

Tune-Up Tuesday for September 12, 2017

(a) Copy, paste and run the Matlab code from slide 1-14 to generate the cosine signal $x(t) = \cos(2 \pi f_0 t)$ with $f_0 = 440$ Hz and play it as an audio signal for 3 seconds at the sampling rate of $f_s = 8000$ Hz:

```
f0 = 440;  
fs = 8000;      % rate  
Ts = 1/fs;  
t = 0 : Ts : 3; % 3 sec  
x = cos(2*pi*f0*t);  
% sound(x, fs);
```

(b) Add to the code in (a) to generate a new signal $y(t) = \cos(2 \pi f_0 t) \cos(2 \pi f_1 t)$ with $f_1 = 220$ Hz by using the same sampling rate of $f_s = 8000$ Hz.

(c) Add to the code in (b) to playing $y(t)$ as an audio signal.

(d) Copy and paste your code for (c) into the Tune-up Tuesday #2 page on Canvas