Project tasks -1

- **Sentences for pro 1: 'C_01_01.wav' & 'C_01_02.wav'**
- **Task 1**
  - Set LPF cut-off frequency to 50 Hz.
  - Implement tone-vocoder by changing the number of bands to N=1, N=2, N=4, N=6, and N=8.
  - Save the wave files for these conditions, and describe how the number of bands affects the intelligibility (i.e., how many words can be understood) of synthesized sentence.

Project tasks -2

- **Task 2**
  - Set the number of bands N=4.
  - Implement tone-vocoder by changing the LPF cut-off frequency to 20 Hz, 50 Hz, 100 Hz, and 400 Hz.
  - Describe how the LPF cut-off frequency affects the intelligibility of synthesized sentence.

Project tasks -3

- **Task 3**
  - Generate a noisy signal (summing clean sentence and SSN) at SNR -5 dB.
  - Set LPF cut-off frequency to 50 Hz.
  - Implement tone-vocoder by changing the number of bands to N=2, N=4, N=6, N=8, and N=16.
  - Describe how the number of bands affects the intelligibility of synthesized sentence, and compare findings with those obtained in task 1.

Project tasks -4

- **Task 4**
  - Generate a noisy signal (summing clean sentence and SSN) at SNR -5 dB.
  - Set the number of bands to N=6.
  - Implement tone-vocoder by changing the LPF cut-off frequency to 20 Hz, 50 Hz, 100 Hz, and 400 Hz.
  - Describe how the LPF cut-off frequency affects the intelligibility of synthesized sentence.