

Generalized coordinates: $q = [x_a \ y_a \ \theta_a \ x_b \ y_b \ \theta_b \ x_c \ y_c \ \theta_c \ x_d \ y_d]'$

```
>> q(1,:) % Position problem
```

```
ans =
```

```
0.3536 0.3536 0.7854 1.7672 1.1529 0.3980 2.4136 0.7993 4.2348 1.1605  
1.3046
```