MP2 Part 2: Time Analysis

Location of Operation	Elapsed Time (ms)
Called from client	0.088
Generated in server	0.015
Called from client	0.026
Generated in server	0.002
Called from client	0.022
Generated in server	0.001

Location of Operation	Average Elapsed Time (ms)
Called from client	0.045
Generated in server	0.006

The functions that measure time for the client are located right before and after a request to the database server is sent. In comparison, the function that measures time within the database server are called in the functions that call generate_data().

On average, the time it takes to call an operation from the client side to the server side takes longer compared to calling the function locally within the server. Hypothetically, this is because the client needs to transfer the request using a channel and waits for a response from the database server from the channel, while the database server does not utilize this channel when calling generate_data() locally.