

NAG C Library Chapter Contents

f04 – Simultaneous Linear Equations

f04 Chapter Introduction

| Routine | Mark of Introduction | Purpose |
|---------|-------------------------|--|
| f04adc | 1 | <code>nag_complex_lin_eqn_mult_rhs</code> Approximate solution of complex simultaneous linear equations with multiple right-hand sides |
| f04agc | 1 | <code>nag_real_cholesky_solve_mult_rhs</code> Approximate solution of real symmetric positive-definite simultaneous linear equations (coefficient matrix already factorized by <code>nag_real_cholesky</code> (f03aec)) |
| f04ajc | 1 | <code>nag_real_lu_solve_mult_rhs</code> Approximate solution of real simultaneous linear equations (coefficient matrix already factorized by <code>nag_real_lu</code> (f03afc)) |
| f04akc | 1 | <code>nag_complex_lu_solve_mult_rhs</code> Approximate solution of complex simultaneous linear equations (coefficient matrix already factorized by <code>nag_complex_lu</code> (f03ahc)) |
| f04arc | 1 | <code>nag_real_lin_eqn</code> Approximate solution of real simultaneous linear equations, one right-hand side |
| f04awc | 1 | <code>nag_hermitian_lin_eqn_mult_rhs</code> Approximate solution of complex Hermitian positive-definite simultaneous linear equations (coefficient matrix already factorized by <code>nag_complex_cholesky</code> (f01bnc)) |
| f04bac | 8 | <code>nag_real_gen_lin_solve</code> Computes the solution and error-bound to a real system of linear equations |
| f04bbc | 8 | <code>nag_real_band_lin_solve</code> Computes the solution and error-bound to a real banded system of linear equations |
| f04bcc | 8 | <code>nag_real_tridiag_lin_solve</code> Computes the solution and error-bound to a real tridiagonal system of linear equations |
| f04bdc | 8 | <code>nag_real_sym_posdef_lin_solve</code> Computes the solution and error-bound to a real symmetric positive-definite system of linear equations |
| f04bec | 8 | <code>nag_real_sym_posdef_packed_lin_solve</code> Computes the solution and error-bound to a real symmetric positive-definite system of linear equations, packed storage |
| f04bfc | 8 | <code>nag_real_sym_posdef_band_lin_solve</code> Computes the solution and error-bound to a real symmetric positive-definite banded system of linear equations |
| f04bgc | 8 | <code>nag_real_sym_posdef_tridiag_lin_solve</code> Computes the solution and error-bound to a real symmetric positive-definite tridiagonal system of linear equations |
| f04bhc | 8 | <code>nag_real_sym_lin_solve</code> Computes the solution and error-bound to a real symmetric system of linear equations |
| f04bjc | 8 | <code>nag_real_sym_packed_lin_solve</code> Computes the solution and error-bound to a real symmetric system of linear equations, packed storage |
| f04cac | 8 | <code>nag_complex_gen_lin_solve</code> Computes the solution and error-bound to a complex system of linear equations |
| f04cbc | 8 | <code>nag_complex_band_lin_solve</code> Computes the solution and error-bound to a complex banded system of linear equations |

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| f04ccc | 8 | nag_complex_tridiag_lin_solve Computes the solution and error-bound to a complex tridiagonal system of linear equations |
| f04cdc | 8 | nag_herm_posdef_lin_solve Computes the solution and error-bound to a complex Hermitian positive-definite system of linear equations |
| f04cec | 8 | nag_herm_posdef_packed_lin_solve Computes the solution and error-bound to a complex Hermitian positive-definite system of linear equations, packed storage |
| f04cfc | 8 | nag_herm_posdef_band_lin_solve Computes the solution and error-bound to a complex Hermitian positive-definite banded system of linear equations |
| f04cgc | 8 | nag_herm_posdef_tridiag_lin_solve Computes the solution and error-bound to a complex Hermitian positive-definite tridiagonal system of linear equations |
| f04chc | 8 | nag_herm_lin_solve Computes the solution and error-bound to a complex Hermitian system of linear equations |
| f04cjc | 8 | nag_herm_packed_lin_solve Computes the solution and error-bound to a complex Hermitian system of linear equations, packed storage |
| f04dhc | 8 | nag_complex_sym_lin_solve Computes the solution and error-bound to a complex symmetric system of linear equations |
| f04djc | 8 | nag_complex_sym_packed_lin_solve Computes the solution and error-bound to a complex symmetric system of linear equations, packed storage. |
| f04mcc | 1 | nag_real_cholesky_skyline_solve Approximate solution of real symmetric positive-definite variable-bandwidth simultaneous linear equations (coefficient matrix already factorized by nag_real_cholesky_skyline (f01mcc)) |
