```
function [xx, tt] = key2sinus(keynum, amp, phase, fsamp, dur)
% KEY2SINUS Produce a sinusoidal waveform corresonpoding to a given piano
%       key number
% usage: xx = key2sinus(keynum, amp, phase, fsamp, dur);
%
% xx = output of sinusoidal waveform
% tt = vector of sampling times
% keynum = piano keyboard number of desired note
% amp, phase, sinusoid parameters
% fsamp = sampling frequency (800,11025, 22050)
% dur = duration in seconds of output note
tt = 0:(1/fsamp):dur;
freqKey = 440*2^((keynum-49)/12);
Xphasor = amp*exp(j*phase);
xx = real(Xphasor*exp(j*2*pi*freqKey*tt));
end
```

```
Error using key2sinus (line 12)
Not enough input arguments.
```

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```
function [xx, tt] = makeFMexpVals(sigFMexp, dt)
% Inputs - sigFMexp (struct)
%          Struct with following fields
%          Amp, fc, beta, gamma, t1, t2
%        - dt (double), sampling period

tt = sigFMexp.t1:1/dt:sigFMexp.t2;
psi = 2*pi*(sigFMexp.fc*tt + (sigFMexp.gamma/sigFMexp.beta)*exp(sigFMexp.beta*tt));
xx = sigFMexp.Amp * cos(psi);
end
```

```
Error using makeFMexpVals (line 7)
Not enough input arguments.
```

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