

```

clear
T = xlsread('data2.xlsx');

%Independent Variable
x = T(:, 1);

% Dependent Variable
y = T(:, 2);

%original distance
x1 = xlsread('data2.xlsx','Sheet1','A1:A1');

%Cross-sectional area
y1 = 0.01*76.2*(10^-6); %For Nitrile Gloves
y11 = 0.013*127*(10^-6); %For Latex Gloves

%Strain
x2 = (x - x1)/11;

%Stress
y2 = (y*0.0098) / y11;

figure
plot(x2,y2,'-');
title('Stress VS Strain');
xlabel('Strain');
ylabel('Stress')

%ultimate Tensile Strenth
y3 = max(y2);

%For Youngâ€™s Modulus
x4 = xlsread('data2.xlsx','Sheet1','A2:A5');
y4 = xlsread('data2.xlsx','Sheet1','B2:B5');

x5 = (x4 - x1)/1;
y5 = (y4*0.0098) / y11;

p = polyfit(x5,y5,1);

fprintf('Youngâ€™s Modulus: ');
display(p);
fprintf('Ultimate Tensile Strenth ');
display(y3);

```