

In the process of testing, I encountered the problem where, despite getting result outputs for the user upon the calculation of RMS on the filtered audio, the software had an output of 0 for rms value before conversion to dB. First assumption was that through running the raw RMS, analyzer and filter nodes were not connected properly. However, after the investigation, it seemed that the incident was a timing problem from the timeout function, where, perhaps, the delay was not enough to allow for the audio to be processed and then analyzed. My first response was to increase the delay time, which successfully changed the output RMS to a value other than zero. However, I changed it again to make sure it is not manipulating the calculation, and unfortunately, it did. Upon searching on ChatGPT, I received a suggestion to change the timeout function with the onended function. I changed it, but the calculation stopped working. Currently, the software seems to work, but I do not understand how changing the delay time is manipulating the RMS so significantly, and how I can give the audio 100% of the processing time before analysis. Upon that, I got help for syntax from AI to add lines for testing and debugging using console.log for the steps of file upload, connection between nodes, and calculation.