

FORTRAN SUBROUTINES

Available from the class web page

Routine	Result/Purpose
adi	A solution of 2D unsteady equation via Alternating Direction Implicit method.
blktri	Solution of block tridiagonal system of equations.
bv	Direct solution of a boundary value problem.
lagran	Lagrange polynomial interpolant.
lagtry	Test program for lagran.
lsode	Stiff ODE solver.
lstry	Test program for lsode.
quanc8	Newton-Cotes (8 Panel) Adaptive Quadrature.
quatry	Test program for quanc8.
rkf45	Fehlberg's development of Runge-Kutta 4th/5th order method.
rkftry	Test program for rkf45.
romberg	Romberg Quadrature.
rombtry	Test program for romberg.
runge4	4th order Runge-Kutta method for system of ODE's.
runtry	Test program for runge4.
simp	Simpson's rule quadrature.
simptry	Test program for simp.
sor	Solves Laplace equation on a square via Successive Over-Relaxation.
spline/speval	Cubic spline interpolants.
spltry	Test program for spline/speval.
trdiag	Solution of tridiagonal system of equations using Thomas algorithm.