Lab-07

1. Write a MATLAB program to carry out cubic spline interpolation of the data given.

2. Consider the following set of data points: x = [0.01 1.1 2 3.3 4.2 5.0 5.3 7.1 8.9 9.9] and fx = [1.0000 0.7331 0.3326 0.0179 0.0044 0.0172 0.0170 0.0001 0.0033 0.0002]. Do a cubic spline interpolation and plot the orginial data as well as the interpolated curve. The data above corresponds to the Airy pattern due to a ciruclar aperture. Can you determine the position of the first minima from the plot.