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| 1. Define initial geometry of system 2. Define initial material properties 3. Define DOF and connectivity |  |
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| For all of the load steps | |
| 1. Calculate the unbalanced forces 2. While the unbalance force > tolerance 3. Determine the structural state 4. For all elements 5. Get the global displacement at the DOF 6. Transform into local displacement 7. Define the orientation of the element 8. Calculate the basic deformations 9. Calculate the basic stiffness matrix 10. Calculate the basic internal forces 11. Transform in global internal forces 12. Add to structural internal force matrix 13. Calculate the tangential stiffness matrix 14. Assemble the structural stiffness matrix |  |
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