

MATLAB - APPENDING VECTORS

http://www.tutorialspoint.com/matlab/matlab_vector_appending.htm

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MATLAB allows you to append vectors together to create new vectors.

If you have two row vectors `r1` and `r2` with `n` and `m` number of elements, to create a row vector `r` of `n` plus `m` elements, by appending these vectors, you write –

```
r = [r1, r2]
```

You can also create a matrix `r` by appending these two vectors, the vector `r2`, will be the second row of the matrix –

```
r = [r1; r2]
```

However, to do this, both the vectors should have same number of elements.

Similarly, you can append two column vectors `c1` and `c2` with `n` and `m` number of elements. To create a column vector `c` of `n` plus `m` elements, by appending these vectors, you write –

```
c = [c1; c2]
```

You can also create a matrix `c` by appending these two vectors; the vector `c2` will be the second column of the matrix –

```
c = [c1, c2]
```

However, to do this, both the vectors should have same number of elements.

Example

Create a script file with the following code –

```
r1 = [ 1 2 3 4 ];  
r2 = [5 6 7 8 ];  
r = [r1, r2]  
rMat = [r1; r2]  
  
c1 = [ 1; 2; 3; 4 ];  
c2 = [5; 6; 7; 8 ];  
c = [c1; c2]  
cMat = [c1, c2]
```

When you run the file, it displays the following result –

```
r =  
  
Columns 1 through 7:  
  
     1     2     3     4     5     6     7  
  
Column 8:  
  
     8  
  
rMat =  
  
     1     2     3     4  
     5     6     7     8  
  
c =
```

1
2
3
4
5
6
7
8

cMat =

1	5
2	6
3	7
4	8