```
I = imread("hw1-3.jpg");
imshow(I);

% Get image coordinates
[x y] = ginput(2)
```



```
x = 2 \times 1
252
642
y = 2 \times 1
342
318
```

```
% Get focal length of OAK-D Lite from DepthAI
f = 1.657423e+03;

% Distance(camera, box)
z0 = 644;

% Calculate real world coordinates from image coordinates
x0 = z0 * (x(1)/f)
```

x0 = 97.9159

```
x1 = z0 * (x(2)/f)
```

x1 = 249.4523

```
y0 = z0 * (y(1)/f)
```

y0 = 132.8858

$$y1 = z0 * (y(2)/f)$$

y1 = 123.5605

% Print out the distance of object distance = $sqrt((x1-x0)^2 + (y1-y0)^2)$

distance = 151.8231