

NAG Library Routine Document

F06FBF

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

F06FBF broadcasts a real scalar into a real vector.

2 Specification

```
SUBROUTINE F06FBF(N, CON, X, INCX)
  INTEGER          N, INCX
  double precision CON, X(*)
```

3 Description

F06FBF performs the operation

$$x \leftarrow (\alpha, \alpha, \dots, \alpha)^T,$$

where x is an n element real vector.

4 References

None.

5 Parameters

- | | | |
|----|---|---------------------|
| 1: | N – INTEGER | <i>Input</i> |
| | <i>On entry:</i> n , the number of elements in x . | |
| 2: | CON – double precision | <i>Input</i> |
| | <i>On entry:</i> the scalar α . | |
| 3: | X(*) – double precision array | <i>Input/Output</i> |
| | Note: the dimension of the array X must be at least $\max(1, 1 + (N - 1) \text{INCX})$. | |
| | <i>On entry:</i> an array X. | |
| | <i>On exit:</i> the vector x scattered with a stride of INCX. Intermediate elements of X are unchanged. | |
| 4: | INCX – INTEGER | <i>Input</i> |
| | <i>On entry:</i> the increment in the subscripts of X between successive elements of x . | |

6 Error Indicators and Warnings

None.

7 Accuracy

Not applicable.

8 Further Comments

None.

9 Example

None.
