**randg**

*Function of generation of Gaussian noise with specified mathematical expectation and dispersion.*

**Syntax:**

*y* = **randg**(m, g)*;*

**Arguments:**

*m* – input value of mathematical expectation,

*g* – input value of dispersion.

**Description:**

*randg(m, g)* – function returns a random number generated with Gaussian distribution (Gaussian noise) with mathematical expectation *m* and dispersion *g*.

**Result:**

*y* – output value, a random number generated with Gaussian distribution.

**Example:**

|  |  |
| --- | --- |
|  | **var** t:**array** = 10#0; //10-element array  **for**(i=1, 10)  t[i] = **randg**(5, 2); //let us fill the array with random  //numbers |

As a result values of the array [6.8355076 , 5.6157777 , 1.5408495 , 8.5692876 , 5.8709171 , 4.4622456 , 5.7149265 , 6.9142895 , 3.8483596 , 2.9655359] that are random values (Gaussian noise) with mathematical expectation and dispersion 2 will be assigned to variable *t*. Values of the array will be filled in random fashion on every step of the program.