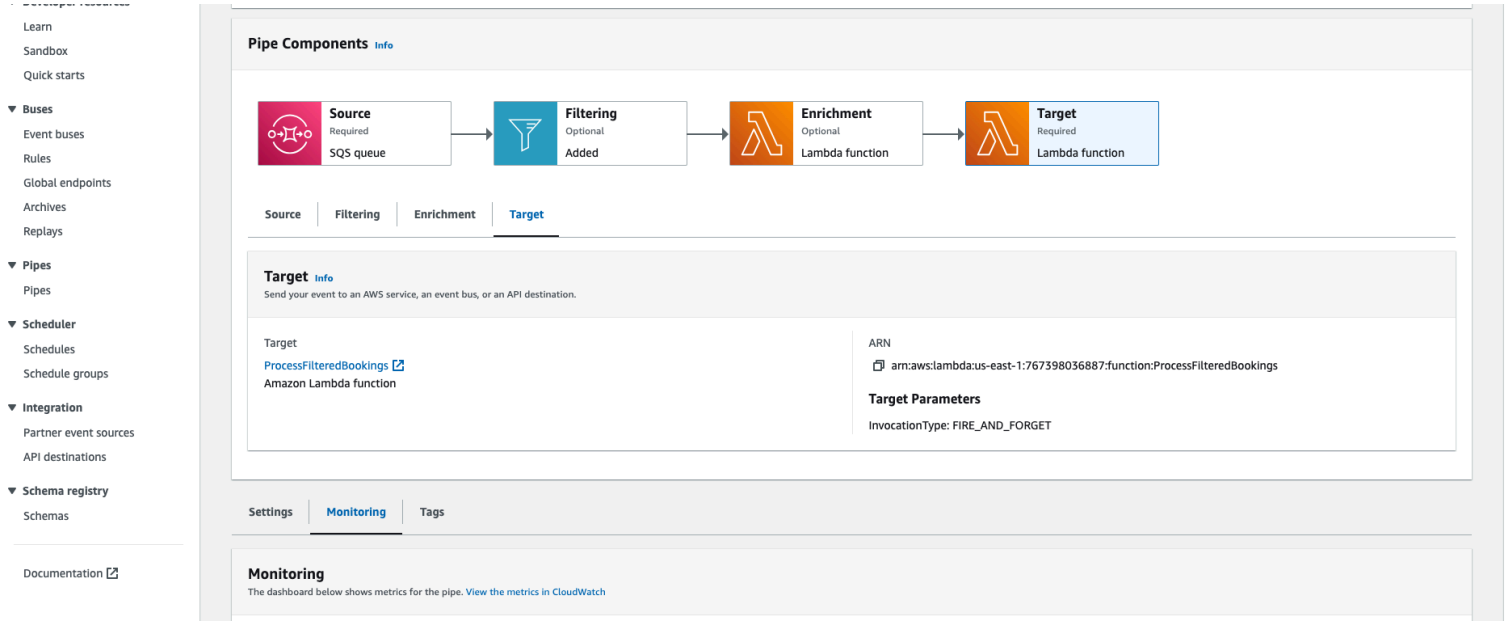
SQS Assignment:

1). Source code repository for lambda functions:

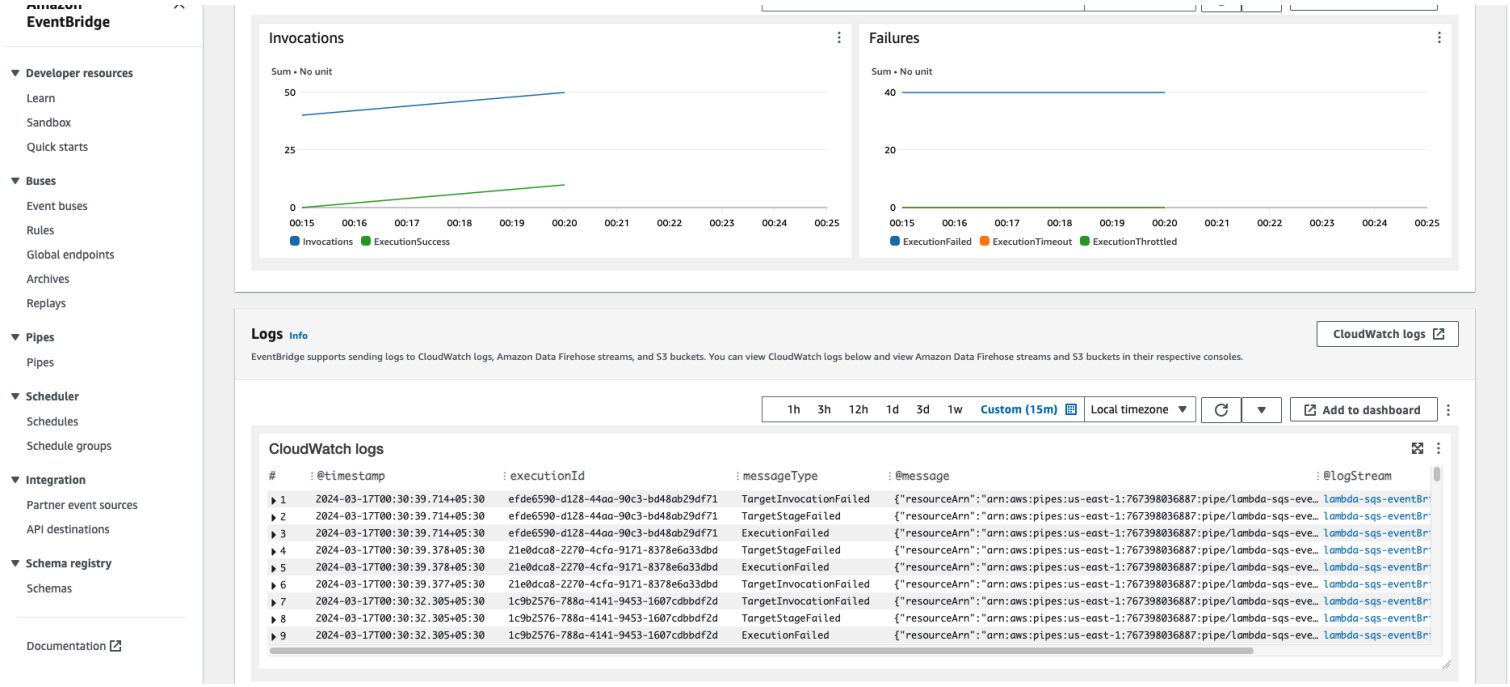
https://github.com/desininja/AirBnb-Stream-Data-Ingestion

2). Screenshot of logs demonstrating the successful execution of code:

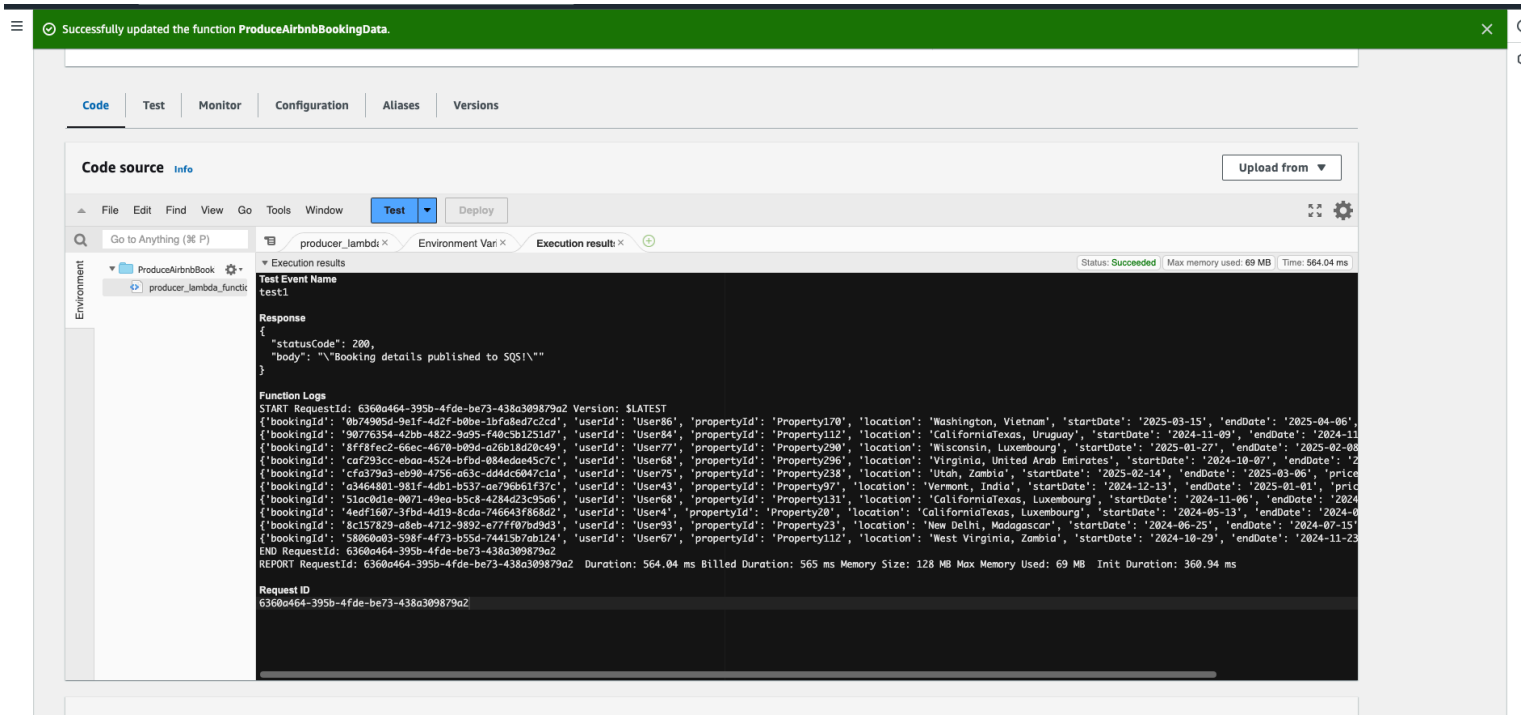
EventBridge Pipe Flow:



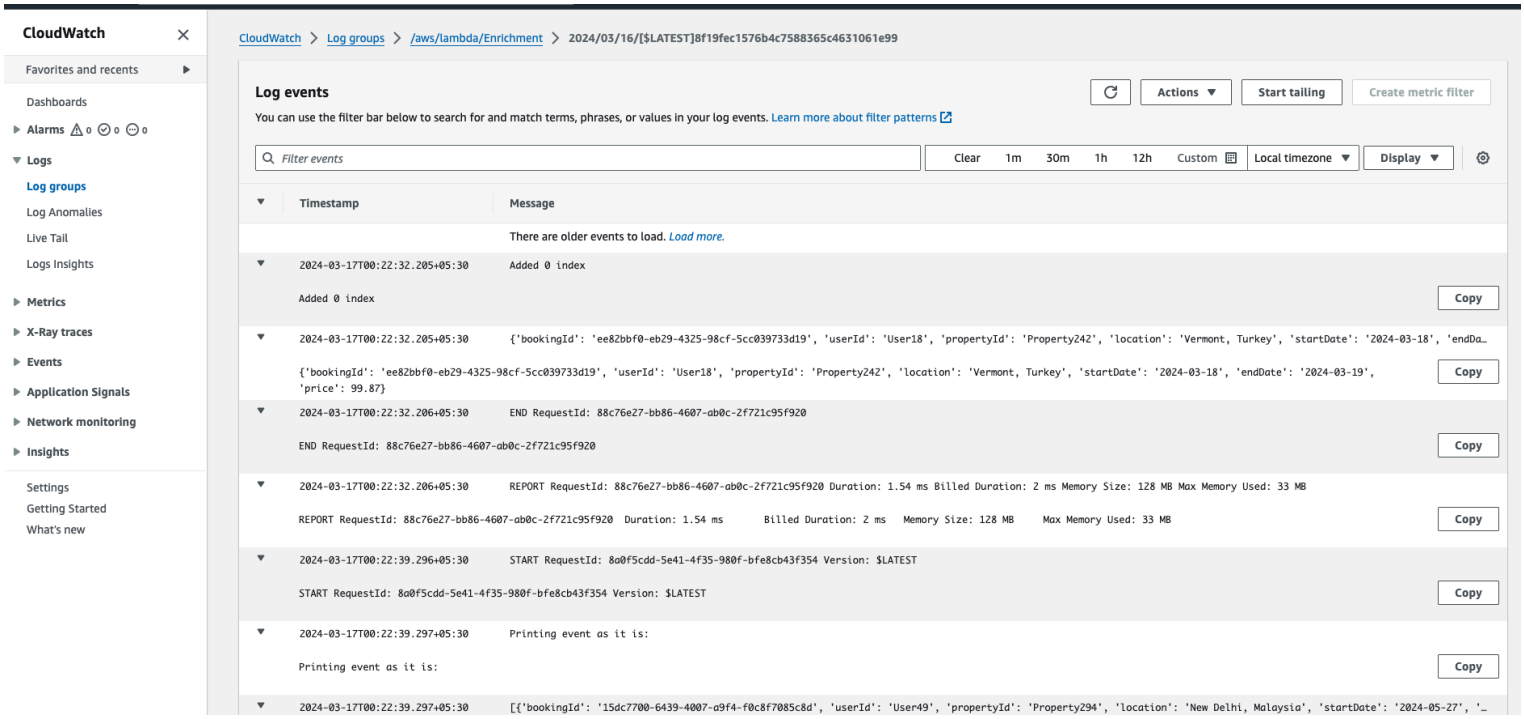
Invocations from producer lambda to SQS to Event Bridge Pipe:



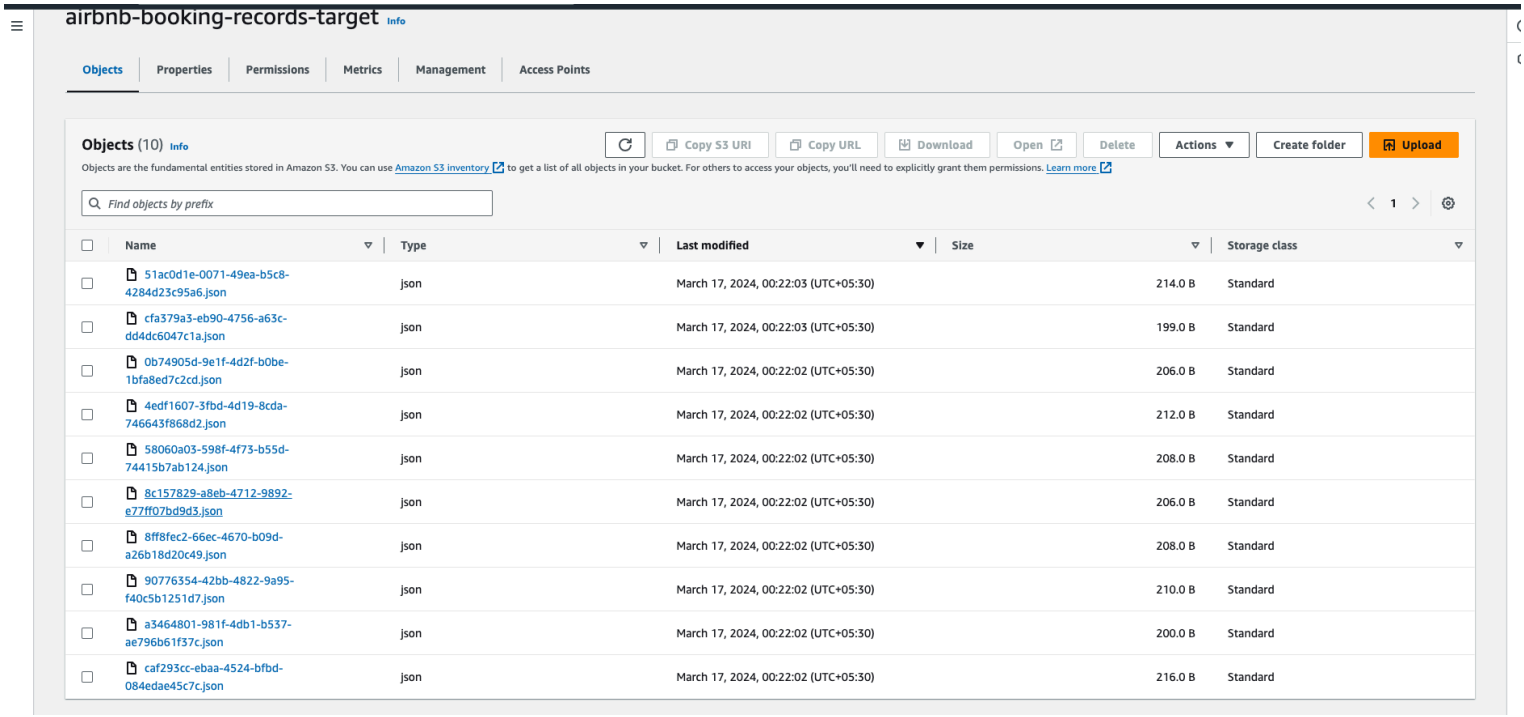
Producer data produced 10 messages:



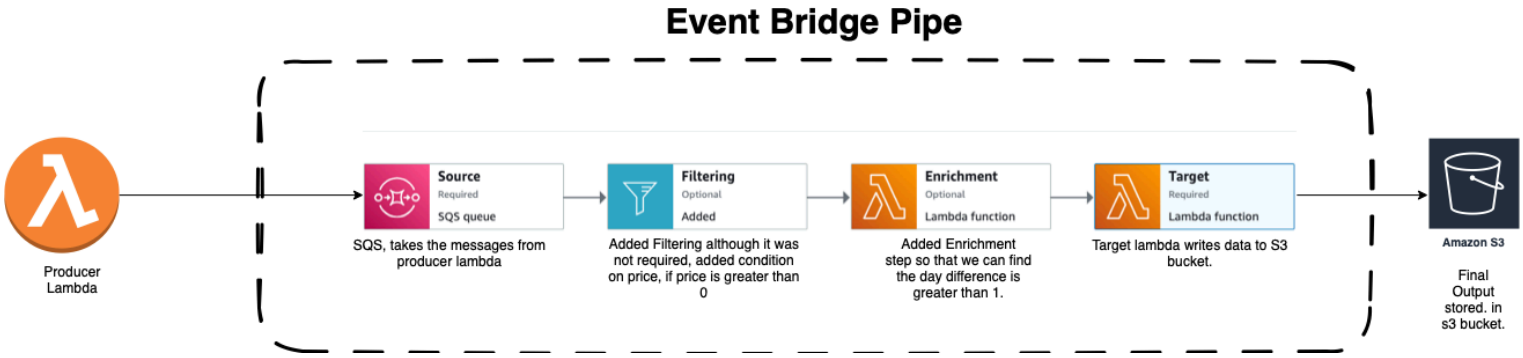
Enrichment lambda logs:



Final files in S3 location after Target lambda is processed:



3). Architecture Diagram:



As you can see in the above architecture, the producer lambda generates the mock data that is sent to SQS which act as a source for Event Bridge Pipe and passes that message to filtering stage(although this filtering stage was not required, but added it and filtered for price, if price is greater than 0. Then the Enrichment step where the difference between start time and end time is calculated and filtered if the difference is greater than 1. After that the filtered messages are passed to Target lambda which simply writes the received data to S3 bucket in json format.

4). Reflection on this assignment:

Initially I got confused on how to calculate the difference between starttime and endtime in the filter of EventBridge Pipe but when I revisited the session, Shashank clearly mentioned that for any transformation we can use an enrichment segment and apply a lambda for transformation so I applied it.
Later on I also faced a challenge with parsing event json for enrichment, I thought the event payload would be a json but it was a list and inside the list the json was present, and then for target the input was a string instead of dictionary type or json object. So I converted them into json/dictionary format at respective stages.
After doing all this, I achieved the objective and files got created in S3 bucket.

I still have some doubt regarding the invocation logs. I will ask them in the next session.