

ELL 770 – Power System Analysis

Assignment 5

Develop a generic MATLAB code to build a Z bus for the given system using step-by-step Z bus building algorithm. The programmes should have following features:

1. The programme should read the system data from another file (Excel, .mat, .csv, or any other format).
2. The system data will be provided in two parts: A) bus data (required for shunt capacitors / inductors connected to the bus); B) line data – From Bus, To Bus, R, X, B.
3. Your 'read-me' file should tell, in which form the above data should be arranged.
4. The programmes should be generic enough to accommodate 'n' bus system.
5. The programmes should export the Zbus entries into Excel file or .mat file.
6. The programme should also print your name and entry number as title of Z bus.

Deadline of submission: 3rd January 2021

Mode of submission: Please submit on MS Teams course channel.

Note: It is very easy to trace out a copied source (either from internet or from your friend). Please be careful and write your own programme.