# Basic String Operations

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## Combine String, Numeric values etc, Single and Double Quotes

Convert a string array into a single string, note the double quotes, and the auto space between:

```
st_a = "another string";
ar_st = ["abc", num2str(2), "opq", st_a];
disp(strjoin(ar_st));
```

```
abc 2 opq another string
```

If we do not want to have spaces between words, the second parameter for strjoin allows for string connectors:

```
st_a = "another string";
ar_st = ["abc", num2str(2), "opq", st_a];
disp(strjoin(ar_st, ""));
```

```
abc2opqanother string
```

With single quotes, the str element is not an array, so does not need strjoin, but not need to have spaces:

```
st_a = 'another string';
str = ['abc ', num2str(2), ' opq ', st_a];
disp((str));
```

```
abc 2 opq another string
```

## Construct String Array and String Elements of String Array

In the example below, we have a number of strings we want to put inside a string array, then join with strjoin, but two of the strings need to be constructed as strings first. Note below that double quoates are own strings, single quotes in brackets constructing additional strings.

```
st_a = "another string";
ar_st = strjoin(...
    ["Completed SNW_DS_MAIN", ...
     ['SNW_MP_PARAM=' num2str(123.345)], ...
     ['SNW_MP_CONTROL=' num2str(678.90)], ...
     st_a...
    ], ";");
disp(ar_st);
```

```
Completed SNW_DS_MAIN;SNW_MP_PARAM=123.345;SNW_MP_CONTROL=678.9;another string
```

## Paste Join Strings Together with Separator

Join strings together with separator, this is similar to the paste0 function in R.

```
ar_st = ["abc", "efg", "opq"];
disp(strjoin(ar_st, '-'));
```

```
abc-efg-opq
```

## Combine Char with Numeric Value

Compose a string with words and numerical values

```
st_title = strcat("Figure Title ", ...
    "(", ...
    "threedeci=%.3f,", ...
    "twodeci=%.2f,", ...
    "int=%.0f", ...
    ")");
ar_params = 123.4567 + zeros(1,3);
st_combo = compose(st_title, ar_params);
disp(st_combo);
```

```
Figure Title (threedeci=123.457,twodeci=123.46,int=123)
```

## Change File Name MLX to M

```
st_file_name_mlx = 'continuous_differentiable.mlx';
at_st_split_file_name = split(st_file_name_mlx, ".");
st_file_name_m = strcat(at_st_split_file_name{1}, '_m.m');
disp(st_file_name_m);
```

```
continuous_differentiable_m.m
```