**eye**

*Function of creating identity matrix.*

**Syntax:**

*M* = **eye**(*n*);

**Arguments:**

*n* – identity matrixdimensionality.

**Description:**

*eye(n)* – function returns matrix with dimensionality n to n with all diagonal elements equal to one.

**Result:**

*М* – identity matrix*.* Matrix *М* –square.

**Example:**

|  |  |
| --- | --- |
|  | **const** n = 5;  M = **eye**(n); |

As a result, variable *M* will be assigned array value

[

[1, 0, 0, 0, 0],

[0, 1, 0, 0, 0],

[0, 0, 1, 0, 0],

[0, 0, 0, 1, 0],

[0, 0, 0, 0, 1]

],

determining identity matrix with all diagonal elements equal to 1.