

PROJECT 1.

Program the following project with FORTRAN. Write all outputs on **(.TXT)** format.

Consider the following simple beam. Find all Supportive reactions under **any kind of loadings** (concentrated loads and moments, distributed load, oblique loads, Triangular Load, distributed moments and etc.) also find maximum bending stress in any location of beam. (rectangular beam's section)



Left support vertical reaction (A_y)	...
Left support horizontal reaction (A_x)	...
right support vertical reaction (B_y)	...
Bending stress in location x (σ)	...

Project 2.

Program the following project with FORTRAN. Write all outputs on **(.TXT)** format.

Find the center of mass for containers which are loaded upon a ship. Densities for any container is constant but they can have any weight and any dimensions.

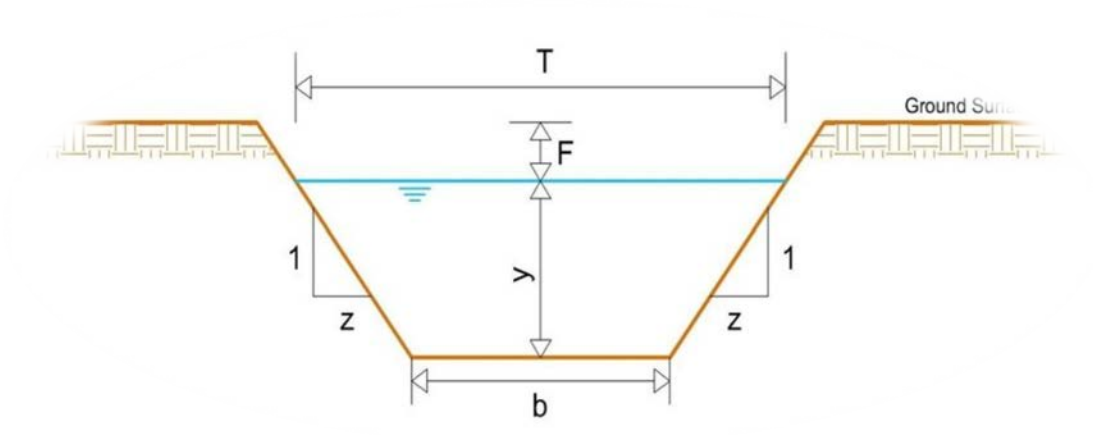
Xbar	...
Ybar	...



Project 3.

Program the following project with FORTRAN. Write all outputs on **(.TXT)** format.

Find the all dimensions for a trapezoidal channel section, including bed width, water depth and freeboard height. The values for discharge, bed gradient, side walls slope and Manning's number are known.



Bed width (b)	...
Water height (y)	...
Freeboard (F)	...
Top width (T)	...

submission date