**norm1**

*Function of calculating the first norm of real matrix.*

**Syntax:**

*x* = **norm1**(*M*);

**Arguments:**

*M* – input matrix.

**Description:**

*norm1(M)* – function returns the first norm of real matrix. All the elements in the columns of matrix *M* taken according to module get summed up, and the maximum of the obtained sums is announced to be the norm (the first norm).

Input matrix *М* can be assigned:

* as variable of matrix type determined earlier:

*x* = **norm1**(*M*);

* as matrix consisting of variables determined earlier:

*x* = **norm1**([[*x1,x2*],[*x3,x4*],[*x5,x6*]]);

* as constant matrix:

*x* = **norm1**([[1,2],[3,4],[5,6]]);

**Result:**

*х* – value of the first norm of matrix *M.*

**Example:**

|  |  |
| --- | --- |
|  | **const** M = [  [1, -3, 2],  [4, 5, -1],  [3, 8, -6]  ];  x = **norm1**(M); //16 |

As a result variable *x* will be assigned the value of the first norm of matrix *М* equal 16.