

INDUSTRIAL QUANTUM ROBOTICS

WEEK 6

TRAPEZOIDAL CALCULATION

Name : VIVITHA M
Roll No : 7376221CS352

Trapezoidal profile:

Distance	<input type="text" value="700"/>	<input type="button" value="Run"/>
Speed	<input type="text" value="1"/>	<input type="button" value="Clear"/>
<input type="radio"/> Triangle	<input type="button" value="+X"/>	<input type="button" value="-X"/>
<input checked="" type="radio"/> Trapezoidal	<input type="button" value="+Y"/>	<input type="button" value="-Y"/>
<input type="radio"/> S-Curve	<input type="button" value="+Z"/>	<input type="button" value="-Z"/>

Total SumVelocity	700.5000959400
Last Position in X-axis	0.0000
Last Position in Y-axis	0.0000
Last Position in Z-axis	0.0000

JOG +X

Distance

700

Speed

1

☐ Triangle

☒ Trapezoidal

☐ S-Curve

+X

+Y

+Z

-X

-Y

-Z

Run

Clear

	X Position	Y Position	Z Position
684	699.22747		
685	699.32404		
686	699.41416		
687	699.49785		
688	699.57511		
689	699.64592		
690	699.71030		
691	699.76824		
692	699.81974		
693	699.86481		
694	699.90343		
695	699.93562		
696	699.96137		
697	699.98069		
698	699.99356		
699	700.00000		
700	700.00000		

Total SumVelocity

700.5000959400

Last Position in X-axis

700.00000

Last Position in Y-axis

0.0000

Last Position in Z-axis

0.0000

JOG -X

Distance

700

Speed

1

☐ Triangle

☒ Trapezoidal

☐ S-Curve

+X

+Y

+Z

-X

-Y

-Z

Run

Clear

	X Position	Y Position	Z Position
2084	-699.22747		
2085	-699.32404		
2086	-699.41416		
2087	-699.49785		
2088	-699.57511		
2089	-699.64592		
2090	-699.71030		
2091	-699.76824		
2092	-699.81974		
2093	-699.86481		
2094	-699.90343		
2095	-699.93562		
2096	-699.96137		
2097	-699.98069		
2098	-699.99356		
2099	-700.00000		
2100	-700.00000		

Total SumVelocity

700.5000959400

Last Position in X-axis

-700.00000

Last Position in Y-axis

0.0000

Last Position in Z-axis

0.0000

JOG +Y

Distance700

Speed1

Triangle

Trapezoidal

S-Curve

+X

+Y

+Z

-X

-Y

-Z

Run

Clear

	X Position	Y Position	Z Position
2094	-699.90343		
2095	-699.93562		
2096	-699.96137		
2097	-699.98069		
2098	-699.99356		
2099	-700.00000		
2100	-700.00000		
2101		0.00429	
2102		0.01502	
2103		0.03219	
2104		0.05579	
2105		0.08583	
2106		0.12232	
2107		0.16523	
2108		0.21459	
2109		0.27038	
2110		0.33261	

Total SumVelocity

700.5000959400

Last Position in X-axis

-700.00000

Last Position in Y-axis

700.00000

Last Position in Z-axis

0.0000

JOG -Y

Distance700

Speed1

Triangle

Trapezoidal

S-Curve

+X

+Y

+Z

-X

-Y

-Z

Run

Clear

	X Position	Y Position	Z Position
4184		-699.22747	
4185		-699.32404	
4186		-699.41416	
4187		-699.49785	
4188		-699.57511	
4189		-699.64592	
4190		-699.71030	
4191		-699.76824	
4192		-699.81974	
4193		-699.86481	
4194		-699.90343	
4195		-699.93562	
4196		-699.96137	
4197		-699.98069	
4198		-699.99356	
4199		-700.00000	
4200		-700.00000	

Total SumVelocity

700.5000959400

Last Position in X-axis

-700.00000

Last Position in Y-axis

-700.00000

Last Position in Z-axis

0.0000

JOG +Z

Distance

700

Run

Speed

1

Clear

☐ Triangle

☒ Trapezoidal

☐ S-Curve

+X

-X

+Y

-Y

+Z

-Z

	X Position	Y Position	Z Position
4197		-699.98069	
4198		-699.99356	
4199		-700.00000	
4200		-700.00000	
4201			0.00429
4202			0.01502
4203			0.03219
4204			0.05579
4205			0.08583
4206			0.12232
4207			0.16523
4208			0.21459
4209			0.27038
4210			0.33261
4211			0.40128
4212			0.47639
4213			0.55793

Total SumVelocity

700.5000959400

Last Position in X-axis

-700.00000

Last Position in Y-axis

-700.00000

Last Position in Z-axis

700.00000

JOG -Z

Distance

700

Run

Speed

1

Clear

☐ Triangle

☒ Trapezoidal

☐ S-Curve

+X

-X

+Y

-Y

+Z

-Z

	X Position	Y Position	Z Position
6284			-699.22747
6285			-699.32404
6286			-699.41416
6287			-699.49785
6288			-699.57511
6289			-699.64592
6290			-699.71030
6291			-699.76824
6292			-699.81974
6293			-699.86481
6294			-699.90343
6295			-699.93562
6296			-699.96137
6297			-699.98069
6298			-699.99356
6299			-700.00000
6300			-700.00000

Total SumVelocity

700.5000959400

Last Position in X-axis

-700.00000

Last Position in Y-axis

-700.00000

Last Position in Z-axis

-700.00000