ascii() — Manipulate ASCII and byte codes

Description

ascii(s) returns a row vector containing the ASCII codes (0–127) and byte codes (128–255) corresponding to s. For instance, ascii("abc") returns (97, 98, 99); ascii("café") returns (99, 97, 102, 195, 169). Note that the Unicode character “é” is beyond ASCII range. Its UTF-8 encoding requires 2 bytes and their byte values are 195 and 169.

char(c) returns a UTF-8 encoded string consisting of the specified ASCII and byte codes. For instance, char((97, 98, 99)) returns "abc", and char((99, 97, 102, 195, 169)) returns "café".

Syntax

    real rowvector ascii(string scalar s)

    string scalar char(real rowvector c)

Conformability

ascii(s):
    s: 1 × 1
    result: 1 × strlen(s)

char(c):
    c: 1 × n, n ≥ 0
    result: 1 × 1

Diagnostics

ascii(s) returns J(1,0,.0) if strlen(s)==0.

In char(c), if any element of c is outside the range 0 to 255, the returned string is terminated at that point. For instance, char((97,98,99,1000,97,98,99))="abc".

char(J(1,0,.)) returns ".".

Also see

[M-5] isascii() — Whether string scalar contains only ASCII codes
[M-5] uchar() — Convert code point to Unicode character
[M-4] String — String manipulation functions