ASE 211 Homework 8

Due: 12:00 noon, Friday, October 27.

1. Write an m-file which takes as input the data points (x_i, y_i) $i = 1, \ldots, n$ and constructs the spline matrix and right hand side, and solves for the vector of second derivatives.

2. Write another m-file which takes as input the vector of second derivatives, and the data points, and computes the coefficients of the spline function.

3. Test your program on the data in problem A8.7. Plot your spline function, and find the value of the spline at $T = 50$.