Computational Fluid Dynamics (AE/ME 339)
MAE Dept., UMR

Home Work Problem 01

Write a computer program to solve the following ordinary differential equation using the Euler method between limits (0,4) for step sizes 0.1 and 0.01. Compare the results to the exact solution. Use Fortran or C/C++. Graph all results on one plot.

$$\frac{dy}{dx} = y$$

Boundary condition

y(0) = 1