

```

[wave,fs]=wavread('C:\Users\Jenny\Desktop\matlab\phonokardiogramm.wav'); %
read file into memory */

sound(wave,fs); % see what it sounds like */
t=0:1/fs:(length(wave)-1)/fs; % and get sampling frequency */

plot(t,wave); % zeigt den Graph grundlegend an*/
figure(1);
    plot(t,wave);
    title('Wave File');
    ylabel('Amplitude');
    xlabel('Length (in seconds)');
    % versieht den Graphen mit Beschriftung und Titel*/

n=length(wave)-1;
f=0:fs/n:fs;
wavefft=abs(fft(wave)); % perform Fourier Transform *

figure(2);
    plot(f,wavefft); % plot Fourier Transform */
    xlabel('Frequency in Hz');
    ylabel('Magnitude');
    title('The Wave FFT');

figure(3);
wave3=wave.^2;
plot(t, wave3);

```