time in YYYY-MM-DD HH:MM:SS format.
  - **Year**: Directly retrieved using getFullYear().
  - Month: Retrieved using getMonth(), but since it's zero-indexed (January is 0),
    I added 1 and used padStart(2, '0') to ensure it's always two digits.
  - Day: Retrieved using getDate(), and padded to two digits.
  - Hours, Minutes, Seconds: Similarly, retrieved and padded to two digits to maintain consistent formatting.

## 3. Combine Date and Time into Timestamp:

 I created a timestamp string by concatenating the formatted date and time. This string was then added to the message object as a new field.

## 4. Return the Updated Message:

 I returned a new object that included all the original message fields plus the new timestamp.

## **Problems I Faced:**

# • Property Existence:

 One challenge was ensuring that the function handled cases where msg.propertyName did not exist in msg.payload. If the property is missing, I needed to return null to indicate it wasn't found. This required a check for undefined.

#### Input Validation:

 Ensuring that msg.propertyName was a valid property name and msg.payload was an object were additional concerns. If msg.propertyName was not a string or msg.payload was not an object, the function might not work as expected. However, the basic implementation assumes that inputs are correctly formatted.