

I() — Identity matrix

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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.

Syntax

real matrix $I(\textit{real scalar } n)$

real matrix $I(\textit{real scalar } m, \textit{real scalar } n)$

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

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