

**ascii()** — Manipulate ASCII and byte codes
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## 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*:         $1 \times 1$   
       *result*:     $1 \times \text{strlen}(s)$

`char(c)`:  
       *c*:         $1 \times n, \quad n \geq 0$   
       *result*:     $1 \times 1$

## Diagnostics

`ascii(s)` returns J(1,0,.) 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