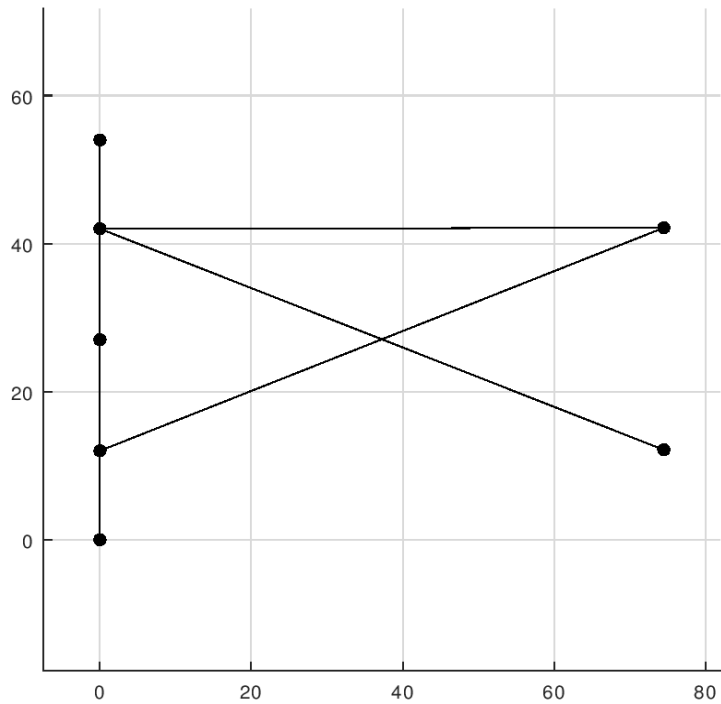


Analysis3Stiffness

Analysis3Stiffness



Column1		

GEOMETRY		

Nodal Coordinates:		
(Node No. - X - Y - Z)		

NODES =		
1.00000	0.00000	0.00000
2.00000	0.00000	12.00000
3.00000	0.00000	27.00000
4.00000	0.00000	42.00000
5.00000	0.00000	54.00000
6.00000	74.50000	12.13000
7.00000	74.50000	42.13000

Boundary Conditions: 1 = Restrained, 0 = Free

(Node No. - Tx - Ty - Rz)

BOUNDS =

1 1 1 0

6 1 1 1

7 1 1 1

Element Information:

(Ele No. - iNode - jNode - Member Type - E - A - I)

ELES =

1 1 2 0 29000 9999 999999

2 2 3 0 29000 9999 999999

3 3 4 0 29000 9999 999999

4 4 5 0 29000 9999 999999

5 4 7 1 29000 5 50

6 4 6 1 29000 5 50

7 2 7 1 29000 5 50

Load Information:

(Node No. - Fx - Fy - Mz)

LOADS =

1 0 0 1000

plotFile = ../1. OUTPUT/Analysis3Stiffness.png

ans =

-7.4500 81.9500 -17.7000 71.7000

ANALYSIS				

kff =				
Columns 1 through 5:				
966657000.00000	1208332125.00000	0.00000	4833328500.00000	0.00000
1208332125.00000	304501247.37449	624.23404	434999565.00000	-103111008.00000
0.00000	624.23404	43495910.84044	0.00000	0.00000
4833328500.00000	434999565.00000	0.00000	17399982600.00000	773332560.00000
0.00000	-103111008.00000	0.00000	773332560.00000	206222016.00000
0.00000	0.00000	-19331400.00000	0.00000	0.00000
0.00000	-773332560.00000	0.00000	3866662800.00000	0.00000
0.00000	0.00000	0.00000	0.00000	-103111008.00000
0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	-773332560.00000
0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	0.00000
Columns 6 through 10:				
0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	-773332560.00000	0.00000	0.00000	0.00000
-19331400.00000	0.00000	0.00000	0.00000	0.00000
0.00000	3866662800.00000	0.00000	0.00000	0.00000
0.00000	0.00000	-103111008.00000	0.00000	-773332560.00000
38662800.00000	0.00000	0.00000	-19331400.00000	0.00000
0.00000	15466651200.00000	773332560.00000	0.00000	3866662800.00000
0.00000	773332560.00000	304503199.29690	-617.71157	-434999565.00000
-19331400.00000	0.00000	-617.71157	43495917.95754	0.00000
0.00000	3866662800.00000	-434999565.00000	0.00000	17399982600.00000
0.00000	0.00000	-201388687.50000	0.00000	1208332125.00000
0.00000	0.00000	0.00000	-24164250.00000	0.00000
0.00000	0.00000	-1208332125.00000	0.00000	4833328500.00000
Columns 11 through 13:				
0.00000	0.00000	0.00000		
0.00000	0.00000	0.00000		
0.00000	0.00000	0.00000		
0.00000	0.00000	0.00000		
0.00000	0.00000	0.00000		
0.00000	0.00000	0.00000		
0.00000	0.00000	0.00000		
-201388687.50000	0.00000	-1208332125.00000		

0.00000	-24164250.00000	0.00000
1208332125.00000	0.00000	4833328500.00000
201388687.50000	0.00000	1208332125.00000
0.00000	24164250.00000	0.00000
1208332125.00000	0.00000	9666657000.00000
Number of dof: 13		
Number of loads: 1		
LOADS =		
1	0	0 1000
deg = 1		
P =		
1000		
0		
0		
0		
0		
0		
0		
0		
0		
0		
0		
0		
0		
0		
0		
0		
uf =		
0.00015661277		
-0.00187712761		
-0.00000011914		
0.00015626326		
-0.00421884808		
-0.00000032868		
0.00015599585		
-0.00655789447		
-0.00000053822		
0.00015590671		
-0.00842877504		
-0.00000053822		
0.00015590671		

Post Process		

Nodal Displacements:

(Node No. - Tx - Ty - Rz)

NodalDisp =

1.00000	0.00000	0.00000	0.00016
2.00000	-0.00188	-0.00000	0.00016
3.00000	-0.00422	-0.00000	0.00016
4.00000	-0.00656	-0.00000	0.00016
5.00000	-0.00843	-0.00000	0.00016
6.00000	0.00000	0.00000	0.00000
7.00000	0.00000	0.00000	0.00000

Global Member Forces:

(Element No. - iFx - iFy - iMz - jFx - jFy - jMz)

GlobalForces =

1.00000	-25.89034	2.87895	1000.00000	25.89034	-2.87895	-689.31594
2.00000	-22.97720	4.05074	689.31594	22.97720	-4.05074	-344.65797
3.00000	-22.97720	4.05074	344.65797	22.97720	-4.05074	0.00000
4.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000
5.00000	-12.76363	-0.02216	0.00000	12.76363	0.02216	0.00855
6.00000	-10.21357	4.07290	0.00000	10.21357	-4.07290	-1.64816
7.00000	-2.91314	-1.17180	0.00000	2.91314	1.17180	0.47398

Local Member Forces:

(Element No. - iFx - iFy - iMz - jFx - jFy - jMz)

LocalForces =

1.00000	2.87895	25.89034	1000.00000	-2.87895	-25.89034	-689.31594
2.00000	4.05074	22.97720	689.31594	-4.05074	-22.97720	-344.65797
3.00000	4.05074	22.97720	344.65797	-4.05074	-22.97720	0.00000
4.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000
5.00000	-12.76365	0.00011	0.00000	12.76365	-0.00011	0.00855
6.00000	-10.99568	-0.02053	0.00000	10.99568	0.02053	-1.64816

7.00000	-3.13998	0.00590	0.00000	3.13998	-0.00590	0.47398

Nodal Support Reactions:						
(Node No. - Fx - Fy - Mz)						

Support =						
1.00000	-25.89034	2.87895	0.00000			
2.00000	0.00000	0.00000	0.00000			
3.00000	0.00000	0.00000	0.00000			
4.00000	0.00000	0.00000	0.00000			
5.00000	0.00000	0.00000	0.00000			
6.00000	10.21357	-4.07290	-1.64816			
7.00000	15.67677	1.19396	0.48253			
sumFx = 0.00000000097535						
sumFy = 3.5527e-15						
sumMz = -1.1656						
