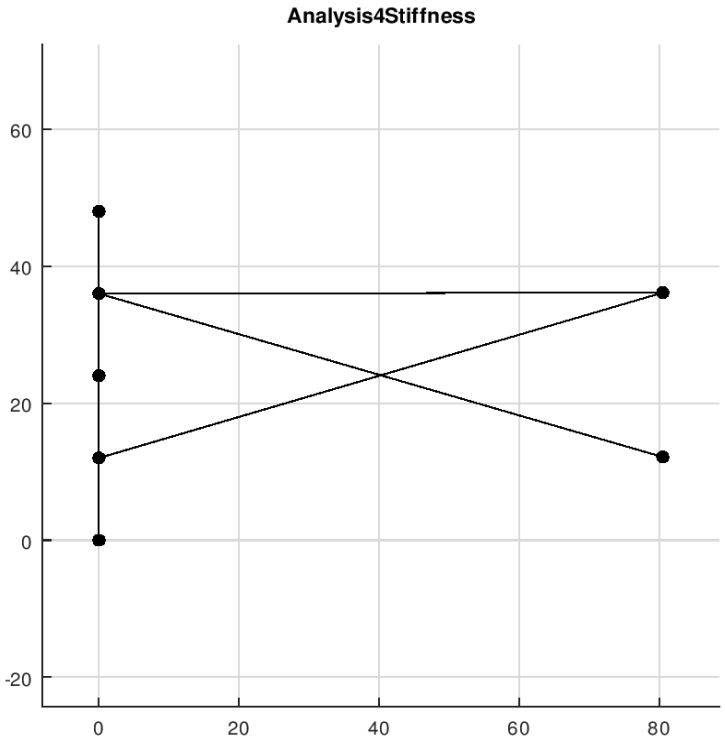
Analysis4Stiffness



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 24.00000
4.00000 0.00000 36.00000
5.00000 0.00000 48.00000
6.00000 80.50000 12.14000
7.00000 80.50000 36.14000

```
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Boundary Conditions: 1 = Restrained, 0 = Free
(Node No. - Tx - Ty - Rz)
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BOUNDS =

  1   1   1   0
  6   1   1   1
  7   1   1   1

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

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Load Information:
(Node No. - Fx - Fy - Mz)
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LOADS =

     1     0     0  1000

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plotFile = ../../1. OUTPUT/Analysis4Stiffness.png
ans =

  -8.0500   88.5500  -24.3000   72.3000

**************************************
```

ANALYSIS

****

kff =

Columns 1 through 5:

9666657000.00000	1208332125.00000	0.00000	4833328500.00000	0.00000
1208332125.00000	402778958.59005	472.68270	0.00000	-201388687.50000
0.00000	472.68270	48328649.07444	0.00000	0.00000
4833328500.00000	0.00000	0.00000	19333314000.00000	1208332125.00000
0.00000	-201388687.50000	0.00000	1208332125.00000	402777375.00000
0.00000	0.00000	-24164250.00000	0.00000	0.00000
0.00000	-1208332125.00000	0.00000	4833328500.00000	0.00000
0.00000	0.00000	0.00000	0.00000	-201388687.50000
0.00000	0.00000	0.00000	0.00000	0.00000
0.00000	0.00000	0.00000	0.00000	-1208332125.00000
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	-1208332125.00000	0.00000	0.00000	0.00000
-24164250.00000	0.00000	0.00000	0.00000	0.00000
0.00000	4833328500.00000	0.00000	0.00000	0.00000
0.00000	0.00000	-201388687.50000	0.00000	-1208332125.00000
48328500.00000	0.00000	0.00000	-24164250.00000	0.00000
0.00000	19333314000.00000	1208332125.00000	0.00000	4833328500.00000
0.00000	1208332125.00000	402780764.34212	-465.41488	0.00000
-24164250.00000	0.00000	-465.41488	48328654.56547	0.00000
0.00000	4833328500.00000	0.00000	0.00000	19333314000.00000
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

uf =

0.000216813835
-0.002599586379
-0.000000099200
0.000216475821
-0.005195985060
-0.000000249253
0.000216279145
-0.007790810333
-0.000000399305
0.000216213587
-0.010385373372
-0.000000399305
0.000216213587

****
Post Process

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Nodal Displacements:

(Node No. - Tx - Ty - Rz)

NodalDisp =

1.00000	0.00000	0.00000	0.00022
2.00000	-0.00260	-0.00000	0.00022
3.00000	-0.00520	-0.00000	0.00022
4.00000	-0.00779	-0.00000	0.00022
5.00000	-0.01039	-0.00000	0.00022
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	-30.52226	2.39710	1000.00000	30.52226	-2.39710	-633.73286
2.00000	-26.40554	3.62590	633.73286	26.40554	-3.62590	-316.86643
3.00000	-26.40554	3.62590	316.86643	26.40554	-3.62590	0.00000
4.00000	0.00000	-0.00000	-0.00000	-0.00000	0.00000	-0.00000
5.00000	-14.03307	-0.02430	0.00000	14.03307	0.02430	0.00883
6.00000	-12.37246	3.65019	0.00000	12.37246	-3.65019	-1.36639
7.00000	-4.11673	-1.22879	0.00000	4.11673	1.22879	0.45983

Local Member Forces:

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

LocalForces =

1.00000	2.39710	30.52226	1000.00000	-2.39710	-30.52226	-633.73286
2.00000	3.62590	26.40554	633.73286	-3.62590	-26.40554	-316.86643
3.00000	3.62590	26.40554	316.86643	-3.62590	-26.40554	0.00000
4.00000	-0.00000	-0.00000	-0.00000	0.00000	0.00000	-0.00000
5.00000	-14.03310	0.00011	0.00000	14.03310	-0.00011	0.00883
6.00000	-12.89967	-0.01627	0.00000	12.89967	0.01627	-1.36639

7.00000 -4.29620 0.00547 0.00000 4.29620 -0.00547 0.45983

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

Support =
1.00000 -30.52226 2.39710 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 12.37246 -3.65019 -1.36639
7.00000 18.14980 1.25309 0.46865
sumFx = 0.000000000058261
sumFy = -6.6613e-16
sumMz = -0.89774
