```matlab
I = imread("./captured_images/1651007099257.jpg");
imshow(I);

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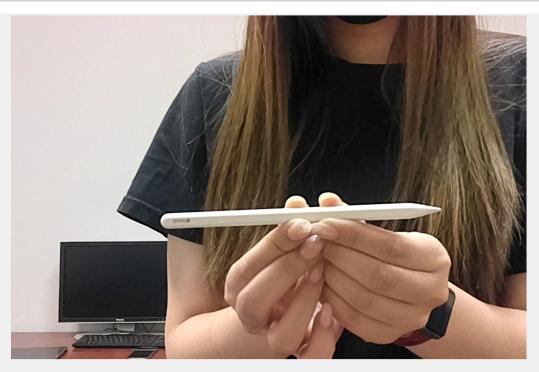


```
x = 2×1
    316
    900
y = 2×1
    432
    406
```

```matlab
% Get focal length of OAK-D Lite from DepthAI
f = 1.6574233e+03;

% Distance between object and chessboard
z0 = 644;

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

```
x0 = 122.7834
```

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

```
x1 = 349.6994
```

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

y0 = 167.8557

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

y1 = 157.7533

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

distance = 227.1409