Write a MATLAB program as follows:

- 1) Read a data file (Lab9.dat) has values of x and y (data points).
- 2) Plot the nearest, linear and spline, interpolation functions in black, red and blue, each in a separate figure; plot the data points as black circles in each of these three figures (figures 1-3). Also plot the nearest, linear and spline interpolation functions in black, red and blue, and the data points as black circles, all in the same figure (figure 4). The graphs should look like the ones shown below.







