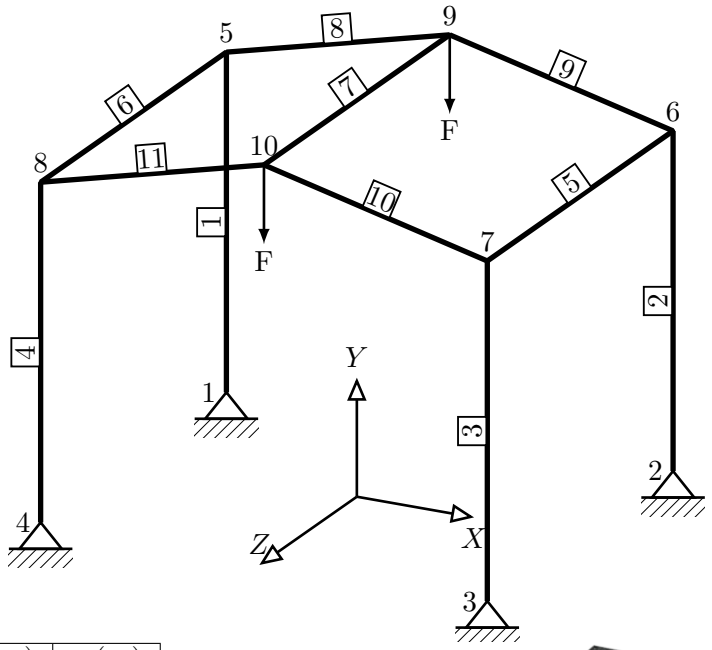
Practicum 2, group B: Hall



node	x (m)	y (m)	z (m)
1	0	0	0
2	4	0	0
3	4	0	2
4	0	0	2
5	0	3	0
6	4	3	0
7	4	3	2
8	0	3	2
9	0	3.5	0
10	4	3.5	2

element	B (mm)	H (mm)
1 - 4 & 8 - 11	90	40
5 - 7	50	40

E = 210×10^9 N/m^2
$\nu = 0.25$
F = 4 kN
 = constrained in all directions (displacement and rotation).

The framework above represents hall structure in the picture. Use Mechanical ADPL to model the problem. All beams have rigid connections. At the nodes 1, 2, 3 and 4 the construction is constraint as denoted above. The lengths, sections and loads are given in the tables above as well. The thickness in the plane of the drawing is B and out of the plane it is H (Note that - *in the local coordinate system* - the beam is oriented in x-direction. In the local coordinate system, B denotes the thickness in y-direction and H denotes the thickness in z-direction).

Instructions can be found in the practical training manual. Assess the correctness of the results by checking equilibrium of the framework and checking whether the elongation of the trusses agree with the truss forces. Fill in the answer sheet and let the student assistant assess your work. They may ask some questions to see whether you understand what you did.

Hand in the answer sheet to the student assistant at the end of the practicum.