PROBLEM:

Consider the following MATLAB program:

- nn = 0:16000;
- xx = 3 + 2*cos(0.75*pi*nn-pi/4) + 11*cos(1.5*pi*nn-pi/3); yy = conv([1,0,0,0,-1]/4,xx); soundsc(yy,8000)
 - (a) What is the system function H(z) of the system that is implemented by the conv() statement?
 - (b) What is the frequency response of the system?
 - (c) Neglecting the end effects in the convolution, determine y(t) that describes the signal produced by the soundsc() statement.