

- M is an INTEGER variable which must be set by the user to m the order of the matrix.
- IX is an INTEGER variable which must be set by the user to the first dimension of the array X.
- W is a REAL (DOUBLE PRECISION in the D version) array of length at least $2m$ which is used by the subroutine as workspace.

3 GENERAL INFORMATION

Use of common: None.

Workspace: See argument W.

Other routines called directly: EA09C/CD.

Input/output: None.

4 METHOD

First EA09C/CD is called to find the eigenvalues and then the QR algorithm is repeated with known eigenvalues as shifts. During the second application of QR the plane rotations are multiplied into a matrix which eventually holds the eigenvectors. Finally the eigenvalues are refined by taking the Rayleigh quotients of the eigenvectors.