

## nag\_random\_init\_nonrepeatable (g05ccc)

### 1. Purpose

**nag\_random\_init\_nonrepeatable (g05ccc)** sets the seed used by the basic generator in the g05 Chapter to a non-repeatable initial value.

### 2. Specification

```
#include <nag.h>
#include <nagg05.h>

void nag_random_init_nonrepeatable(void)
```

### 3. Description

This function sets the internal seed used by the basic generator `nag_random_continuous_uniform (g05cac)` to a value  $n_0$  calculated from the setting of the real-time clock. It then generates the value  $n_1$  and discards it, i.e., the first available value is  $n_2$ .

This function 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. Parameters

None.

### 5. Error Indications and Warnings

None.

### 6. Further Comments

None.

### 7. See Also

`nag_random_continuous_uniform (g05cac)`  
`nag_random_init_repeatable (g05cbc)`

### 8. Example

The example program prints the first five pseudo-random real numbers from a uniform distribution between 0 and 1, generated by `nag_random_continuous_uniform (g05cac)` after initialisation by `nag_random_init_nonrepeatable`. The program should give **different** results each time it is run.

#### 8.1. Program Text

```
/* nag_random_init_nonrepeatable(g05ccc) Example Program
 *
 * Copyright 1990 Numerical Algorithms Group.
 *
 * Mark 1, 1990.
 */

#include <nag.h>
#include <stdio.h>
#include <nag_stdlib.h>
#include <nagg05.h>

main()
{
```

```
Integer i;  
  
Vprintf("g05ccc Example Program Results\n");  
g05ccc();  
for (i=1; i<=5; i++)  
    Vprintf("%10.4f\n",g05cac());  
exit(EXIT_SUCCESS);  
}
```

**8.2. Program Data**

None.

**8.3. Program Results**

```
g05ccc Example Program Results  
0.8368  
0.4629  
0.9618  
0.4192  
0.2339
```

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