

# NAG Library Routine Document

## X05AAF

**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

X05AAF returns the current date and time.

### 2 Specification

```
SUBROUTINE X05AAF (ITIME)  
INTEGER ITIME(7)
```

### 3 Description

X05AAF returns the current date and time as a set of seven integers.

### 4 References

None.

### 5 Arguments

1: ITIME(7) – INTEGER array

*Output*

*On exit:* the current date and time, as follows:

ITIME(1)

Contains the current year.

ITIME(2)

Contains the current month, in the range 1–12.

ITIME(3)

Contains the current day, in the range 1–31.

ITIME(4)

Contains the current hour, in the range 0–23.

ITIME(5)

Contains the current minute, in the range 0–59.

ITIME(6)

Contains the current second, in the range 0–59.

ITIME(7)

Contains the current millisecond, in the range 0–999.

### 6 Error Indicators and Warnings

None.

### 7 Accuracy

The accuracy of this routine depends on the accuracy of the host machine. In particular, on some machines it may not be possible to return a value for the current millisecond. In this case, the value returned will be zero.

## 8 Parallelism and Performance

X05AAF is not threaded in any implementation.

## 9 Further Comments

None.

## 10 Example

This example prints out the vector ITIME after a call to X05AAF.

### 10.1 Program Text

```

Program x05aafe

!      X05AAF Example Program Text

!      Mark 26 Release. NAG Copyright 2016.

!      .. Use Statements ..
Use nag_library, Only: x04acf, x04adf, x04baf, x05aaf
!      .. Implicit None Statement ..
Implicit None
!      .. Parameters ..
Integer, Parameter          :: iounit = 53, nout = 6
Character (*), Parameter    :: fname = 'x05aafe_output.txt'
!      .. Local Scalars ..
Integer                     :: ifail
Character (80)              :: rec
!      .. Local Arrays ..
Integer                     :: itime(7)
!      .. Executable Statements ..
Write (nout,*) 'X05AAF Example Program Results'

!      Associate fname with iounit and open the unit for writing:
ifail = 0
Call x04acf(iounit,fname,1,ifail)

!      Get the time array:
Call x05aaf(itime)

!      Stamp the output file:
Call x04baf(iounit,
           'File created by NAG x05aaf example program, time stamp:')
Write (rec,99999) itime
Call x04baf(iounit,rec)

!      Close the output file:
ifail = 0
Call x04adf(iounit,ifail)

Write (nout,*) 'File created and stamped successfully.'

99999 Format (I4.4,2I2.2,'-',3(I2.2,':'),I3.3)
End Program x05aafe

```

### 10.2 Program Data

None.

### 10.3 Program Results

```

X05AAF Example Program Results
File created and stamped successfully.

```

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