**randp**

*Function of generation of noise with Poisson distribution by means of preassigned mathematical expectation.*

**Syntax:**

*y* = **randp**(m)*;*

**Arguments:**

*m* – input value, mathematical expectation.

**Description:**

*randp(m)* – function returns a random number generated with Poisson distribution with mathematical expectation *m*.

**Result:**

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

**Example:**

|  |  |
| --- | --- |
|  | **var** t:**array** = 10#0; //10-element array  **for**(i=1, 10)  t[i] = **randp**(3); //let us fill the array with random  //numbers |

As a result values of the array [12 , 7 , 12 , 7 , 8 , 10 , 3 , 21 , 8 , 9] that are random values with Poisson distribution with mathematical expectation 3 will be assigned to variable *t*. Values of the array will be filled in random fashion on every step of the program.