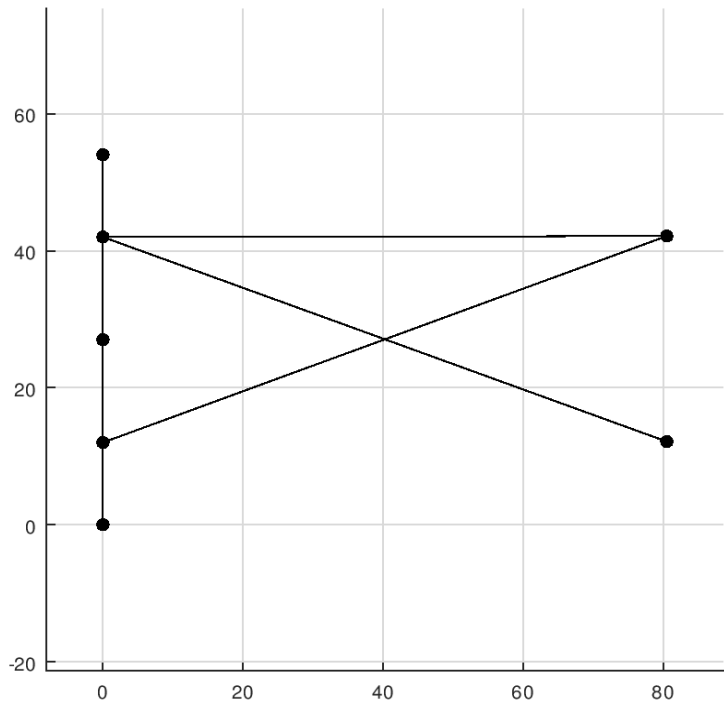


Analysis1Stiffness

Analysis1Stiffness



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	80.50000	12.14000
7.00000	80.50000	42.14000

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/Analysis1Stiffness.png

ans =

-8.0500 88.5500 -21.3000 75.3000

ANALYSIS				

kff =				
Columns 1 through 5:				
966657000.00000	1208332125.00000	0.00000	4833328500.00000	0.00000
1208332125.00000	304501175.82650	551.68455	434999565.00000	-103111008.00000
0.00000	551.68455	43495863.40538	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	304502982.11009	-545.30566	-434999565.00000
-19331400.00000	0.00000	-545.30566	43495868.64451	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 =		
0.00016683256		
-0.00199976541		
-0.00000011201		
0.00016648313		
-0.00449478527		
-0.00000030910		
0.00016621588		
-0.00698713262		
-0.00000050619		
0.00016612680		
-0.00898065417		
-0.00000050619		
0.00016612680		

Post Process		

Nodal Displacements:

(Node No. - Tx - Ty - Rz)

NodalDisp =

1.00000	0.00000	0.00000	0.00017
2.00000	-0.00200	-0.00000	0.00017
3.00000	-0.00449	-0.00000	0.00017
4.00000	-0.00699	-0.00000	0.00017
5.00000	-0.00898	-0.00000	0.00017
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	-25.92407	2.70675	1000.00000	25.92407	-2.70675	-688.91114
2.00000	-22.96370	3.81001	688.91114	22.96370	-3.81001	-344.45557
3.00000	-22.96370	3.81001	344.45557	22.96370	-3.81001	0.00000
4.00000	0.00000	0.00000	-0.00000	-0.00000	0.00000	-0.00000
5.00000	-12.58546	-0.02179	0.00000	12.58546	0.02179	0.00782
6.00000	-10.37824	3.83180	0.00000	10.37824	-3.83180	-1.43416
7.00000	-2.96037	-1.10326	0.00000	2.96037	1.10326	0.41276

Local Member Forces:

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

LocalForces =

1.00000	2.70675	25.92407	1000.00000	-2.70675	-25.92407	-688.91114
2.00000	3.81001	22.96370	688.91114	-3.81001	-22.96370	-344.45557
3.00000	3.81001	22.96370	344.45557	-3.81001	-22.96370	0.00000
4.00000	0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000
5.00000	-12.58548	0.00010	0.00000	12.58548	-0.00010	0.00782
6.00000	-11.06302	-0.01670	0.00000	11.06302	0.01670	-1.43416

7.00000	-3.15926	0.00480	0.00000	3.15926	-0.00480	0.41276

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

Support =						
1.00000	-25.92407	2.70675	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	10.37824	-3.83180	-1.43416			
7.00000	15.54583	1.12505	0.42058			
sumFx = -0.00000000062731						
sumFy = -3.1086e-15						
sumMz = -1.0136						
