Poses

1.

0, pi/4, pi/4, pi/2, 0; % start pose

(x,y,z) =

2.

0, pi/6, pi/4, pi/2, 0;

3.

pi/4, pi/4, pi/4, pi/2, 0;

4.

pi/4, pi/6, pi/4, pi/2, 0;

5.

pi/6, pi/4, pi/4, pi/2, 0;

6.

pi/6, pi/6, pi/4, pi/2, 0;

7.

pi/8, pi/4, pi/4, pi/2, 0;

8.

pi/8, pi/6, pi/4, pi/2, 0;

9.

-pi/4, pi/4, pi/4, pi/2, 0;

10.

-pi/4, pi/6, pi/4, pi/2, 0;

11.

-pi/6, pi/4, pi/4, pi/2, 0;

12.

-pi/6, pi/6, pi/4, pi/2, 0;

13.

-pi/8, pi/4, pi/4, pi/2, 0;

14.

-pi/8, pi/6, pi/4, pi/2, 0;

Transformation Matrix for Pose 1:

-1.0000 -0.0000 0 0.3025

0.0000 -1.0000 0 -0.0000

0 0 1.0000 0.1847

0 0 0 1.0000

Transformation Matrix for Pose 2:

-0.9659 -0.0000 -0.2588 0.2804

0.0000 -1.0000 0.0000 -0.0000

-0.2588 -0.0000 0.9659 0.2614

0 0 0 1.0000

Transformation Matrix for Pose 3:

-0.7071 0.7071 0.0000 0.2139

-0.7071 -0.7071 -0.0000 0.2139

0.0000 -0.0000 1.0000 0.1847

0 0 0 1.0000

Transformation Matrix for Pose 4:

-0.6830 0.7071 -0.1830 0.1983

-0.6830 -0.7071 -0.1830 0.1983

-0.2588 0.0000 0.9659 0.2614

0 0 0 1.0000

Transformation Matrix for Pose 5:

-0.8660 0.5000 -0.0000 0.2619

-0.5000 -0.8660 -0.0000 0.1512

-0.0000 -0.0000 1.0000 0.1847

0 0 0 1.0000

Transformation Matrix for Pose 6:

-0.8365 0.5000 -0.2241 0.2428

-0.4830 -0.8660 -0.1294 0.1402

-0.2588 -0.0000 0.9659 0.2614

0 0 0 1.0000

Transformation Matrix for Pose 7:

-0.9239 0.3827 -0.0000 0.2794

-0.3827 -0.9239 -0.0000 0.1157

-0.0000 -0.0000 1.0000 0.1847

0 0 0 1.0000

Transformation Matrix for Pose 8:

-0.8924 0.3827 -0.2391 0.2590

-0.3696 -0.9239 -0.0990 0.1073

-0.2588 -0.0000 0.9659 0.2614

0 0 0 1.0000

Transformation Matrix for Pose 9:

-0.7071 -0.7071 0.0000 0.2139

0.7071 -0.7071 -0.0000 -0.2139

0.0000 0.0000 1.0000 0.1847

0 0 0 1.0000

Transformation Matrix for Pose 10:

-0.6830 -0.7071 -0.1830 0.1983

0.6830 -0.7071 0.1830 -0.1983

-0.2588 -0.0000 0.9659 0.2614

0 0 0 1.0000

Transformation Matrix for Pose 11:

-0.8660 -0.5000 0.0000 0.2619

0.5000 -0.8660 -0.0000 -0.1512

0.0000 -0.0000 1.0000 0.1847

0 0 0 1.0000

Transformation Matrix for Pose 12:

-0.8365 -0.5000 -0.2241 0.2428

0.4830 -0.8660 0.1294 -0.1402

-0.2588 0.0000 0.9659 0.2614

0 0 0 1.0000

Transformation Matrix for Pose 13:

-0.9239 -0.3827 0.0000 0.2794

0.3827 -0.9239 -0.0000 -0.1157

0.0000 -0.0000 1.0000 0.1847

0 0 0 1.0000

Transformation Matrix for Pose 14:

-0.8924 -0.3827 -0.2391 0.2590

0.3696 -0.9239 0.0990 -0.1073

-0.2588 -0.0000 0.9659 0.2614

0 0 0 1.0000