Array Addressing

Sub-vector

To access a value in a vector, use parentheses to enclose the index value. For example, `x(2)` is the value in the 2nd cell of vector `x`. To access a *sub*-vector, specify the index values using a colon notation. Type the following statements in MATLAB to see what vectors get created:

```
x= rand(1,6)
y= x(2:length(x))  % a length 5 vector containing the last 5 values in x
```

Sub-matrix

Type these statements in MATLAB to see what matrices get created:

```
m1= rand(4,3)    % 4-by-3 random matrix (uniform dist.)
tmp= m1(3,2)     % a scalar:  cell in 3rd row, 2nd column of m1
tmp= m1(3:4,:)  % a 2-by-3 matrix:  rows 3 to 4, all columns, of m1
tmp= m1(:,2)     % a 4-by-1 matrix (length 4 column vector):  column 2 of m1
tmp= m1([1 4],:)
tmp= m1(:, [1 3])
tmp= m1([1 4],[1 3])
```