



## Computer Programming for Civil Engineering CS 199

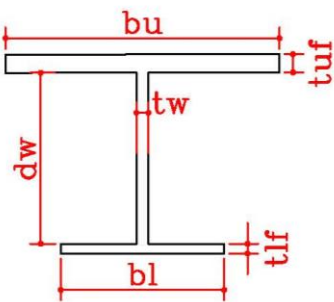
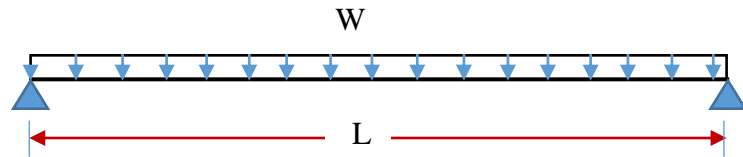
### PROJET

Write and execute a FORTRAN program to compute the maximum bending moment, maximum shear force and maximum deflection, where the modulus of elasticity for steel and concrete are  $E_s = 2100 \text{ t/cm}^2$ ,  $E_c = 210 \text{ t/cm}^2$  respectively for the shown sections.

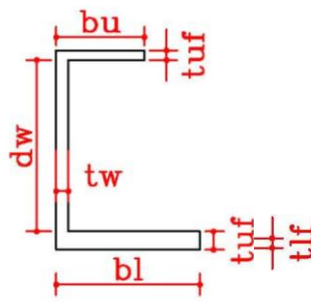
$$M = \frac{W L^2}{8}$$

$$Q = \frac{W L}{2}$$

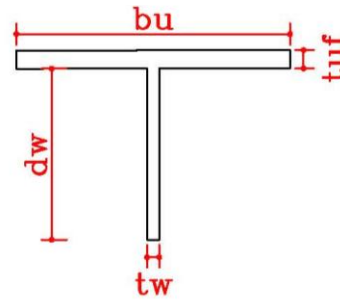
$$\Delta = \frac{5 W L^4}{384 E I_x}$$



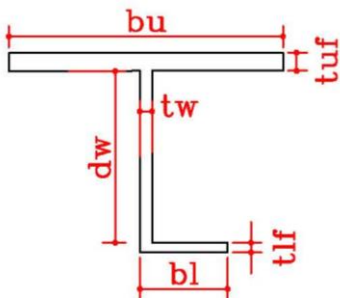
section 1



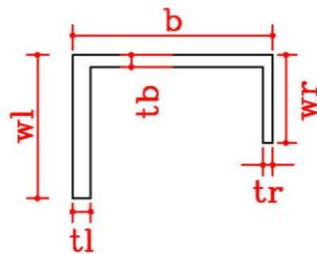
section 2



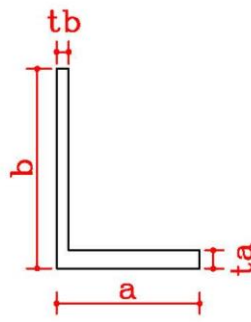
section 3



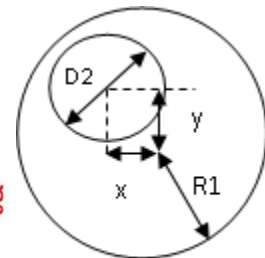
section 4



section 5



section 6



Section 7