
```
clc
clear clf
close all

x = [1,2,3]
y = [1;2;3]

A = x * y % this is inner product
B = y * x % but this is outer product

B .^ 3 % this gives element wise multiplication

sin(cos(B)) % function composition is intuitive

x(1,3) % one based indexing, returns 3
x(1:3) = 10 % can assign to slices, gives 10 10 10

(3:5)' % can use operations on intermediate expressions like the following
```

```
x =
```

```
    1    2    3
```

```
y =
```

```
    1
    2
    3
```

```
A =
```

```
    14
```

```
B =
```

```
    1    2    3
    2    4    6
    3    6    9
```

```
ans =
```

```
    1    8    27
    8   64   216
   27  216  729
```

```
ans =
```

0.5144	-0.4042	-0.8360
-0.4042	-0.6081	0.8193
-0.8360	0.8193	-0.7902

ans =

3

x =

10 10 10

ans =

3

4

5

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