POLYNIOMIAL INTERPOLATION

% Define the measured data points

x\_data = [0.0,1.0,2.0,3.0,4.0,5.0];

y\_data = [44.5,43,42,40.4,39.5,37.6];

% Polynomial interpolation

p1 = polyfit(x\_data,y\_data,length(x\_data)-1);

x\_interp = linspace(0,5,100);

y\_interp = polyval(p1,x\_interp);

% Plot the results of interpolation

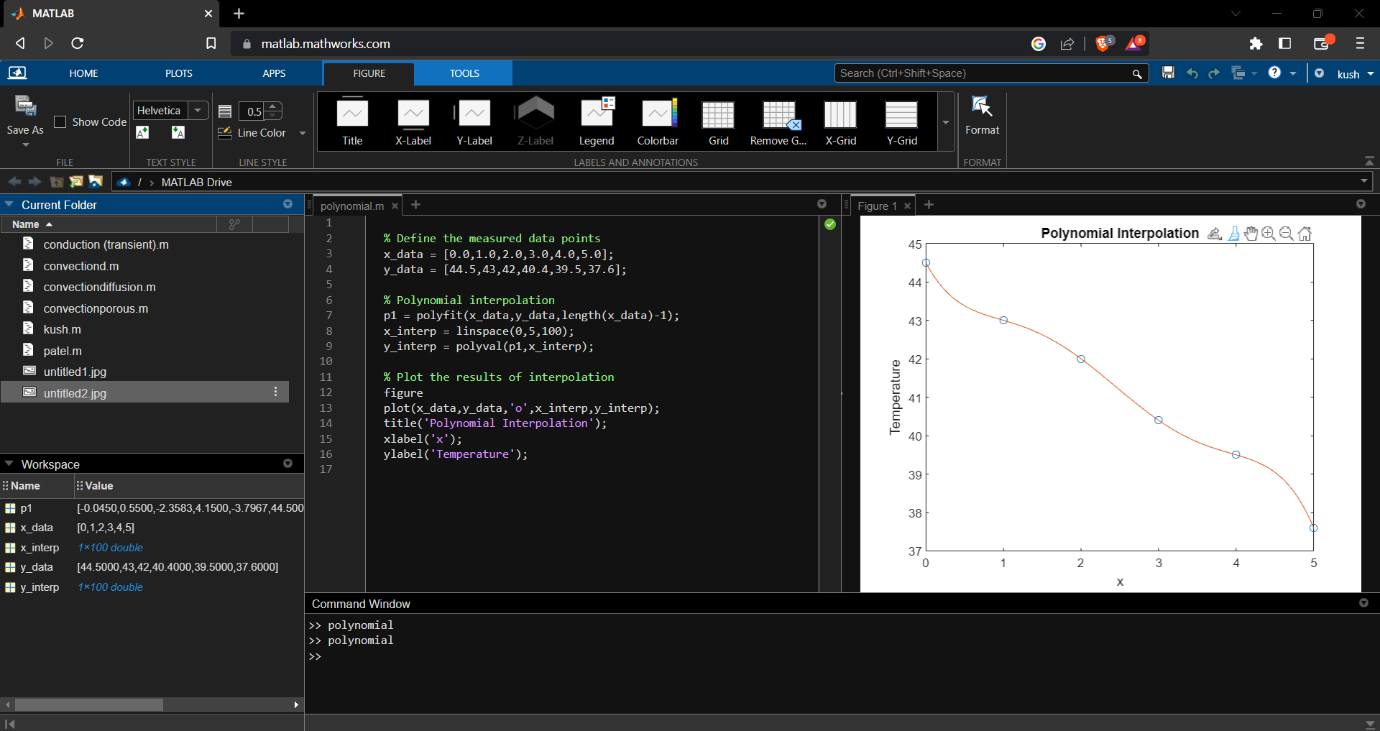
figure

plot(x\_data,y\_data,'o',x\_interp,y\_interp);

title('Polynomial Interpolation');

xlabel('x');

ylabel('Temperature');



POLYNOMIAL APPROXIMATION