Important Notes

* Data is gathered from the Phasor Measurement Units (PMUs) within the power system at a frequency of 30 Hz over a duration of one minute during power system steady-state conditions. Consequently, each dataset comprises 1802data points (rows).
* Despite having 1802 samples available, only a single sample (row) suffices for conducting the necessary calculations.
* The dataset consists of 59 columns, commencing with timestamp, followed by 9 bus voltages, and 20 current flows (10 branches). Therefore, the data encompasses 29 phasors, accounting for both magnitude and angle measurements, resulting in a total of 58 measurements.
* In the raw data files (Data\_Raw\_\*\*\*), the angle measurements are denoted in radians, whereas the voltage measurements are represented in volts (V), and the current measurements are indicated in amperes (A).
* In the pu data files (Data\_pu\_\*\*\*) the angles are same as the raw in radians, but the voltage and current magnitudes are divided by their respective base values as below to obtain the pu values.
* Undergraduate students are tasked with processing the datasets for high, medium, and low operating conditions within the "Fully Connected" topology.
* Graduate students are required to handle all nine datasets - Fully Connected Topology, Topology 1 and Topology 2.