

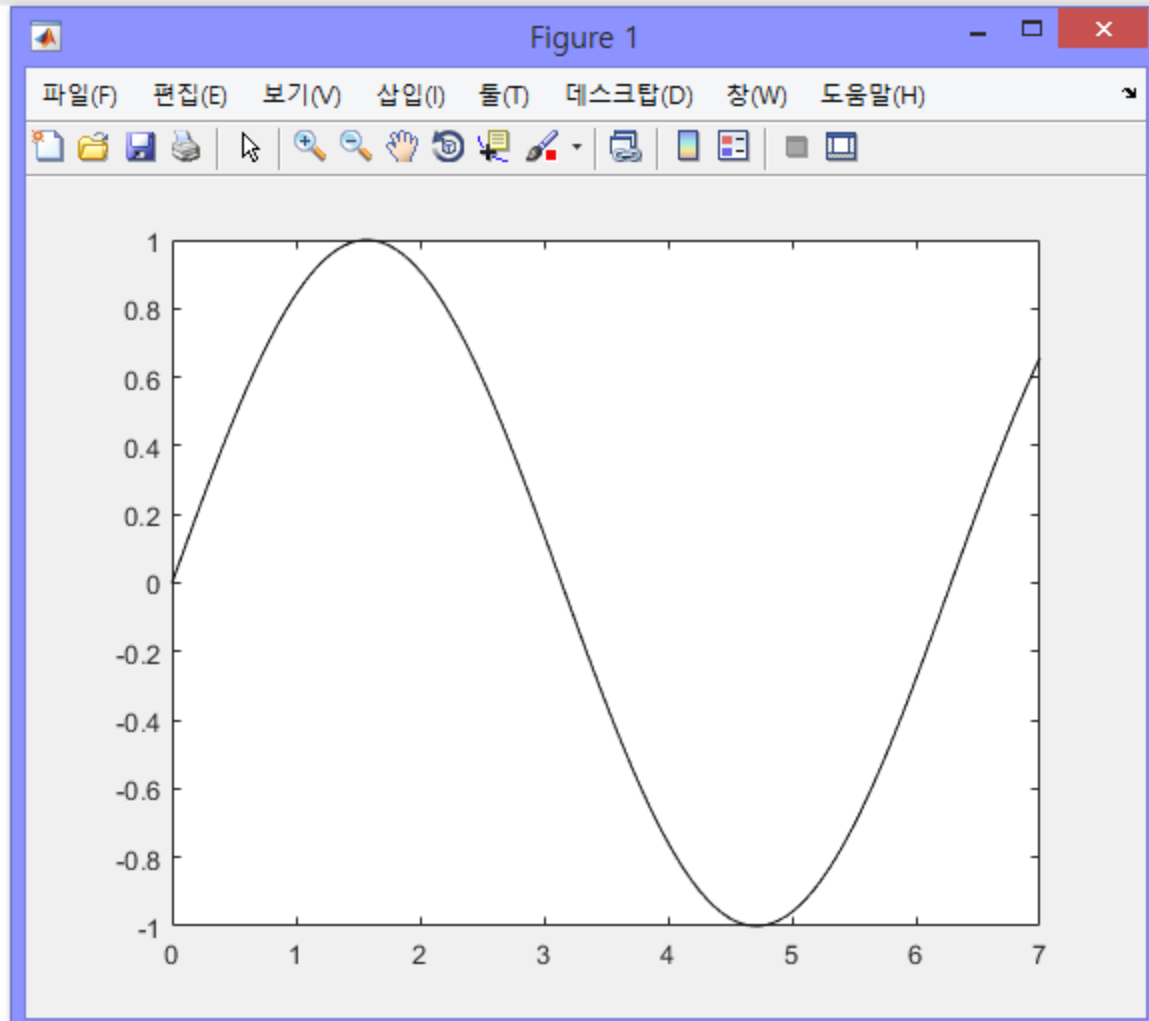
Matlab2Simulink Data Transfer

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명령 창

```
>> xt = 0:0.01:7;  
>> y = sin(xt);  
>> mat2sim = [xt' y'];  
>> plot(xt, y, 'k')
```

fx >>



이름-값 쌍의 인수

예: 'Marker', 'o', 'MarkerFaceColor', 'red'

여기에 나와 있는 chart line 속성은 일부에 불과합니다. 전체 목록을 보려면 [Line 속성](#)을 참조하십시오.

✓ 'Color' — 선 색

[0 0.4470 0.7410] (디폴트 값) | RGB 3색 | 'r' | 'g' | 'b' | ...

선 색으로, RGB 3색이나 표에 나열된 색 옵션 중 하나로 지정됩니다.

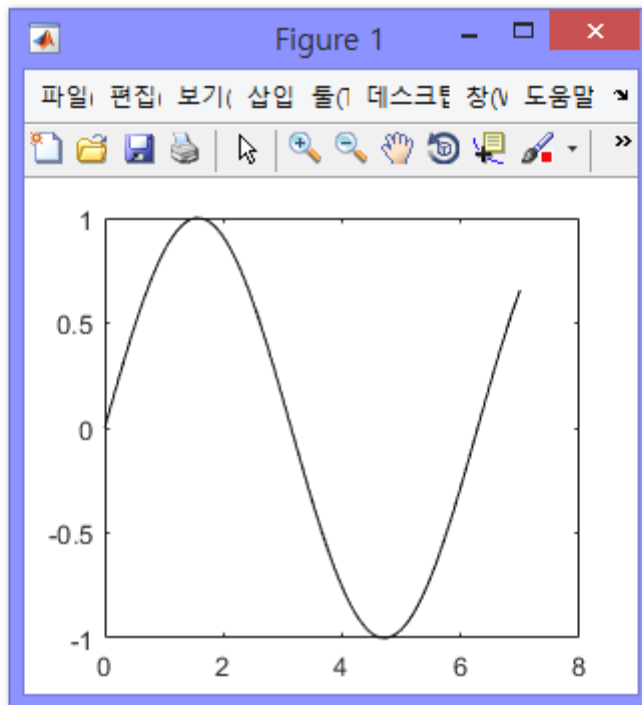
사용자 지정 색의 경우에는 RGB 3색을 지정하십시오. RGB 3색은 요소를 3개 가진 행 벡터로, 각 요소는 색의 RGB 값의 범(0~1)을 나타냅니다. 할 수도 있습니다. 다음 표에는 색의 긴 이름과 짧은 이름 옵션, 그리고 각각에 대응하는 RGB 3색이 나열되어 있습니다.

옵션	설명
'red' 또는 'r'	빨간색
'green' 또는 'g'	녹색
'blue' 또는 'b'	파란색
'yellow' 또는 'y'	노란색
'magenta' 또는 'm'	자홍색
'cyan' 또는 'c'	녹청색
'white' 또는 'w'	흰색
'black' 또는 'k'	검은색
'none'	색 없음

명령 창

```
>> xt = 0:0.01:7;  
>> y = sin(xt);  
>> mat2sim = [xt' y'];  
>> plot(xt, y, 'k')  
>> set(gcf, 'color', 'w', 'pos', [232 326 360 352], 'units', 'pixels')
```

fx >>



gcf

현재 Figure 핸들

구문

```
fig = gcf
```

설명

`fig = gcf`는 현재 Figure 핸들을 반환합니다. Figure가 존재하지 않는 경우 `gcf`는 Figure를 생성하고 핸들을 반환합니다.

예제

▼ 현재 Figure의 속성 지정

현재 Figure의 배경색을 설정하고 도구 모음을 제거합니다. `gcf` 명령을 사용하여 현재 Figure 핸들을 가져옵니다.

```
surf(peaks)
fig = gcf; % current figure handle
fig.Color = [0 0.5 0.5];
fig.ToolBar = 'none';
```

예제

특정 선의 색 변경하기

선을 플로팅하고 chart line 객체를 p로 반환합니다. 선의 Color 속성을 'red'로 설정합니다.

```
p = plot(1:10);  
set(p, 'Color', 'red')
```

여러 선에 대한 색 변경하기

임의의 데이터를 사용하여 4개의 선을 가진 플롯을 만들고 4개의 chart line 객체를 P로 반환합니다. 모든 선에 대한 Color 속성을 'red'로 설정합니다.

```
P = plot(rand(4));  
set(P, 'Color', 'red')
```

팁

set에 대한 하나의 호출에서 속성 이름/속성값 쌍, 구조체형 배열, 셀형 배열 조합을 사용할 수 있습니다.

속성 단위 설정하기

참고로, 하나의 함수 호출에서 FontSize와 FontUnits 속성을 모두 설정하려는 경우 MATLAB이 지정된 FontSize를 제대로 해석할 수 있도록 FontUnits 속성을 먼저 설정해야 합니다. 동일한 내용이 Figure 단위와 좌표축 단위에 적용됩니다. 이러한 단위로 해석하려는 값의 속성을 설정하기 전에 항상 Units 속성을 먼저 설정하십시오. 예를 들어,

```
f = figure('Units', 'characters', 'Position', [30 30 120 35]);
```

명령 창

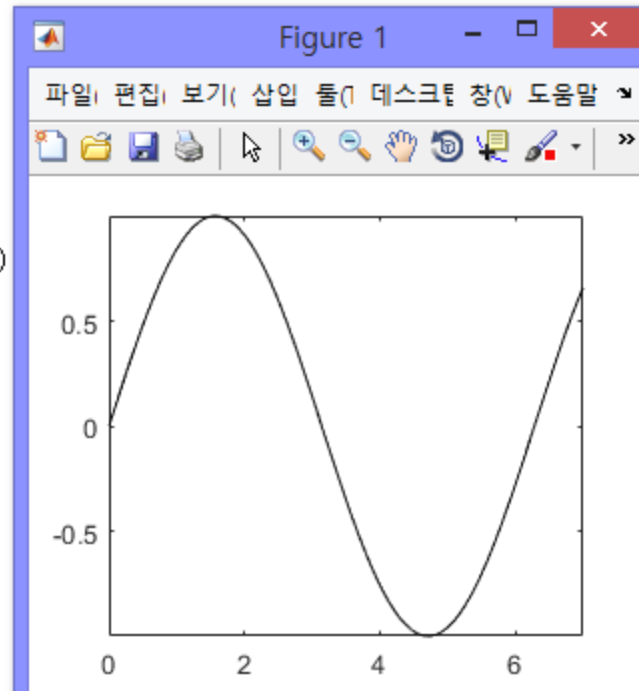
```
>> xt = 0:0.01:7;  
>> y = sin(xt);  
>> mat2sim = [xt' y'];  
>> plot(xt, y, 'k')  
>> set(gcf, 'color', 'w', 'pos', [232 326 360 352], 'units', 'pixels')  
>> axis([min(xt) max(xt) min(y) max(y)])  
axis([min(xt) max(xt) min(y) max(y)])
```

오류: 표현식 또는 명령문이 잘못되었습니다.

정정 제안:

```
>> axis([min(xt) max(xt) min(y) max(y)])
```

fx >>



명령 창

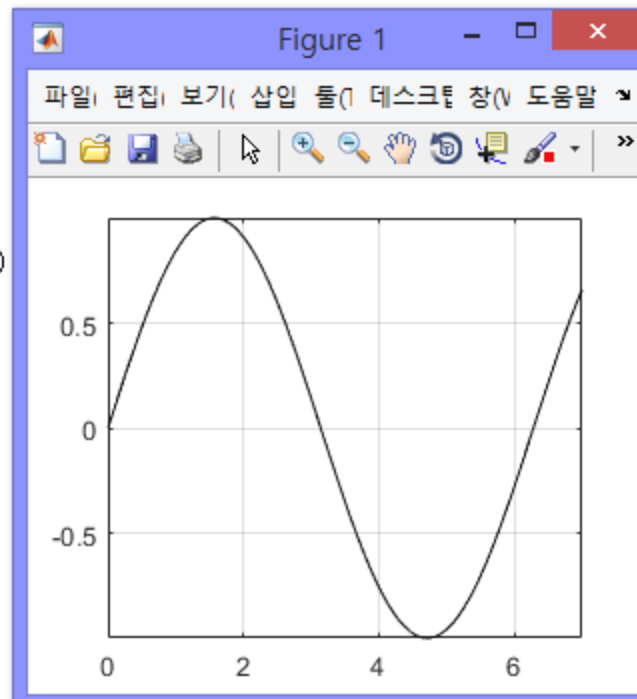
```
>> xt = 0:0.01:7;
>> y = sin(xt);
>> mat2sim = [xt' y'];
>> plot(xt, y, 'k')
>> set(gcf, 'color', 'w', 'pos', [232 326 360 352], 'units', 'pixels')
>> axis([min(xt) max(xt) min(y) max(y)])
>> axis([min(xt) max(xt) min(y) max(y)])
```

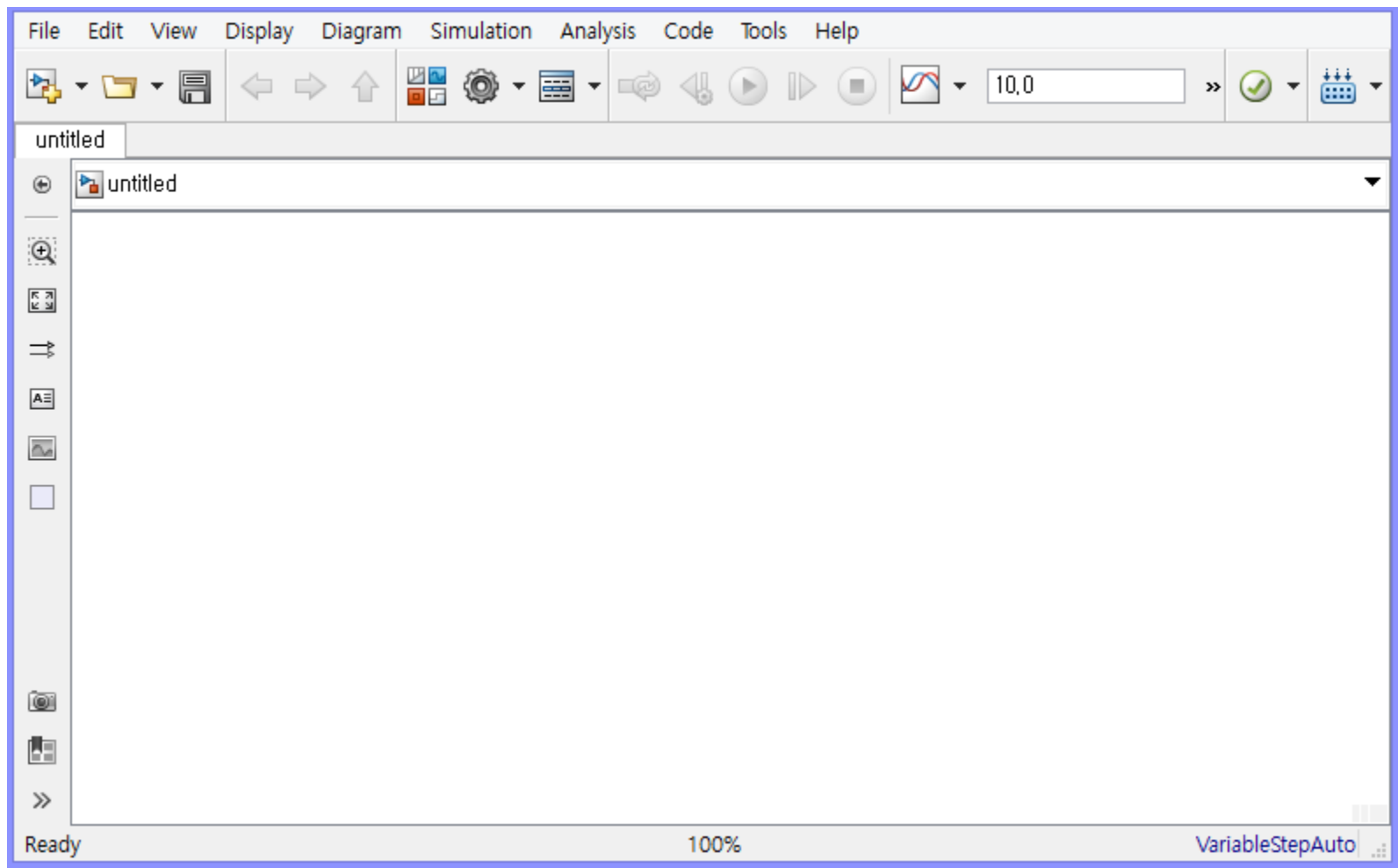
오류: 표현식 또는 명령문이 잘못되었습니다.

정정 제안:

```
>> axis([min(xt) max(xt) min(y) max(y)])
>> grid on
```

fx >>





Simulink/Sources

Simulink

Commonly Used Blocks

Continuous

Dashboard

Discontinuities

Discrete

Logic and Bit Operations

Lookup Tables

Math Operations

Model Verification

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Channels

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Equalizers



Band-Limited White Noise



Chirp Signal



Clock



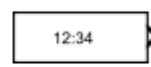
Constant



Counter Free-Running



Counter Limited



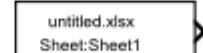
Digital Clock



Enumerated Constant



From File



From Spreadsheet



From Workspace



Ground



In1



Pulse Generator



Ramp



Random Number



Repeating Sequence



Repeating Sequence Interpolated



Repeating Sequence Stair



Signal Builder



Signal Generator



Sine Wave



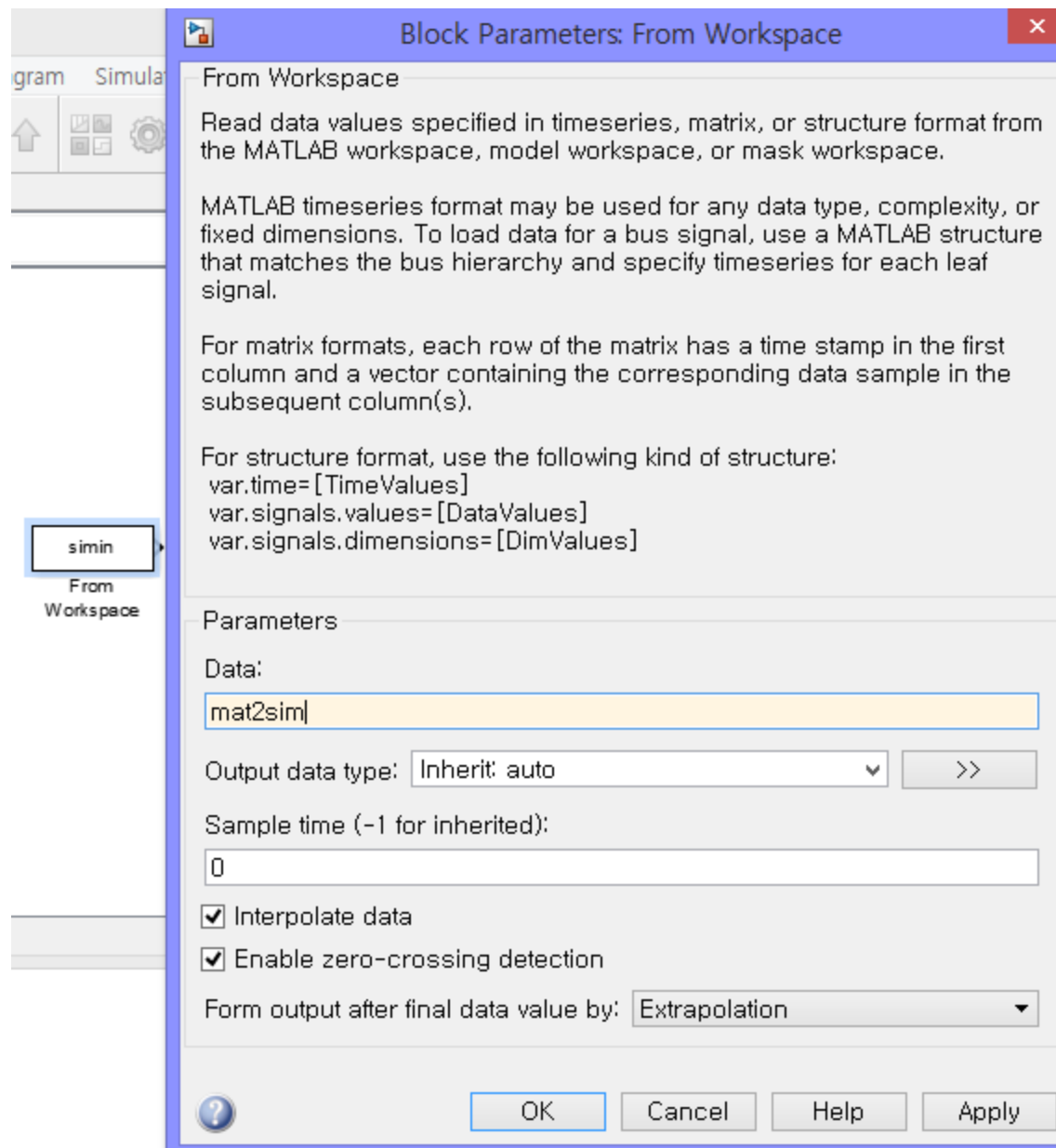
Step



Uniform Random Number



Waveform Generator



Simulink/Continuous

Simulink

Commonly Used Blocks

Continuous

Dashboard

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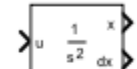
Equalizers



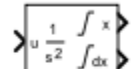
Derivative



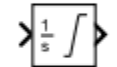
Integrator



Integrator,
Second-Order



Integrator,
Second-Order
Limited



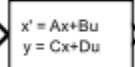
Integrator
Limited



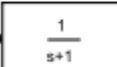
PID Controller



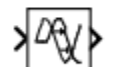
PID Controller (2DOF)



State-Space



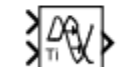
Transfer Fcn



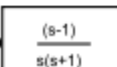
Transport
Delay



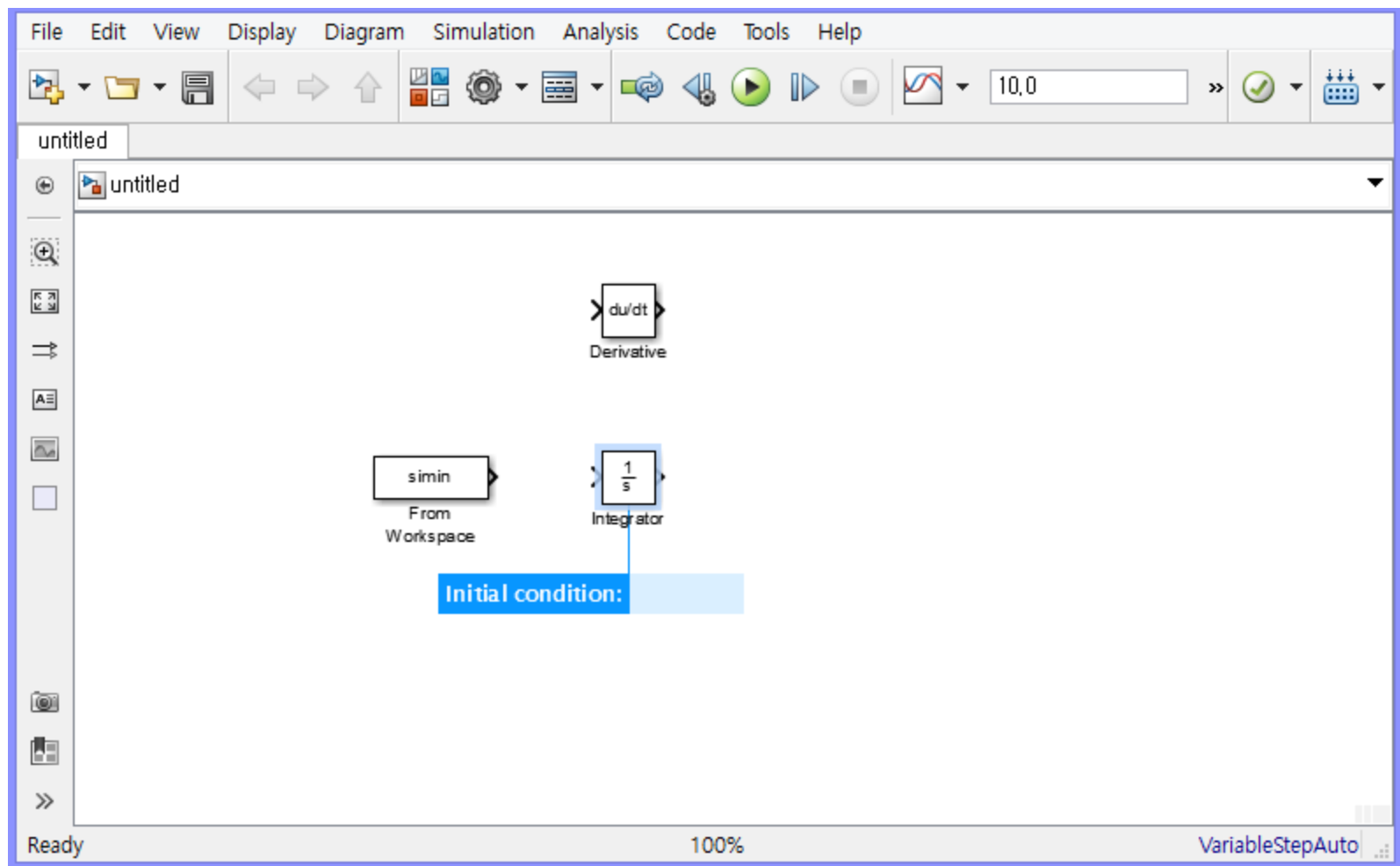
Variable
Time Delay



Variable
Transport Delay



Zero-Pole



Simulink/Discrete

Simulink

Commonly Used Blocks

Continuous

Dashboard

Discontinuities

Discrete

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Comm Filters

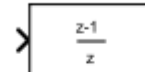
Comm Sinks

▶ Comm Sources

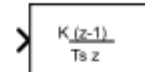
Equalizers



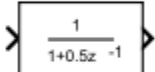
Delay



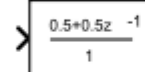
Difference



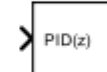
Discrete Derivative



Discrete Filter



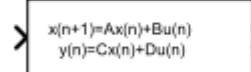
Discrete FIR Filter



Discrete PID Controller



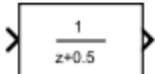
Discrete PID Controller (2DOF)



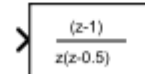
Discrete State-Space



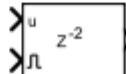
Discrete-Time Integrator



Discrete Transfer Fcn



Discrete Zero-Pole



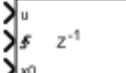
Enabled Delay



First-Order Hold



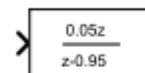
Memory



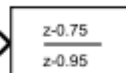
Resettable Delay



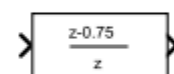
Tapped Delay



Transfer Fcn First Order



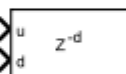
Transfer Fcn Lead or Lag



Transfer Fcn Real Zero



Unit Delay



Variable Integer Delay



Zero-Order Hold

Simulink/Commonly Used Blocks

Simulink

Commonly Used Blocks

- Continuous
- Dashboard
- Discontinuities
- Discrete
- Logic and Bit Operations
- Lookup Tables
- Math Operations
- Model Verification
- Model-Wide Utilities
- Ports & Subsystems
- Signal Attributes
- Signal Routing
- Sinks
- Sources
- User-Defined Functions

Additional Math & Discrete

Aerospace Blockset

- Actuators
- Aerodynamics
- Animation
- Environment
- Equations of Motion
- Flight Parameters
- Flight Instruments
- GNC
- Mass Properties
- Pilot Models
- Propulsion
- Utilities

Audio System Toolbox

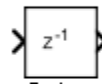
- Dynamic Range Control
- Effects
- Filters
- Sinks
- Sources

Communications System Toolbox

- Channels
- Comm Filters
- Comm Sinks
- Comm Sources
- Equalizers



Bus Creator



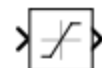
Delay



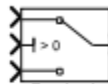
Ground



Mux



Saturation



Switch



Bus Selector



Demux



In1



Out1



Scope



Terminator



Constant



Discrete-Time Integrator



Integrator



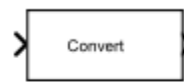
Product



Subsystem



Vector Concatenate



Data Type Conversion



Gain



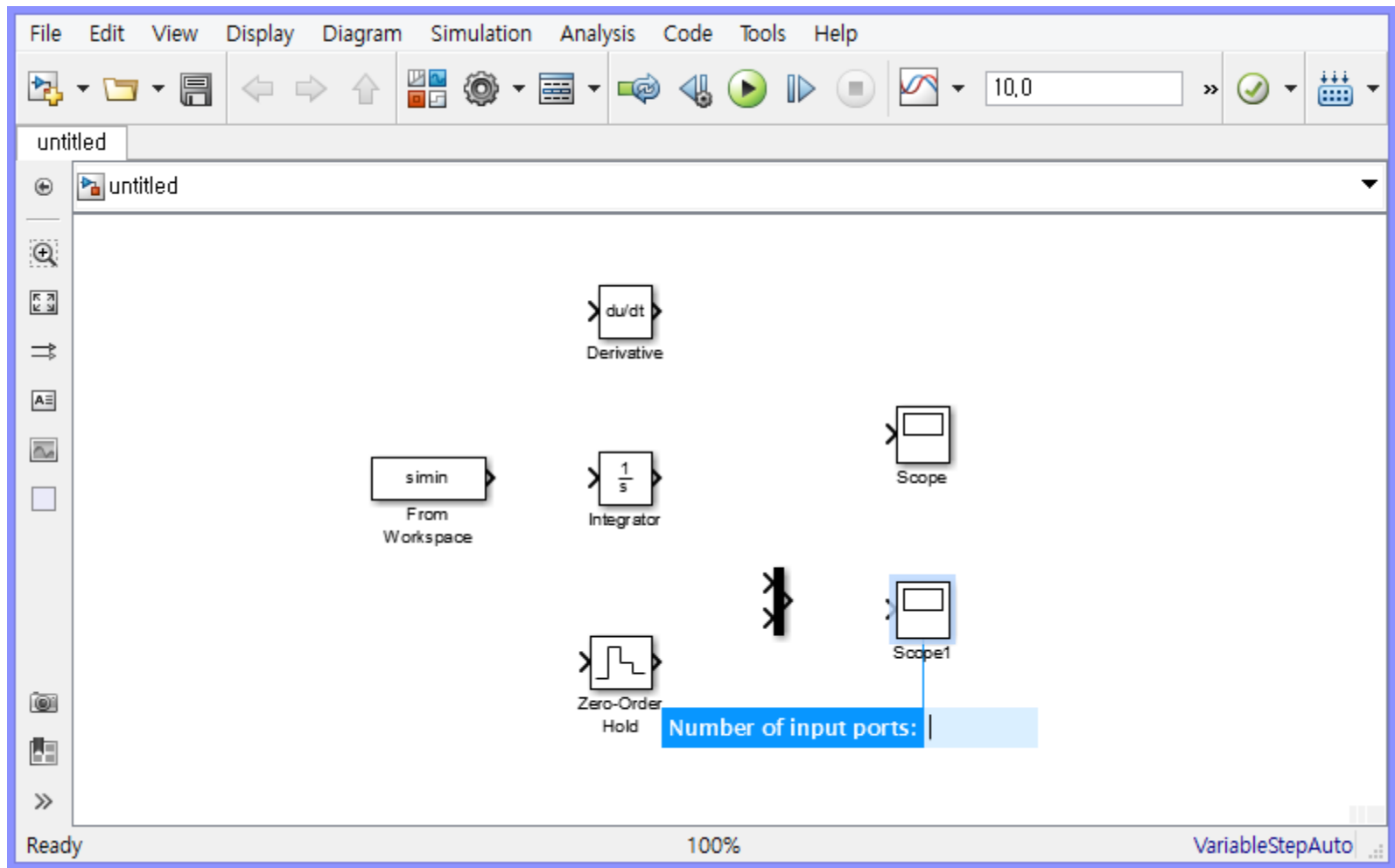
Logical Operator

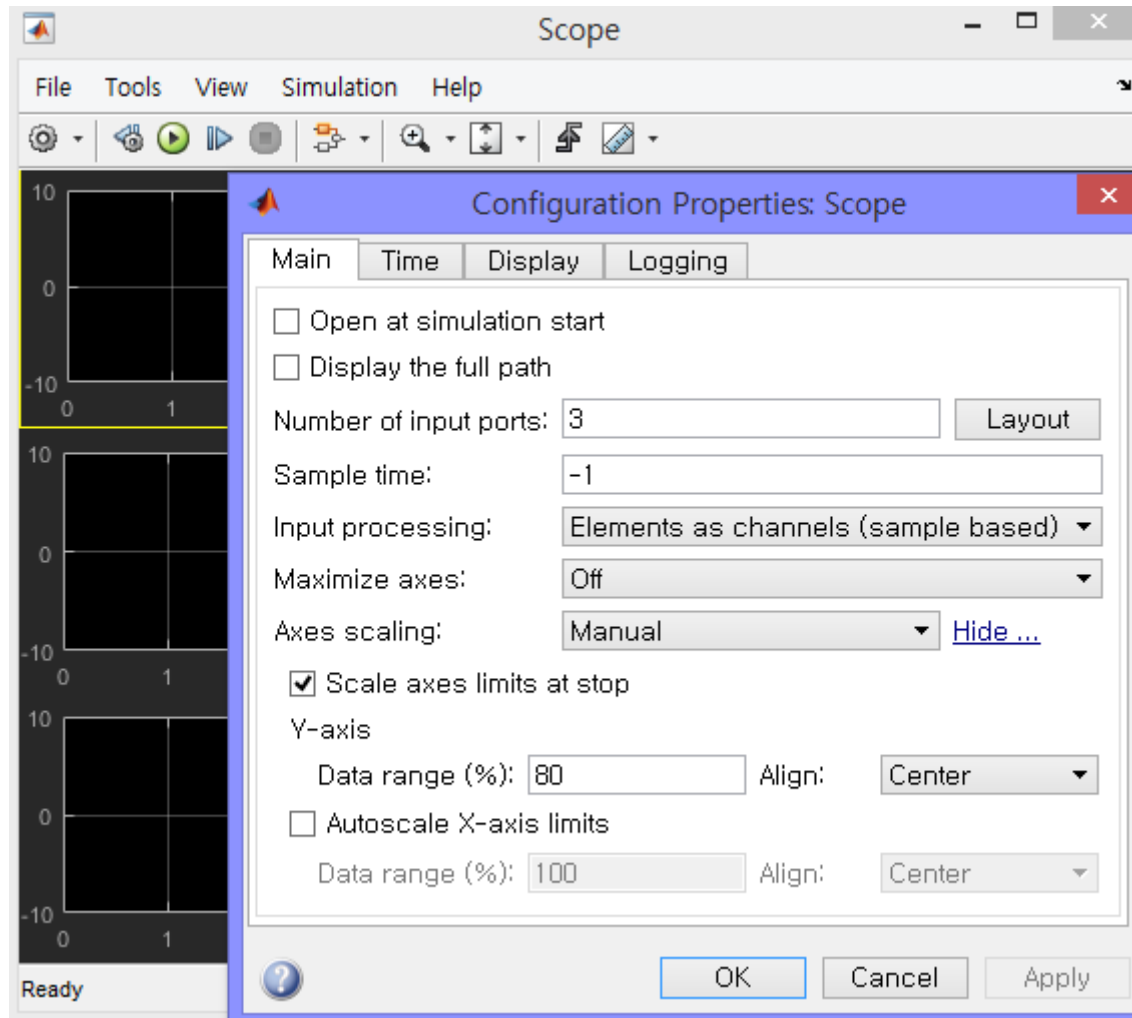


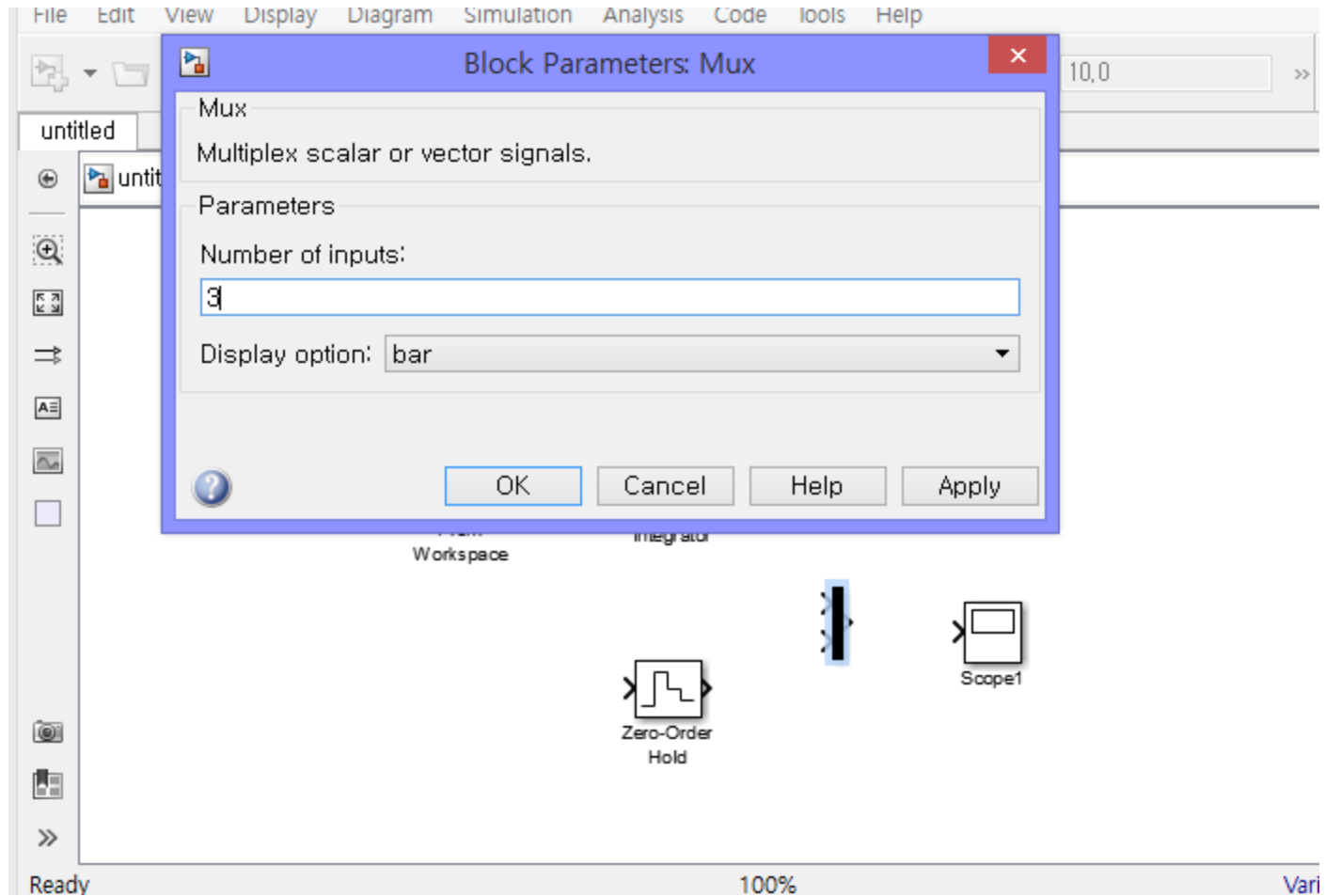
Relational Operator

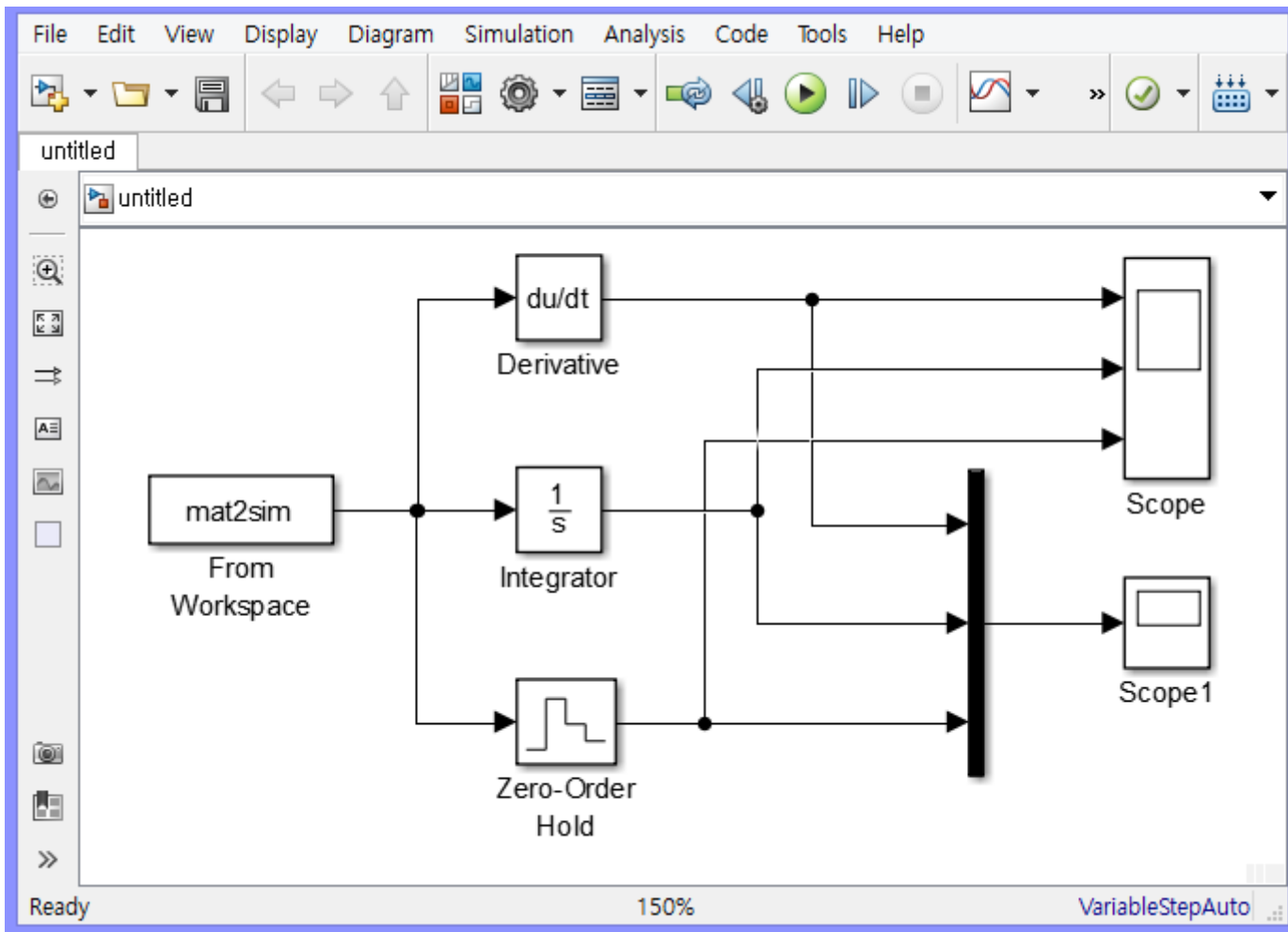


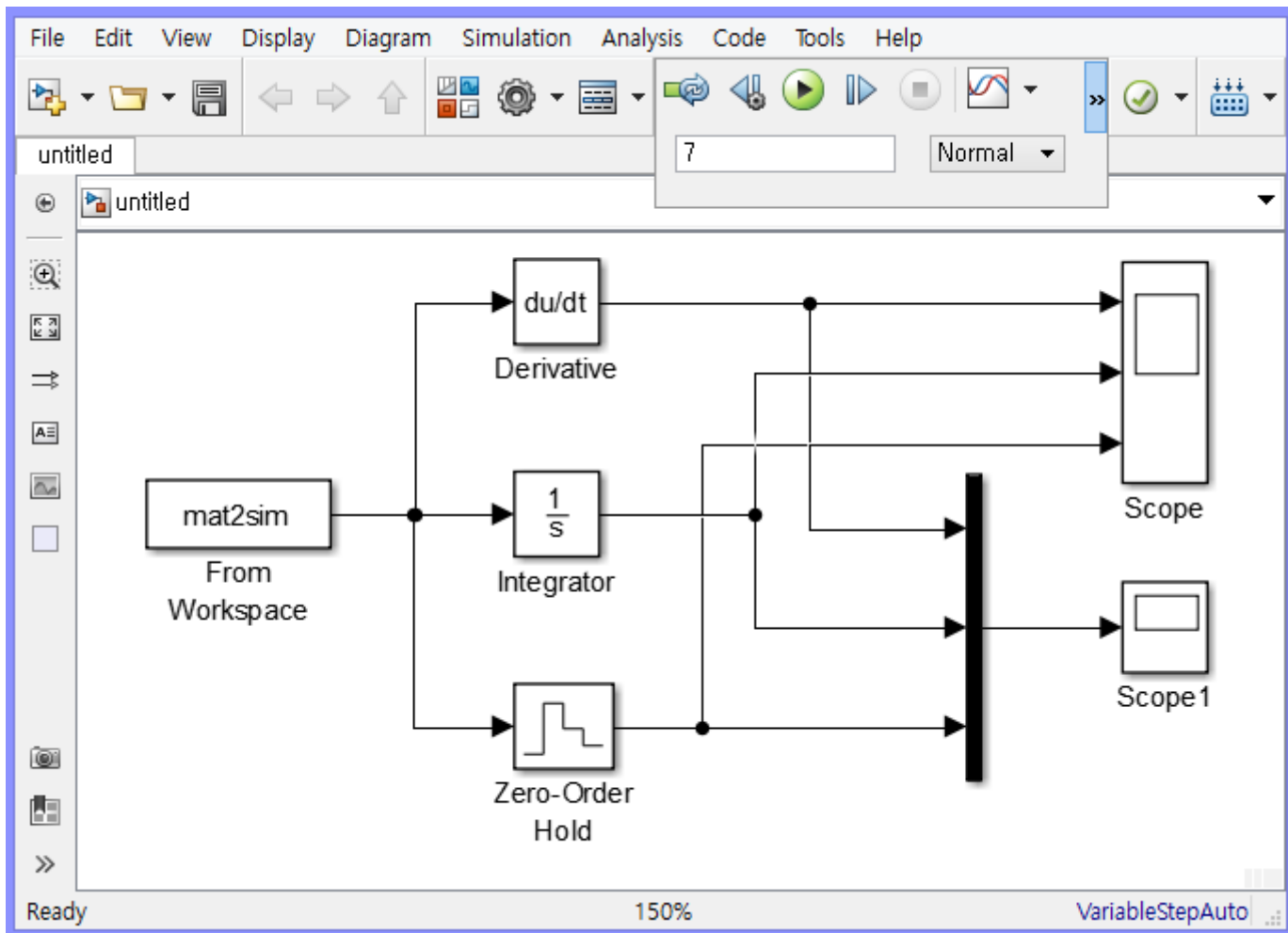
Sum

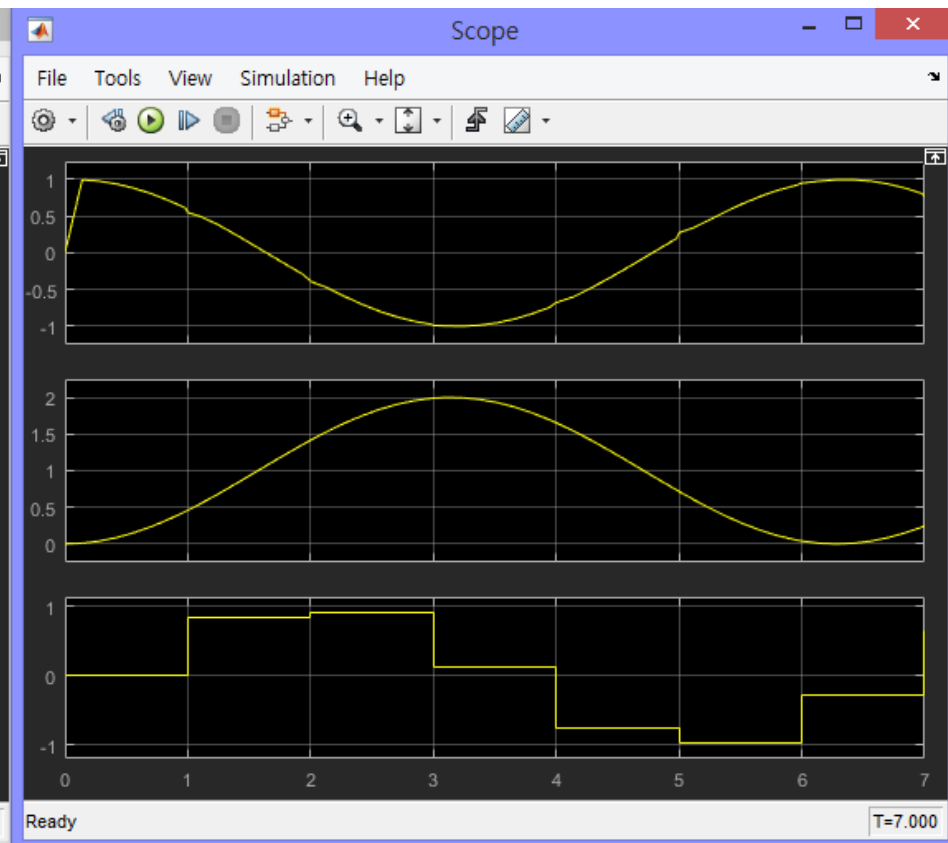
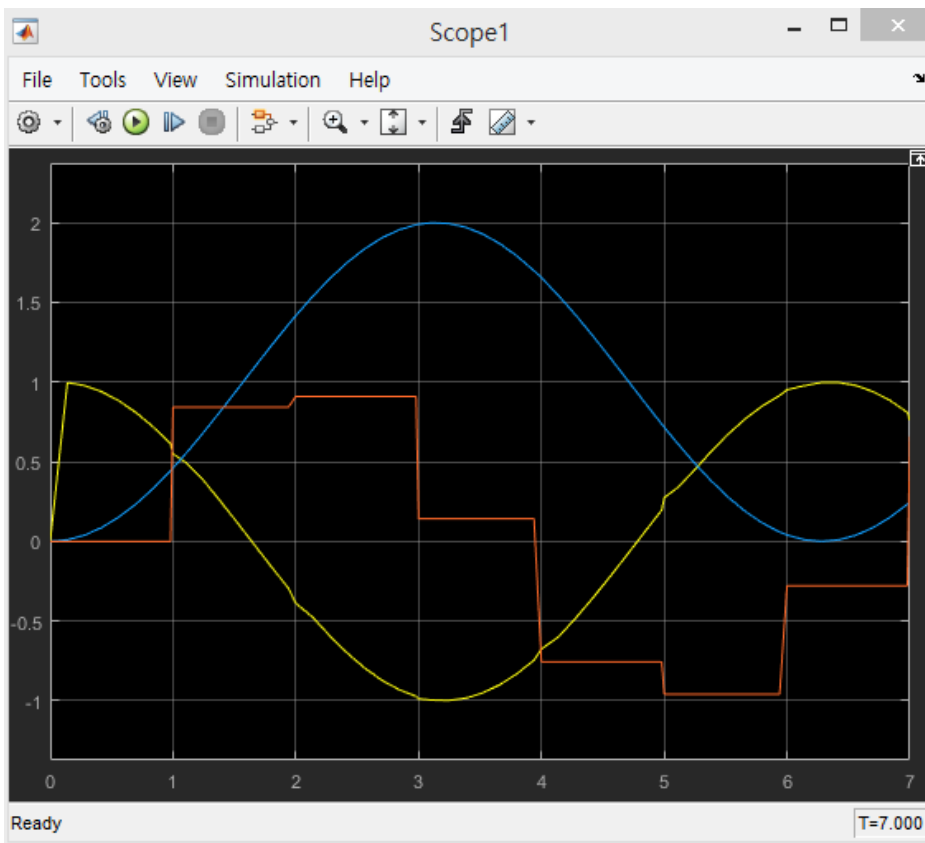


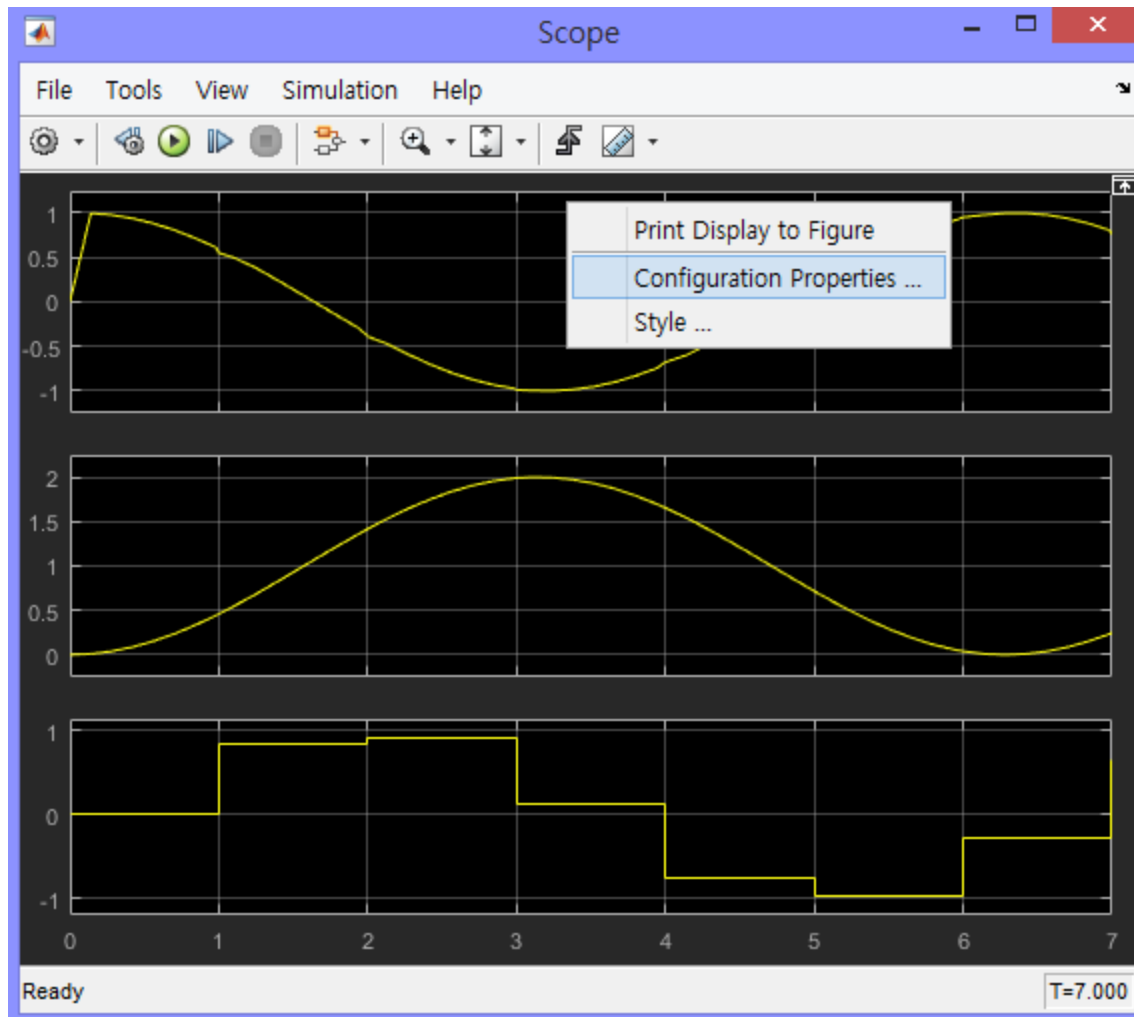














 Configuration Properties: Scope 

Main Time Display Logging

Active display: 1

Title: Differentiation


☐ Show legend ☒ Show grid

☐ Plot signals as magnitude and phase

Y-limits (Minimum): -1.24825

Y-limits (Maximum): 1.24642

Y-label:

 OK Cancel Apply

