# Maher Saleem 1130258

# Part A : Adding more filter coefficients (i.e. more echos).

Adding more coefficient like this

% 9 echos added

h(1) = 1; % orginal signal

h(1000) = 1/2;

h(1500) = 1/4;

h(2000) = 1/4;

h(2500) = 1/4;

h(3000) = 1/4;

h(3500) = 1/4;

h(3999) = 1/4;

Will make the signal repeated more than one time, as there is a multiple echos.

# Part B : Varying more interval (i.e. delay) between echo’s.

This will make the echo take longer time to be heard. Since the echo will start after longer time.

((The delay interval depends on the size of the room and the round-trip time of the sound.))

As in This example

% 6 echos added

h(1) = 1;

h(1000) = 1/2;

h(3000) = 1/3;

h(5000) = 1/4;

h(7000) = 1/5;

h(8000) = 1/6;

# Part C: Varying strength of echo’s (i.e. values of filter coefficients).

Make the magnitude of the coefficient less, will make the echo be lower in voice. Since convolution will make the signal repeated with lesser amplitueds.

Example

% 6 echos added

h(1) = 1;

h(1000) = 1/2;

h(3000) = 1/32;

h(5000) = 1/4;

h(7000) = 1/12;

h(8000) = 1/8;

((The values of the 2nd, 3ed, 4th, … coefficients relates to the magnitude of echos and how rapidly echos decay))