G05CCF – NAG Fortran Library Routine Document

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

G05CCF sets the seeds used by the generator mechanism (see the Chapter Introduction) to a non-repeatable initial value.

2 Specification

```
SUBROUTINE G05CCF()
```

3 Description

This routine sets the internal seeds used by the generator mechanism (see the Chapter Introduction) to values calculated from the setting of the real-time clock.

This routine will yield different subsequent sequences of random numbers in different runs of the calling program. It should be noted that there is no guarantee of statistical properties between sequences, only within sequences.

4 References

None.

5 Parameters

None.

6 Error Indicators and Warnings

None.

7 Accuracy

Not applicable.

8 Further Comments

None.

9 Example

The example program prints the first five pseudo-random real numbers from a uniform distribution between 0 and 1, generated by G05CAF. The program should give **different** results each time it is run.

The generator mechanism used is selected by an initial call to G05ZAF.

9.1 Program Text

Note. The listing of the example program presented below uses bold italicised terms to denote precision-dependent details. Please read the Users' Note for your implementation to check the interpretation of these terms. As explained in the Essential Introduction to this manual, the results produced may not be identical for all implementations.

```
*     G05CCF Example Program Text
*     NAG Fortran SMP Library, Release 2.  NAG Copyright 2000.
*     .. Parameters ..
      INTEGER          NOUT
      PARAMETER        (NOUT=6)
*     .. Local Scalars ..
      DOUBLE PRECISION X
      INTEGER          I
*     .. External Functions ..
      DOUBLE PRECISION G05CAF
      EXTERNAL         G05CAF
*     .. External Subroutines ..
      EXTERNAL         G05CCF, G05ZAF
*     .. Executable Statements ..
      CALL G05ZAF('O')
      WRITE (NOUT,*) 'G05CCF Example Program Results'
      WRITE (NOUT,*)
*
      CALL G05CCF
*
      DO 20 I = 1, 5
         X = G05CAF(X)
         WRITE (NOUT,99999) X
   20 CONTINUE
      STOP
*
99999 FORMAT (1X,F10.4)
      END
```

9.2 Program Data

None.

9.3 Program Results

```
 G05CCF Example Program Results

     0.3798
     0.1941
     0.4871
     0.0294
     0.4691
```