

기본 연산자

```
>> 1+3
```

```
ans =
```

```
4
```

```
>> 13-4
```

```
ans =
```

```
9
```

```
>> 12*3
```

```
ans =
```

```
36
```

```
>> 36/3
```

```
ans =
```

```
12
```

관계 연산자

```
>> x=[1 2 3 4 5] ; y = [5 4 3 2 1] ;
```

```
>> x<y
```

```
ans =
```

```
1×5 logical 배열
```

```
1 1 0 0 0
```

```
>> x<=y
```

```
ans =
```

```
1×5 logical 배열
```

```
1 1 1 0 0
```

```
>> x==y
```

```
ans =
```

```
1×5 logical 배열
```

```
0 0 1 0 0
```

```
>> x>=y
```

```
ans =
```

```
1×5 logical 배열
```

```
0 0 1 1 1
```

```
>> x>y
```

```
ans =
```

```
1×5 logical 배열
```

```
0 0 0 1 1
```

for 문

```
>> for x=0:2:10
```

```
a=2^x
```

```
end
```

```
a =
```

```
1
```

```
a =
```

```
4
```

```
a =
```

```
16
```

```
a =
```

```
64
```

```
a =
```

256

a =

1024

if else문

```
>> a=3;
>> if a<1
b=a+1
else
c=a+2
end
```

c =

5

while 문

```
>> a=1;
>> while a<4
a=a+1
end
```

a =

2

a =

3

a =

4

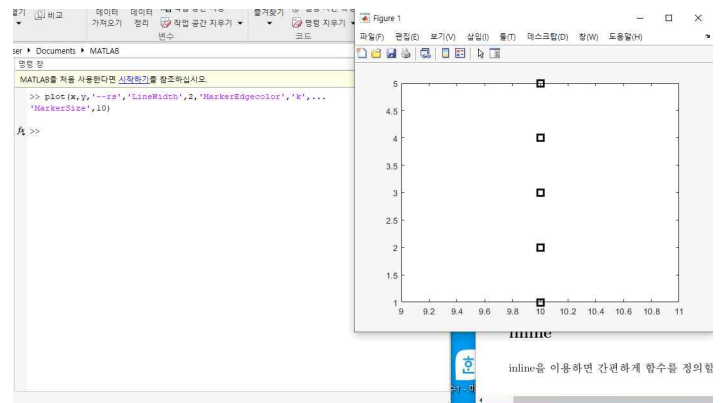
세미콜론

>> a=1; b=2, c=3;

b =

2

명령문 연속



inline

```
>> f = inline('x^3+6*x-2','x');
>> f(3)
```

ans =

43

```
>> f=inline('x.^3+6*x-2','x');
>> f([3 4 5])
```

ans =

43 86 153

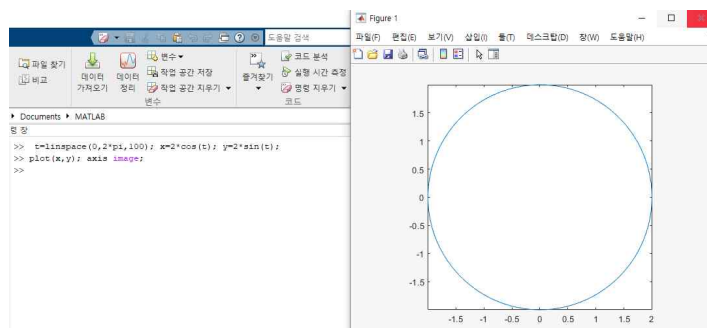
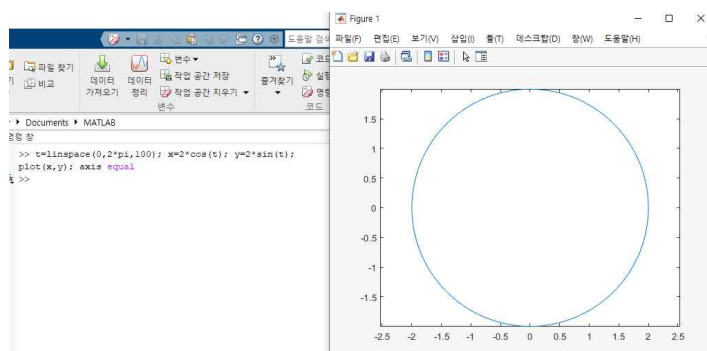
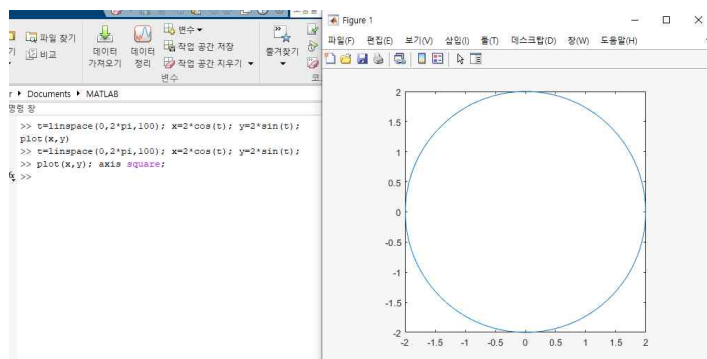
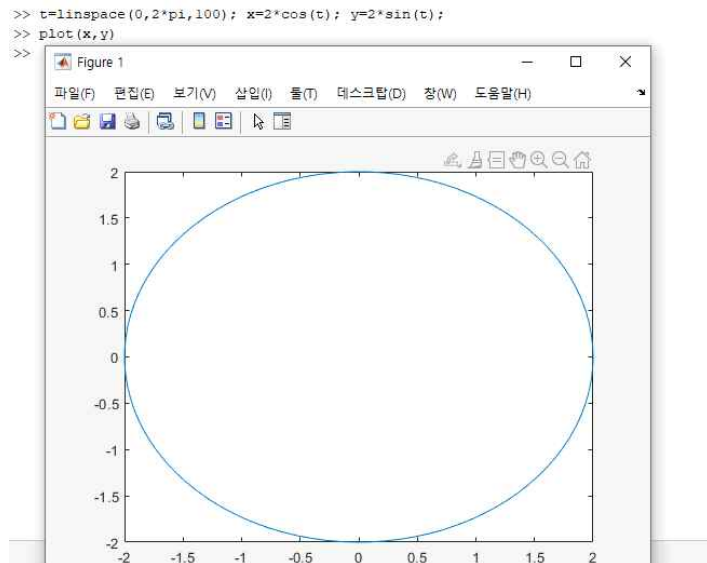
linspace

>> x=linspace(0,5,6)

x =

0 1 2 3 4 5

Plot



Ones

```
>> ones(3)
```

```
ans =
```

```
1 1 1
1 1 1
1 1 1
```

Zeros

```
>> zeros(2)
```

```
ans =
```

```
0 0
0 0
```

length

```
>> C=[1 2 3]; length(C)
```

```
ans =
```

```
3
```

Sum

```
>> A=[1 2 3; 4 5 6; 7 8 9];
```

```
sum(A)
```

```
ans =
```

```
12 15 18
```

Abs

```
>> abs(-3)
```

```
ans =
```

```
3
```

fprintf + load

```
>> fp=fopen('test.m','w');
fprintf(fp, '%d %d\n', 1, 2);
fprintf(fp, '%f %f\n', 3.5, 4.5);
fprintf(fp, '%e %e\n', 100, 1000);
fclose(fp);
>> a=load('test.m')
```

a =

```
1.0e+03 *

    0.0010    0.0020    0.0045    1.0000
```

Rand()

```
>> random_matrix = rand(2,3)
```

random_matrix =

```
    0.9572    0.8003    0.4218
    0.4854    0.1419    0.9157
```

```
>> rand('seed', 3)
```

```
>> rand(2,3)
```

ans =

```
    0.5387    0.0512    0.3010
    0.3815    0.2851    0.1277
```