

NAG Library Routine Document

X02DJF

Note: before using this routine, please read the Users' Note for your implementation to check the interpretation of *bold italicised* terms and other implementation-dependent details.

1 Purpose

X02DJF returns the ROUNDS parameter of the model of floating-point arithmetic (see Section 2.1.1 in the X02 Chapter Introduction).

2 Specification

LOGICAL FUNCTION X02DJF()

3 Description

X02DJF indicates the rules obeyed by the model numbers for the computed results of the following basic arithmetic operations: addition, subtraction, multiplication, negation, absolute value, and comparisons.

If ROUNDS is `.TRUE.`, then the computed result must be the nearest model number to the exact result (assuming that overflow or underflow does not occur); if the exact result is midway between two model numbers, then it may be rounded either way.

If ROUNDS is `.FALSE.`, then: if the exact result is a model number, then the computed result must be equal to the exact result, otherwise the computed result may be either of the adjacent model numbers on either side of the exact result.

4 References

None.

5 Parameters

None.

6 Error Indicators and Warnings

None.

7 Accuracy

None.

8 Further Comments

None.

9 Example

See Section 9 in X02AJF.