Tune-Up Tuesday for September 19, 2017

(a) Copy, paste and run the Matlab code from slide 1-14 to generate the cosine signal   
*x*(*t*) = cos(2 *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);**

**soundsc(x, fs);**

(b) Add to the code in (a) to generate a new signal *y*(*t*) = cos(2 *f*0 *t*) + cos(2 *f*1 *t*) with  
*f*1 = 660 Hz by using the same sampling rate of *f*s = 8000 Hz.

(c) Add to the code in (a) to generate a new signal *z*(*t*) = *y*(*t*) + cos(2 *f*2 *t*) with  
*f*2 = 740 Hz by using the same sampling rate of *f*s = 8000 Hz. *z*(*t*) is a chord (slide 3-4).

(d) Copy and paste your code for (c) into the Tune-up Tuesday #3 page on Canvas