

NAG C Library Chapter Contents

f11 – Large Scale Linear Systems

f11 Chapter Introduction

Routine Name	Mark of Introduction	Purpose
f11dac	5	nag_sparse_nsym_fac Incomplete <i>LU</i> factorization (nonsymmetric)
f11dcc	5	nag_sparse_nsym_fac_sol Solver with incomplete <i>LU</i> preconditioning (nonsymmetric)
f11dec	5	nag_sparse_nsym_sol Solver with no Jacobi/SSOR preconditioning (nonsymmetric)
f11jac	5	nag_sparse_sym_chol_fac Incomplete Cholesky factorization (symmetric)
f11jcc	5	nag_sparse_sym_chol_sol Solver with incomplete Cholesky preconditioning (symmetric)
f11jec	5	nag_sparse_sym_sol Solver with Jacobi, SSOR, or no preconditioning (symmetric)
f11mdc	8	nag_superlu_column_permutation Real sparse nonsymmetric linear systems, setup for nag_superlu_lu_factorize (f11mec)
f11mec	8	nag_superlu_lu_factorize <i>LU</i> factorization of real sparse matrix
f11mfc	8	nag_superlu_solve_lu Solution of real sparse simultaneous linear equations (coefficient matrix already factorized)
f11mgc	8	nag_superlu_condition_number_lu Estimate condition number of real matrix, matrix already factorized by nag_superlu_lu_factorize (f11mec)
f11mhc	8	nag_superlu_refine_lu Refined solution with error bounds of real system of linear equations, multiple right-hand sides
f11mkc	8	nag_superlu_matrix_product Real sparse nonsymmetric matrix matrix multiply, compressed column storage
f11mlc	8	nag_superlu_matrix_norm 1-norm, ∞ -norm, largest absolute element, real general matrix
f11mmc	8	nag_superlu_diagnostic_lu Real sparse nonsymmetric linear systems, diagnostic for nag_superlu_lu_factorize (f11mec)
f11zac	5	nag_sparse_nsym_sort Sparse sort (nonsymmetric)
f11zbc	5	nag_sparse_sym_sort Sparse sort (symmetric)
