

MATLAB String Manipulation Functions

String Creation & Conversion

string(x) – Convert any data to string
`s = string(123);`

char(x) – Convert string to character array
`c = char("hello");`

num2str(n) – Number to string
`s = num2str(45);`

str2double(s) – String to number
`n = str2double("3.14");`

sprintf() – Create formatted string
`s = sprintf("Value=%d", 10);`

Length & Size

strlength() – Find string length
`l = strlength("MATLAB");`

length() – Length of char array
`l = length('MATLAB');`

size() – Size of string array
`sz = size(str);`

numel() – Total elements
`n = numel(str);`

Comparison & Checking

strcmp() – Compare two strings
`strcmp(s1,s2);`

strcmpi() – Case-insensitive compare
`strcmpi("a","A");`

contains() – Check substring exists
`contains("MATLAB", "LAB");`

startsWith() – Check starting pattern
`startsWith("MATLAB", "MAT");`

endsWith() – Check ending pattern
`endsWith("MATLAB", "LAB");`

Case Conversion

upper() – Convert to uppercase
`upper("matlab");`

lower() – Convert to lowercase
`lower("MATLAB");`

capitalize() – Capitalize first letter
`capitalize("hello");`

Extract & Replace

extract() – Extract substring
`extract("MATLAB",1,3);`

extractBefore() – Text before pattern
`extractBefore("a @b.com", "@ ");`

extractAfter() – Text after pattern
`extractAfter("a @b.com", "@ ");`

replace() – Replace text
`replace("I like C","C","MATLAB");`

erase() – Remove text
`erase("abc123", "123");`

Split & Join

split() – Split string
`split("a,b,c", ", ");`

splitlines() – Split by lines
`splitlines(str);`

join() – Join strings
`join(["a","b"], "-");`

strjoin() – Join cell strings
`strjoin({'a','b'}, '-');`

Search & Pattern

count() – Count pattern occurrence
`count("banana", "a");`

find() – Find character index
`find("abc"=="b');`

regexp() – Pattern matching
`regexp("abc123", "\d+");`

regexp替換() – Regex replace
`regexp替換("abc123", "\d", "X");`