**moment4**

*Function of calculation of the fourth central moment.*

**Syntax:**

*y* = **moment4***(X);*

**Arguments:**

*X* – input array containing vector elements.

**Description:**

*moment4(X)* – function returns the value of the fourth central moment of a random value, whose distribution is presented by elements of input vector *X*. The fourth central moment controls how distinctly the distribution peak is expressed in vicinity of the mean one.

Elements of vector *X* shall be real numbers.

The input array *X* can be assigned:

* as variable of array type determined earlier:

*y* = **moment4**(*X*);

* as array consisting of variables determined earlier:

*y* = **moment4**([*x1,x2,x3,x4*]);

* as constant array:

*y* = **moment4**([0,0,2,1,0])*;*

**Result:**

*y* – value of the fourth central moment.

**Example:**

|  |  |
| --- | --- |
|  | **const** X = [2, 2, 1, 3, 4];  y = **moment4**(X); |

As a result, value 0. 74059032 that is the value of the fourth central moment of the random value, whose distribution is presented by elements of input vector *X*, will be assigned to variable *y*.