

substr() — Extract substring
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Syntax

string matrix `substr(string matrix s, real matrix b, real matrix l)`

string matrix `substr(string matrix s, real matrix b)`

Description

`substr(s, b, l)` returns the substring of *s* starting at position *b* and continuing for a length of *l*, where

1. *b* specifies the starting position; the first character of the string is *b* = 1.
2. *b* > 0 is interpreted as distance from the start of the string; *b* = 2 means starting at the second character.
3. *b* < 0 is interpreted as distance from the end of string; *b* = -1 means starting at the last character; *b* = -2 means starting at the second from the last character.
4. *l* specifies the length; *l* = 2 means for two characters.
5. *l* < 0 is treated the same as *l* = 0: no characters are copied.
6. *l* ≥ . is interpreted to mean to the end of the string.

`substr(s, b)` is equivalent to `substr(s, b, .)` for strings that do not contain binary 0. If there is a binary 0 to the right of *b*, the substring from *b* up to but not including the binary 0 is returned.

When arguments are not scalar, `substr()` returns element-by-element results.

Conformability

`substr(s, b, l):`

s: $r_1 \times c_1$
b: $r_2 \times c_2$
l: $r_3 \times c_3$; *s*, *b*, and *l* r-conformable
result: $\max(r_1, r_2, r_3) \times \max(c_1, c_2, c_3)$

`substr(s, b):`

s: $r_1 \times c_1$
b: $r_2 \times c_2$; *s* and *b* r-conformable
result: $\max(r_1, r_2) \times \max(c_1, c_2)$

Diagnostics

In `substr(s, b, l)` and `substr(s, b)`, if *b* describes a position before the beginning of the string or after the end, "" is returned. If *b* + *l* describes a position to the right of the end of the string, results are as if a smaller value for *l* were specified.

Also see

[M-4] [string](#) — String manipulation functions