## **AUDIO**

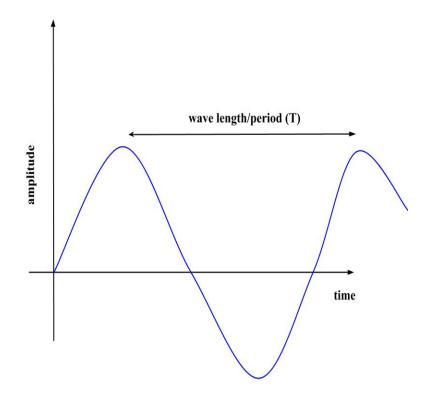
It uses .wav files!No, no, no! How will I find a converter? :(( Well, here is an online one which does the job for you! -

http://audio.online-convert.com/convert-to-wav

You can set the bit resolution to 16 bit and the sampling rate at 44 100 Hz and there you go you have a perfectly good file for audio visualisation.

## How does the Audio Visualisation works?

What we want to represent are the different frequencies there are in our wav.file. To do this we use an algorithm called Fast Fourier Transform. This is how sound waves are normally represented:



The sound wave here is in the time domain. What the Fourier Transform does is it represent it in the frequency domain. So we can identify the higher frequencies and the lower ones. Using that we represent it in our matrix.

