Practicum I: Introduction to Continuous and Discrete Time Signals & Operations
Instructor/TA Sign Off Sheet, & Report Form

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For this Practicum, attach all plots requiring sign off below.

1. Procedure 1(b,c): Plots and sounds of the given audio signals .....
Comment on the questions.

Based on the signal graph it looks like consonant give out higher amplitude signals than vowels. In the spectrogram it looks like "i" and "o" sounds have higher frequencies. It also looks like while "e" sounds might have low frequencies, they have the highest amplitudes

2. Procedure 1(d): Plots and sounds of audio signals from self.....
Comment on the questions.

The patterns in the graphs are very similar. For the time series signal plot, the same vowels ~~were~~ had higher amplitudes than others, while the frequency plots also had similarities, there was more noise in these ~~the~~ graphs.

3. Procedure 1(e): Comment on the questions.

The spectogram belongs to the "university" category. The pattern of the frequencies is very similar. This can be useful in fields such as new AI personal assistants ~~where~~ Alexa and siri. They are able to recognize such as words.

4. Procedure 2(a,b): Sounds of signals after given operations.....
Comment on the questions.

2Fs - compresses time.
Fs/2 - Stretches time
flipud(s) - time reversal.
(S/5) - amplitude scaling, makes the signal quieter.

5. Procedure 2(c,d): Plots of signals after given operations.....
Comment on the questions.

D. Different values will give you different amounts of noise. Noisy signals can happen with something as simple as background noise. Example during a zoom call, microphones can pick up sound from a fan/AC in the background. Some methods that engineers use to fix this is using filters. They can separate signals by sorting frequencies.