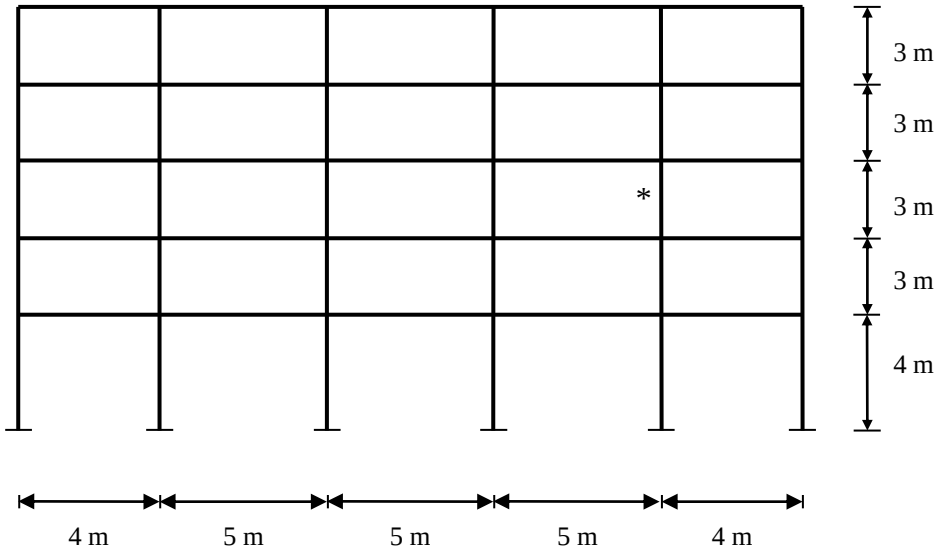
CE 382 HOMEWORK 6[1]

Design the third story interior column shown in the frame given below. The results of the first order structural analysis are given below. The beams are 300 x 500 mm flanged sections.

Materials: C25 and S420, E_c = 30000 MPa.



	Interior Columns	Exterior Columns
Section (mm)	500 x 500 mm	400 x 400 mm
$N_{g1} = N_{g2}$ (DL)	700 kN	450 kN
$N_{q1} = N_{q2}$ (LL)	400 kN	200 kN
$M_{g1} = M_{g2}$ (DL)	0 kNm	60 kNm
$M_{q1} = M_{q2}$ (LL)	8 kNm	40 kNm
V_g (DL)	10 kN	15 kN
V_q (LL)	16 kN	18 kN

Δ_3 = 10 mm (ınterstory displacement for the third story.)

[1] ATTENTION TO ALL STUDENTS
Assignment Date and Time: May 22, 2012 @ 9.00
Due Date & Time: May 26, 2012 @ 18.00
This homework is distributed electronically via METUONLINE CE382 website. The students should hand over their finished work via the same way electronically. The homework submissions that do not obey above conditions will be counted as void.