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char

This package provides a set of utilities for working with characters, focusing on character classification and validation.

Basic ASCII Classification

Functions for determining if a character belongs to various ASCII categories.

```
2
    test "ascii classification" {
3
4
       inspect('A' is_ascii(), content="true")
5
       inspect('?' is_ascii(), content="false")
6
7
8
       inspect('Z' is_ascii_alphabetic(), content="true")
9
       inspect('1' is_ascii_alphabetic(), content="false")
10
11
12
       inspect('A' is_ascii_uppercase(), content="true")
       inspect('a' is_ascii_uppercase(), content="false")
13
       inspect('a' is_ascii_lowercase(), content="true")
inspect('A' is_ascii_lowercase(), content="false")
14
15
16
```

Number Classification

Functions for identifying digits in different number bases.

```
2
    test "number classification" {
3
4
      inspect('5' is_ascii_digit(), content="true")
5
      inspect('x' is_ascii_digit(), content="false")
6
7
8
      inspect('F' is_ascii_hexdigit(), content="true")
9
      inspect('G' is_ascii_hexdigit(), content="false")
10
11
12
      inspect('7' is_ascii_octdigit(), content="true")
13
      inspect('8' is_ascii_octdigit(), content="false")
14
15
16
      inspect('5' is_digit(6U), content="true")
17
      inspect('6' is_digit(6U), content="false")
18
19
20
      inspect('1' is_numeric(), content="true")
21
      inspect('A' is_numeric(), content="false")
22
    }
```

Special Characters

Functions for identifying whitespace, control characters and other special characters.

```
1
    test "special characters" {
2
3
       inspect(' ' is_ascii_whitespace(), content="true")
5
       inspect('\n' is_whitespace(), content="true")
6
7
8
       inspect('\u0000' is_ascii_control(), content="true")
9
       inspect('\u007F' is_control(), content="true")
10
11
       inspect('!' is_ascii_graphic(), content="true")
inspect(' ' is_ascii_graphic(), content="false")
12
13
14
       inspect(',' is_ascii_punctuation(), content="true")
15
```

Method Style Usage

All character classification functions can also be called as methods directly on characters.

```
1
    test "method style" {
3
4
      let c = 'A'
      inspect(c is_ascii(), content="true")
      inspect(c is_ascii_alphabetic(), content="true")
7
      inspect(c is_ascii_uppercase(), content="true")
8
9
10
      let d = '7'
11
      inspect(d is_ascii_digit(), content="true")
12
      inspect(d is_digit(8U), content="true")
13
      inspect(d is_ascii_hexdigit(), content="true")
14
15
16
      let s = ' '
17
      inspect(s is_ascii_whitespace(), content="true")
18
      inspect(s is_whitespace(), content="true")
19
```