Tune-Up Tuesday for September 19, 2017

(a) Copy, paste and run the Matlab code from slide 1-14 to generate the cosine signal $x(t) = \cos(2 \pi f_0 t)$ 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);
soundsc(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 $f_1 = 660$ Hz by using the same sampling rate of $f_s = 8000$ Hz.

(c) Add to the code in (a) to generate a new signal $z(t) = y(t) + \cos(2 \pi f_2 t)$ 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