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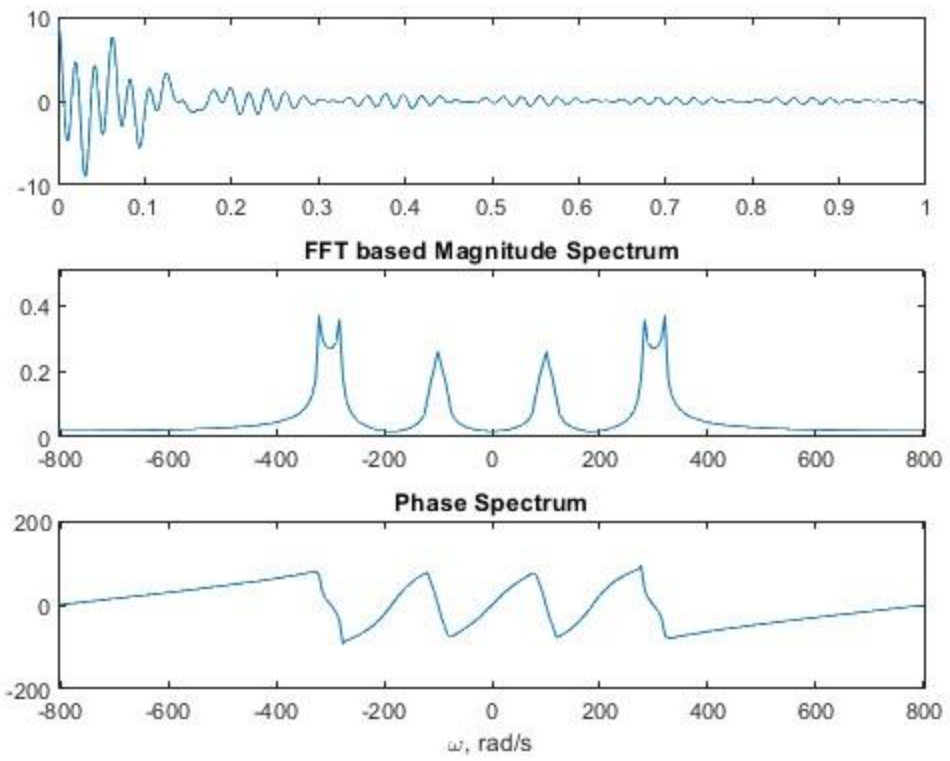
```
%LAB 8
%NAME: Terry-Ann Sneed
%FALL 2018

clc clear
all close
all

t = 0:.001:1; f =
(20/pi)*sinc((20*t)/pi).*cos(300*t)+(10/pi).*sinc((10*t)/
pi).^2.*cos(100*t); subplot(311),plot(t,f)

T1 = 0;
T2 = 1;
No = 256; Ts = (T2 - T1)/No; t = T1:Ts:T2-Ts; ws =
2*pi/Ts/No; w = -pi/Ts:ws:pi/Ts-ws; f =
(20/pi)*sinc((20*t)/pi).*cos(300*t)+(10/pi).*sinc((10*t)/
pi).^2.*cos(100*t); FF = fft(f);
FF = fftshift(FF); FF = Ts*FF; figure(1);
subplot(312),plot(w,abs(FF)),title('FFT based Magnitude Spectrum');
axis([-pi/Ts pi/Ts 0 0.51]);
subplot(313),plot(w,angle(FF)*180/pi),title('Phase Spectrum');
axis([-pi/Ts pi/Ts -200 200]); xlabel('\omega, rad/s');
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*Published with MATLAB® R2018a*