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% This file to show the ability of Matlab to work on matrix and arrays
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clc;
%arrays
x=[10 11 12 13]
y=[10,11,12,13]
z=[10;11;12;13]

size(x)
d=size(x)

length(z)
length (x)

a=[x;y]
b=[x y]
str=['MEMS' ' Section']


f=[5 7 8 4+7i]
transpose(f)
t=f'
o=f.'
l=x'+z
g=sum(x)
h=prod(z)
s=exp(z)



a=[1,2,4]; b=[5;6;7];
c=a.*b'  % try c=a*b
d=a*b
e=a.^(b')

%special
```

```
o=ones(1,10)
z=zeros(10,2)
r=rand(1,45)
t=magic(5)
a=linspace(0,10,5)
b=0:2.5:10
c=0:10

%matrix index
%subscribt
x=[9 5 7 8]
y=x(2)
z=x(3:4)
%linear
d=[3 2 3 4; 5 16 17 18]
c=d(1)
f=d(2)
g=d(5)
h=d(1,:)
j=d(:,2)
d(2,:)=[10 12 15 14]
min(d)
max(d)
ind=find(d==10)
```