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```
clc
clear all
close all
warning off

addpath(genpath('rvctools'));
a1 = 0.3;
a2 = 0.3;
d4 = 0.3;

alpha = zeros(1,4); a = [a1, a2, 0, 0];
d = [0, 0, 0, d4]; theta = zeros(1,4);
dh = [theta' d' a' alpha'];

L{1} = Link('d', dh(1,2), 'a', dh(1,3), 'alpha', dh(1,4));
L{2} = Link('d', dh(2,2), 'a', dh(2,3), 'alpha', dh(2,4));
L{3} = Link('theta', dh(3,2), 'a', dh(3,3), 'alpha', dh(3,4));
L{4} = Link('d', dh(4,2), 'a', dh(4,3), 'alpha', dh(4,4));
L{3}.qlim = [0, 0.2]; %add if prismatic joint

R = SerialLink([L{1} L{2} L{3} L{4}]);

qd = [0, pi/2, .16, pi/3];

Td = R.fkine([qd])
W=[-2 2 -2 2 -2 2];
plot(R,qd,'workspace', W)
teach(R)
m=[1 1 1 0 0 1]';
q0=[pi/4, pi/2, 0.2, 0];
qcomp = R.ikine(Td, q0, m, 'pinv')
Tcomp = R.fkine(qcomp)
```

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