

## NAG Library Chapter Contents

### f04 – Simultaneous Linear Equations

f04 Chapter Introduction – a description of the Chapter and an overview of the algorithms available

Function Name	Mark of Introduction	Purpose
f04bac	8	nag_real_gen_lin_solve Computes the solution, estimated condition number and error-bound to a real system of linear equations
f04bbc	8	nag_real_band_lin_solve Computes the solution, estimated condition number and error-bound to a real banded system of linear equations
f04bcc	8	nag_real_tridiag_lin_solve Computes the solution, estimated condition number and error-bound to a real tridiagonal system of linear equations
f04bdc	8	nag_real_sym_posdef_lin_solve Computes the solution, estimated condition number and error-bound to a real symmetric positive definite system of linear equations
f04bec	8	nag_real_sym_posdef_packed_lin_solve Computes the solution, estimated condition number and error-bound to a real symmetric positive definite system of linear equations, packed storage
f04bfc	8	nag_real_sym_posdef_band_lin_solve Computes the solution, estimated condition number and error-bound to a real symmetric positive definite banded system of linear equations
f04bgc	8	nag_real_sym_posdef_tridiag_lin_solve Computes the solution, estimated condition number and error-bound to a real symmetric positive definite tridiagonal system of linear equations
f04bhc	8	nag_real_sym_lin_solve Computes the solution, estimated condition number and error-bound to a real symmetric system of linear equations
f04bjc	8	nag_real_sym_packed_lin_solve Computes the solution, estimated condition number and error-bound to a real symmetric system of linear equations, packed storage
f04cac	8	nag_complex_gen_lin_solve Computes the solution, estimated condition number and error-bound to a complex system of linear equations
f04cbc	8	nag_complex_band_lin_solve Computes the solution, estimated condition number and error-bound to a complex banded system of linear equations
f04ccc	8	nag_complex_tridiag_lin_solve Computes the solution, estimated condition number and error-bound to a complex tridiagonal system of linear equations
f04cdc	8	nag_herm_posdef_lin_solve Computes the solution, estimated condition number and error-bound to a complex Hermitian positive definite system of linear equations
f04cec	8	nag_herm_posdef_packed_lin_solve Computes the solution, estimated condition number 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, estimated condition number 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, estimated condition number 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, estimated condition number and error-bound to a complex Hermitian system of linear equations, packed storage
f04dhc	8	nag_complex_sym_lin_solve Computes the solution, estimated condition number and error-bound to a complex symmetric system of linear equations
f04djc	8	nag_complex_sym_packed_lin_solve Computes the solution, estimated condition number 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))
f04ydc	24	nag_linsys_real_gen_norm_rcomm Norm estimation (for use in condition estimation), real rectangular matrix
f04zdc	24	nag_linsys_complex_gen_norm_rcomm Norm estimation (for use in condition estimation), complex rectangular matrix

---