Allocation of marks for Exercise 1

Highest mark: 6 marks

0.5 mark for 1.1 and 1.2

1.1. Read the audio file SX83.WAV and sampling rate.

1.2. Make sure the sampling rate is 16kHz, resample if necessary

1.3. Split the data sequence into windows.

- 1.3.1 Calculate the number of frames using the presented formula. **0.5 mark**
- 1.3.2 Windowing function. **1 mark**
- 1.3.3 Copy each frame segment from data to the corresponding column of frame_matrix. **1.5 mark**

1.4. Visualization

- 1.4.1. Plot the whole signal into subplot 1. **0.5 mark**
- 1.4.2. Plot a VOICED frame from frame_matrix into subplot 2. **0.5 mark**
- 1.4.3. Plot the magnitude spectrum of the same frame as in 1.4.2. **0.5 mark**
- 1.4.4. Compute and plot the spectrogram of the whole signal into a new. **1 mark**