corr() — Make correlation matrix from variance matrix

Syntax

real matrix corr(real matrix V)

void _corr(real matrix V)

Description

corr(V) returns the correlation matrix corresponding to variance matrix V.

_corr(V) changes the contents of V from being a variance matrix to being a correlation matrix.

Remarks and examples

See function variance() in [M-5] mean() for obtaining a variance matrix from data.

Conformability

corr(V):

input:

V: \( k \times k \)

result: \( k \times k \)

_corr(V):

input:

V: \( k \times k \)

output:

V: \( k \times k \)

Diagnostics

corr() and _corr() abort with error if V is not square. V should also be symmetric, but this is not checked.

Also see

[M-5] mean() — Means, variances, and correlations

[M-4] statistical — Statistical functions