Header

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Nolan Anderson CPE 381 Final Exam Final.m Plots the spectrum using a hanning function and input .mat file.

Load and initialize

```
load('fintest.mat');

Fs = 200; %sampling frequency
NFFT = 1024; %NFFT
H = 1024; %Hanning window size
Window = transpose(hann(H));
```

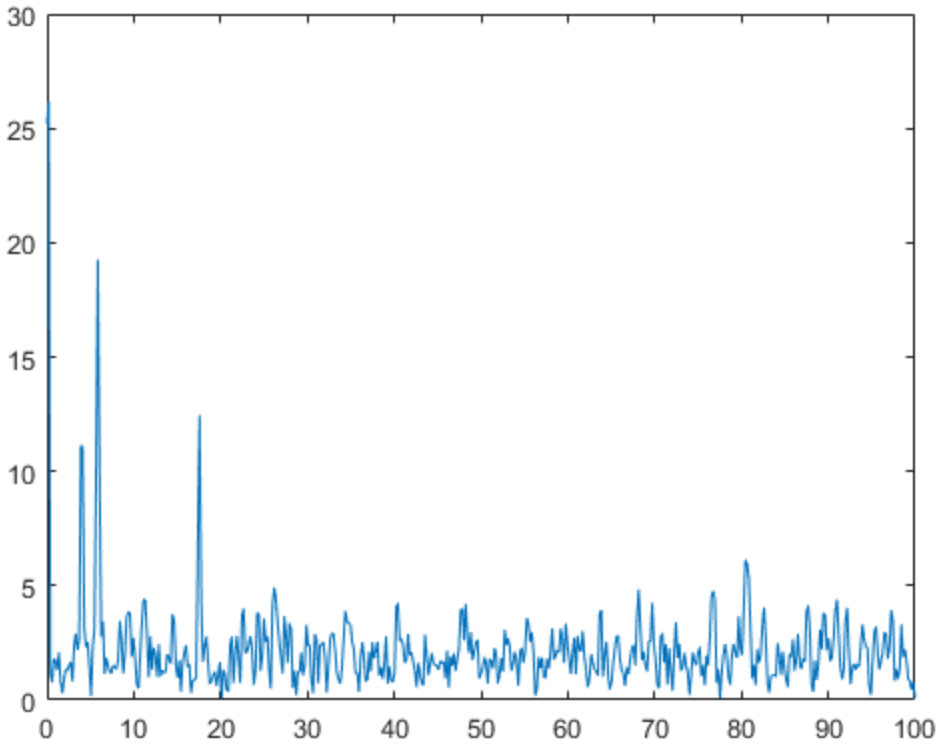
Calculate and Plot

```
x = x .* Window;

out = fft(x, NFFT);
f = Fs*(0:(NFFT/2))/NFFT; % Half samp freq.

sp2 = abs(out / NFFT);
sp1 = sp2(1:NFFT/2+1);
sp1(2:end-1) = 2*sp1(2:end-1);

plot(f,sp1)
```



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