Abbreviate strings

**Description**

`abbrev(s, n)` returns `s` abbreviated to `n` display columns. Usually, this means it will be abbreviated to `n` characters, but if `s` contains characters requiring more than one display column, such as Chinese, Japanese, and Korean (CJK), `s` will be abbreviated such that it does not exceed `n` display columns.

1. `n` is the abbreviation length and is assumed to contain integer values in the range 5, 6, ..., 32.
2. If `s` contains a period, ., and `n < 8`, then the value `n` defaults to 8. Otherwise, if `n < 5`, then `n` defaults to 5.
3. If `n` is missing, the entire string (up to the first binary 0) is returned.

If there is a binary 0 in `s`, the abbreviation is derived from the beginning of the string up to but not including the binary 0.

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

**Syntax**

```
string matrix abbrev(string matrix s, real matrix n)
```

**Conformability**

`abbrev(s, n)`:  
```
s: r1 × c1  
n: r2 × c2; s and n r-conformable  
result: max(r1, r2) × max(c1, c2)
```

**Diagnostics**

`abbrev()` returns "" if `s` is "". `abbrev()` aborts with error if `s` is not a string.

**Also see**

[M-4] String — String manipulation functions