

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","ld+");

regexprep() – Regex replace
regexprep("abc123","ld","X");