**ustrword() — Obtain Unicode word from Unicode string**

### Description

`ustrword(s, n)` returns the `n`th Unicode word in the Unicode string `s`. Positive numbers count Unicode words from the beginning of `s`, and negative numbers count Unicode words from the end of `s`. `1` is the first word in `s`, and `-1` is the last Unicode word in `s`. The function uses the `locale_functions` setting.

`ustrword(s, n, loc)` returns the `n`th Unicode word in the Unicode string `s`. Positive numbers count Unicode words from the beginning of `s`, and negative numbers count Unicode words from the end of `s`. `1` is the first word in `s`, and `-1` is the last Unicode word in `s`. The function uses the locale specified in `loc`.

`ustrwordcount(s)` returns the number of nonempty Unicode words in the Unicode string `s`. An empty Unicode word is a Unicode word consisting of only Unicode whitespace characters. The function uses the `locale_functions` setting.

`ustrwordcount(s, loc)` returns the number of nonempty Unicode words in the Unicode string `s`. An empty Unicode word is a Unicode word consisting of only Unicode whitespace characters. The function uses the locale specified in `loc`.

When `s` and `n` are not scalar, these functions return element-by-element results.

### Syntax

```
string matrix  ustrword(string matrix s, real matrix n)
string matrix  ustrword(string matrix s, real matrix n, string scalar loc)
real matrix    ustrwordcount(string matrix s)
real matrix    ustrwordcount(string matrix s, string scalar loc)
```

### Remarks and examples

A Unicode word is different from a word produced by the function `word()`. The word in `word()` is a space-separated token. A Unicode word is a language unit based on either a set of `word boundary rules` or dictionaries for some language such as Chinese, Japanese, and Thai.

An invalid UTF-8 sequence is replaced with a Unicode replacement character `\ufffd`.

The null terminator `char(0)` is a nonempty Unicode word.
Conformability

\texttt{ustrword}(s, n), \texttt{ustrword}(s, n, loc):

\begin{align*}
  s: & \quad r \times c \\
  n: & \quad r \times c \text{ or } 1 \times 1 \\
  loc: & \quad 1 \times 1 \\
  result: & \quad r \times c \\
\end{align*}

\texttt{ustrwordcount}(s), \texttt{ustrwordcount}(s, loc):

\begin{align*}
  s: & \quad r \times c \\
  loc: & \quad 1 \times 1 \\
  result: & \quad r \times c \\
\end{align*}

Diagnostics

\texttt{ustrword()} returns an empty string if an error occurs. \texttt{ustrwordcount()} returns a negative number if an error occurs.

Also see

[M-5] \texttt{invtokens()} — Concatenate string rowvector into string scalar

[M-5] \texttt{tokenget()} — Advanced parsing

[M-5] \texttt{tokens()} — Obtain tokens from string

[M-5] \texttt{ustrsplit()} — Split string into parts based on a Unicode regular expression

[M-4] \textbf{String} — String manipulation functions

[FN] \textbf{String functions}

[U] 12.4.2 Handling Unicode strings