

NAG Toolbox for MATLAB

g05cb

1 Purpose

g05cb sets the seeds used by the generator mechanism (see the G05 Chapter Introduction) to a repeatable initial value. g05cb is for use only with the group of functions g05ca–g05hd.

2 Syntax

```
g05cb(ii)
```

3 Description

g05cb sets the internal seeds used by the generator mechanism (see the G05 Chapter Introduction) to values calculated from the parameter *i*.

This function will yield different subsequent sequences of random numbers if called with different values of *i*, but the sequences, if calculated sequentially, will be repeatable 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

5.1 Compulsory Input Parameters

1: **ii** – int32 scalar

A number from which the new seeds are to be calculated.

5.2 Optional Input Parameters

None.

5.3 Input Parameters Omitted from the MATLAB Interface

None.

5.4 Output Parameters

None.

6 Error Indicators and Warnings

None.

7 Accuracy

Not applicable.

8 Further Comments

None.

9 Example

```
ii = int32(0);  
g05za('O');  
g05cb(int32(0));  
for i=1:5  
    x = g05ca();  
    fprintf('%16.4f\n',x);  
end
```

```
0.7951  
      0.2257  
      0.3713  
      0.2250  
      0.8787
```