```matlab
%fft
clc;clear;close all;
f1=3;
f2=15;
fs=60;
t=0:1/fs:5;

x=5*cos(2*pi*f1*t)+3*sin(2*pi*f2*t);
N=fs*2;
X=fft(x,N);
f=fs*(0:N-1)/N;
Power=X.*conj(X)/N;

subplot(3,2,1),
t1=t(1:300);
x1=x(1:300);
plot(t1,x1);
title('Input Signal x(t)'),xlabel('time'),ylabel('Amplitude'),

subplot(3,2,2),
n=0:(length(x1)-1);
stem(n,x1);
title('Input Signal x(n)'),xlabel('discrete time'),ylabel('Amplitude'),

subplot(3,2,3),
stem(f,abs(X),'g');
title('Magnitude Spectrum of X(k)'),xlabel('Frequency in khz'),ylabel('Amplitude'),

subplot(3,2,4),
stem(f,Power,'m');
title('Power Spectrum of X(k)'),xlabel('Frequency in khz'),ylabel('Power'),

subplot(3,2,5),
stem(f,angle(X),'r');
title('Phase Spectrum of X(k)'),xlabel('Frequency in khz'),ylabel('Phase of X');
```