

Matlab Array Reshaping Examples

back to [Fan's Reusable Matlab Repository](#) or [Dynamic Asset Repository](#).

Basic Examples

```
a = [1,2,3,4,5,6]';  
b = reshape(a, [3,2])
```

```
b = 3x2  
    1     4  
    2     5  
    3     6
```

```
b(:)
```

```
ans = 6x1  
     1  
     2  
     3  
     4  
     5  
     6
```

```
a = [1,2,3;4,5,6;7,8,9;10,11,12]'
```

```
a = 3x4  
     1     4     7    10  
     2     5     8    11  
     3     6     9    12
```

```
b = reshape(a, [6,2])
```

```
b = 6x2  
     1     7  
     2     8  
     3     9  
     4    10  
     5    11  
     6    12
```

Index Dimension Transform

```
it_inner_fin = 5; it_outter_fin = 3;
```

```
it_inner_cur = it_outter_fin it_outter_cur = it_inner_fin
```

```
ar_it_cols_idx = 1:1:(it_inner_fin*it_outter_fin) ar_it_cols_inner_dim = repmat(1:it_inner_cur, [it_outter_cur, 1])  
ar_it_cols_inner_dim(:)'
```

```
mt_it_cols_idx = reshape(ar_it_cols_idx, [it_inner_cur, it_outter_cur])' mt_it_cols_idx(:)'
```

```
it_inner_fin = 5;  
it_outter_fin = 3;
```

```
ar_it_cols_idx = 1:1:(it_inner_fin*it_outter_fin)
```

```
ar_it_cols_idx = 1×15  
1      2      3      4      5      6      7      8      9     10     11     12     13 ...
```

```
mt_it_cols_idx = reshape(ar_it_cols_idx, [it_outter_fin, it_inner_fin])'
```

```
mt_it_cols_idx = 5×3  
1      2      3  
4      5      6  
7      8      9  
10     11     12  
13     14     15
```

```
mt_it_cols_idx(:)'
```

```
ans = 1×15  
1      4      7     10     13      2      5      8     11     14      3      6      9 ...
```