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*    Computer Software   *
*           for          *
*   STRUCTURAL ANALYSIS   *
*      Sixth Edition      *
*           by            *
*     Aslam Kassimali     *
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General Structural Data

Project Title : EWCE 411 - HW1
Structure Type : Beam
Number of Joints : 4
Number of Members : 3
Number of Material Property Sets (E) : 1
Number of Cross-Sectional Property Sets : 2

Joint Coordinates

Joint No.	X Coordinate
1	0.0000E+00
2	1.6000E+01
3	2.4000E+01
4	4.0000E+01

Supports

Joint No.	Y Restraint	Rotational Restraint
1	Yes	Yes
2	Yes	No
4	Yes	No

Material Properties

Material No.	Modulus of Elasticity (E)	Co-efficient of Thermal Expansion
1	1.0000E+03	0.0000E+00

Cross-Sectional Properties

Property No.	Moment of Inertia
1	1.0000E+00
2	2.0000E+00

Member Data

Member No.	Beginning Joint	End Joint	Material No.	Cross-Sectional Property No.
1	1	2	1	1
2	2	3	1	2
3	3	4	1	2

Joint Loads

Joint No.	Y Force	Moment
3	-2.5000E+01	0.0000E+00

Member Loads

Member No.	Load Type	Load Intensity (w)
1	Uniform	3.500E+0

********** End of Input Data **********

Results of Analysis

Joint Displacements

Joint No.	Y Translation	Rotation (Rad)
1	0.0000E+00	0.0000E+00
2	0.0000E+00	-7.2889E-02
3	-1.1931E+00	-1.1585E-01
4	0.0000E+00	1.6978E-01

Member End Forces in Local Coordinates

Member	Joint	Shear Force	Moment
1	1	2.6292E+01	6.5556E+01
	2	2.9708E+01	-9.2889E+01
2	2	2.0537E+01	9.2889E+01
	3	-2.0537E+01	7.1407E+01
3	3	-4.4630E+00	-7.1407E+01
	4	4.4630E+00	-2.7418E-06

Support Reactions

Joint No.	Y Force	Moment
1	2.6292E+01	6.5556E+01
2	5.0245E+01	0.0000E+00
4	4.4630E+00	0.0000E+00

********** End of Analysis **********