Title

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I( ) — Identity matrix

Syntax

real matrix `I(`*real scalar n*`)`

real matrix `I(`*real scalar m*`,` *real scalar n*`)`

Description

`I(`*n*`)` returns the $n \times n$ identity matrix.

`I(`*m*`,` *n*`)` returns an $m \times n$ matrix with 1s down its principal diagonal and 0s elsewhere.

Remarks and examples

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`I()` must be typed in uppercase.

Conformability

`I(`*n*`)`:

n:	1×1
result:	$n \times n$

`I(`*m*`,` *n*`)`:

m:	1×1
n:	1×1
result:	$m \times n$

Diagnostics

`I(`*n*`)` aborts with error if *n* is less than 0 or is missing. *n* is interpreted as `trunc(`*n*`)`.

`I(`*m*`,` *n*`)` aborts with error if *m* or *n* are less than 0 or if they are missing. *m* and *n* are interpreted as `trunc(`*m*`)` and `trunc(`*n*`)`.

Also see

[M-4] **standard** — Functions to create standard matrices