Description Syntax Conformability Diagnostics Also see

Description

 $_diag(Z, v)$ replaces the diagonal of the matrix Z with v. Z need not be square.

- 1. If v is a vector, the vector replaces the principal diagonal.
- 2. If v is 1×1 , each element of the principal diagonal is replaced with v.
- 3. If v is a void vector $(1 \times 0 \text{ or } 0 \times 1)$, Z is left unchanged.

Syntax

void _diag(numeric matrix Z, numeric vector v)

Conformability

```
\begin{array}{c} \texttt{diag}(Z, v):\\ input:\\ Z: & n \times m, n \leq m\\ v: & 1 \times 1, 1 \times n, \text{ or } n \times 1\\ \text{or}\\ Z: & n \times m, n > m\\ v: & 1 \times 1, 1 \times m, \text{ or } m \times 1\\ output:\\ Z: & n \times m\end{array}
```

Diagnostics

 $_$ diag(Z, v) aborts with error if Z or v is a view.

Also see

[M-5] diag() — Create diagonal matrix

[M-4] Manipulation — Matrix manipulation

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