1. Calculate Psat value by using data from Perry’s Handbook.
2. Psat value obtained from Perry handbook, call it as Ydata.
3. Using the given cubic equation of state and by using Ydata value we fit the data and find the unknown parameters (m,n) value.
4. Curve fitting objective should me to minimize the error obtained in fitting the data, which can be done using various statistical methods
5. Use statistical analysis tools to check for the fit and to study the partial effect of parameters on Ydata.
6. Back calculate Psat by substituting the unknown parameters(m,n) value obtained by curve fitting, in the given cubic equation of state.
7. Psat value obtained from step 6 call it as Ycalc.
8. Plot graph of residuals and graph of Ydata Vs parameters.
9. Plot Parity plot between Ycalc and Ydata to check for the error in estimating the unknown values.