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### Part A T2=3.5T1

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```
%get the inputs
inputsignal=wavread('F:\Coll works\HOMEWORKS\Spring 17\DSP 2\Project 2\sample2.wav');
inputsignaltone=wavread('F:\Coll works\HOMEWORKS\Spring 17\DSP 2\Project 2\sample2_tone.wav');
%sound(inputsignal);
%f1 is 8khz f2 is 2.2857khz I=2 D=7
I=input('Enter I');
D=input('Enter D');
outputsignal=resample(inputsignal,I,D); %resampling of the signal
outputsignaltone=resample(inputsignaltone,I,D); %resampling of the signal
%use sampling rate of 8kHz to play input signal, 2.28kHz to play output
%signal
figure();
stem(inputsignal);
title('Input signal without Tone');
ylabel('Amplitude');
xlabel('time scale');
figure();
stem(outputsignal);
title('Resampled Output signal without Tone');
ylabel('Amplitude');
xlabel('time scale');
figure();
stem(inputsignaltone);
title('Input signal with Tone');
ylabel('Amplitude');
xlabel('time scale');
figure();
stem(outputsignaltone);
title('Resampled Output signal with Tone');
ylabel('Amplitude');
xlabel('time scale');
```

### Part A T2=3T1

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```
%input the signals
inputsignal=wavread('F:\Coll works\HOMEWORKS\Spring 17\DSP 2\Project 2\sample2.wav');
inputsignaltone=wavread('F:\Coll works\HOMEWORKS\Spring 17\DSP 2\Project 2\sample2_tone.wav');
incoutputsignal=downsample(inputsignal,3,2);
incoutputsignaltone=downsample(inputsignaltone,3,2);
%Use sample rate 2.667KHz to play the signal
figure();
stem(incoutputsignal);
title('Downsampled output signal');
ylabel('Amplitude');
xlabel('time scale');
figure();
stem(incoutputsignaltone);
title('Downsampled Output signal with Tone');
ylabel('Amplitude');
xlabel('time scale');
```

