Matlab Assignment

Deadline: 03/20/2013

- 1. Use the Eluer, Improved Euler, and fourth order Runge Kutta methods with h = 0.1 to approximate the solution to the initial value problem y' = 2y - 6, y(0) = 1, over an interval [0, 1]. Compare the approximate solution with an analytical solution $y = 3 - 2 \exp(2x)$ evaluated over an interval [0, 1] by plotting them in single graphical window.
- 2. Change the value of h with 0.025 in problem 1 and again compare the solutions with above mentioned analytical solution over an interval [0, 1].