% This use of ' is for transpose:

mat2x2 = [1 2; 3 4]'; % transpose of a matrix

cell2x2 = {1 2; 3 4}'; % transpose of a cell

v=mat2x2'; % transpose of a variable

v2 = (v')'; % two transpose operations

foo = 1.'; % transpose of scalar 1.

% Nonconjugate transpose uses .'

mat2x2 = [1 2; 3 4].'; % of a matrix

cell2x2 = {1 2; 3 4}.'; % of a cell

v=mat2x2.'; % of a variable

v2 = (v.').'; % two operations

foo = 1..'; % of scalar 1.

bar = v.''.'.''; % mix of transpose operations

% single quote strings:

sq1 = 'a single quote string';

sq2 = ...

' abcd '; % single quote string starting at column 1

sq3 = ['a','bc']; % array of single quote strings

sq4 = {'a','bc'}; % cell of single quote strings

% double quote strings

dq1 = "a double string";

dq2 = ...

" abcd "; % double quote string starting at column 1

dq3 = ["a","bc"]; % array of double quote strings

% Mixture of strings and transpose

c2 = {'a','bc'}'; % transpose of a cell of strings

s = ['a','bc']'; % you can transpose vectors of strings (they are really 'char' arrays)

s = s'; % and transpose back

% (s')' is a double transpose of a string

x = [(s')', ' xyz ', 'a single quote in a string'', escape \', two quotes in a string'''''];

s2 = "abc\"def""ghi"; % newer versions of MATLAB support double quoted strings

s3 = (["abc", "defg"]')'; % transpose a vectors of quoted string twice

s4 = "abc"!; % transpose a quoted string

b = true' + false'; % boolean constants