## Homework # 1

Use the file xydata.dat; it contains data in two columns (column 1 is x and column to is y).

Write a computer program to compute L1, L2, L3, L5, and L15 norms to fit a straight line to the data.

Display the elements of the residual vector in L1, L2,L3,L5, and L15 norms as a function of  $\boldsymbol{X}$ 

Display the data with best fit straight lines using L1, L2, L3, L5, and L15 norms.