Homework 04 – Stiffness Method – Beams-Frames

Required:

Using the direct stiffness method solve the following problems (Leet & Uang, “Fundamentals of Structural Analysis”, 2nd Edition, 2005); In all answer you must evaluate and display (i): reactions; (ii) shear force diagram; (iii) moment diagram and (iv) “estimated” (not calculated) deflection lines consistent with the previous diagrams.

Problem 18.1 (50 pts)

Problem 18.3 (50 pts)

Notes:
- Please **organize the submittal in two columns**: a) One column for all diagrams, sketches, drawings and b) Second column hand calculations, notes, etc.