

DSP Projects of Chapter 5

Shift the pitch of a soundtrack of a person singing (downloaded from the course Web site) and process the data to make them sing 6 semitones lower or higher. Please show the spectrogram of the three audio files for comparison.

- You can use the MATLAB tool for the conversion and the presentation of the spectrogram.

- <https://www.mathworks.com/help/audio/ref/shiftpitch.html>

- <https://www.mathworks.com/help/signal/ref/spectrogram.html>

- Chrome Music lab for spectrogram demo

<https://musiclab.chromeexperiments.com/Spectrogram/>

Please upload your program and the results to the ftp site within two weeks after the date of project assignment. The audio signal files can be downloaded from the website. The ftp site can be found on the course website.