I = imread('16641553972049.jpeg'); % Read the image

imshow(I); % Display the image

[x y] = ginput(2); % reads two points. x is a 2x1 column vector with x coordinates and y is a 2x1 column vector with y coordinates.

%Focal length from part A

fx = 1523.38;

fy = 1528.62;

%distance between camera and object

z0 = 29.22;

%point1

x1 = z0\*(x(1)/fx);

y1 = z0\*(y(1)/fy);

%point2

x2 = z0\*(x(2)/fx);

y2 = z0\*(y(2)/fy);

% using Euclidean distance to find the distance between point1 and point2

dist = sqrt((x2-x1)^2 + (y2-y1)^2);

disp("the distance between the two points is");

disp(dist);