editvalue() — Edit (change) values in matrix

Description

\( \text{editvalue}(A, \text{from}, \text{to}) \) returns \( A \) with all elements equal to \( \text{from} \) changed to \( \text{to} \).

\( \_\text{editvalue}(A, \text{from}, \text{to}) \) does the same thing but modifies \( A \) itself.

Syntax

\[
\text{matrix} \quad \text{editvalue}(\text{matrix } A, \text{scalar from}, \text{scalar to}) \\
\text{void} \quad \_\text{editvalue}(\text{matrix } A, \text{scalar from}, \text{scalar to})
\]

where \( A, \text{from}, \) and \( \text{to} \) may be real, complex, or string.

Remarks and examples

\( \text{editvalue() and \_editvalue()} \) are fast.

If you wish to change missing values to nonmissing values, it is better to use \([\text{M-5}] \text{editmissing}()\). \( \text{editvalue}(A, ., 1) \) would change all . missing values to 1 but leave .a, .b, …, .z unchanged. \( \text{editmissing}(A, 1) \) would change all missing values to 1.

Conformability

\( \text{editvalue}(A, \text{from}, \text{to}): \)

\[
\begin{align*}
A: & \quad r \times c \\
\text{from}: & \quad 1 \times 1 \\
\text{to}: & \quad 1 \times 1 \\
\text{result}: & \quad r \times c
\end{align*}
\]

\( \_\text{editvalue}(A, \text{from}, \text{to}): \)

\[
\begin{align*}
\text{input}: \\
A: & \quad r \times c \\
\text{from}: & \quad 1 \times 1 \\
\text{to}: & \quad 1 \times 1 \\
\text{output}: \\
A: & \quad r \times c
\end{align*}
\]
Diagnostics

\texttt{editvalue(A, from, to)} returns a matrix of the same type as \( A \).

\texttt{editvalue(A, from, to)} and \texttt{_editvalue(A, from, to)} abort with error if \texttt{from} and \texttt{to} are incompatible with \( A \). That is, if \( A \) is real, \texttt{to} and \texttt{from} must be real. If \( A \) is complex, \texttt{to} and \texttt{from} must each be either real or complex. If \( A \) is string, \texttt{to} and \texttt{from} must be string.

\texttt{_editvalue(A, from, to)} aborts with error if \( A \) is a view.

Also see

[M-5] \texttt{editmissing()} — Edit matrix for missing values

[M-4] \texttt{Manipulation} — Matrix manipulation