06/04/2022

Data Communication LAB

Exp: 7

Submitted by:

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Course Teacher:

Abir Ahmed
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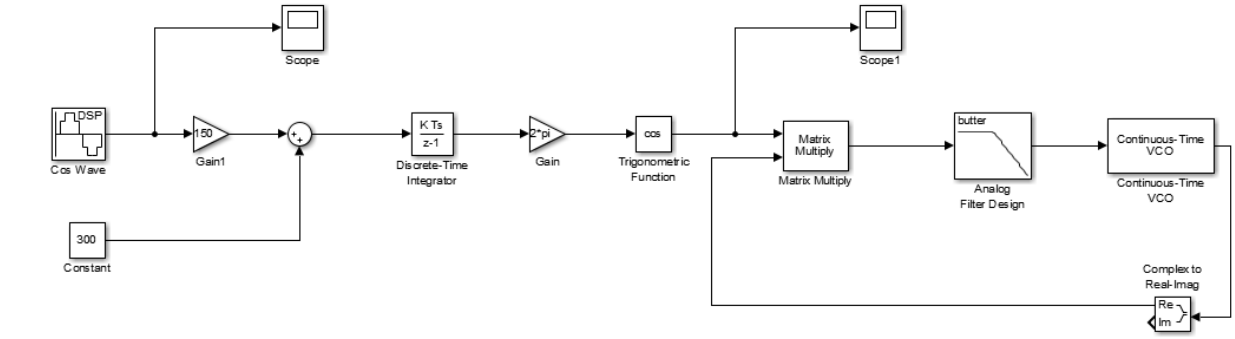
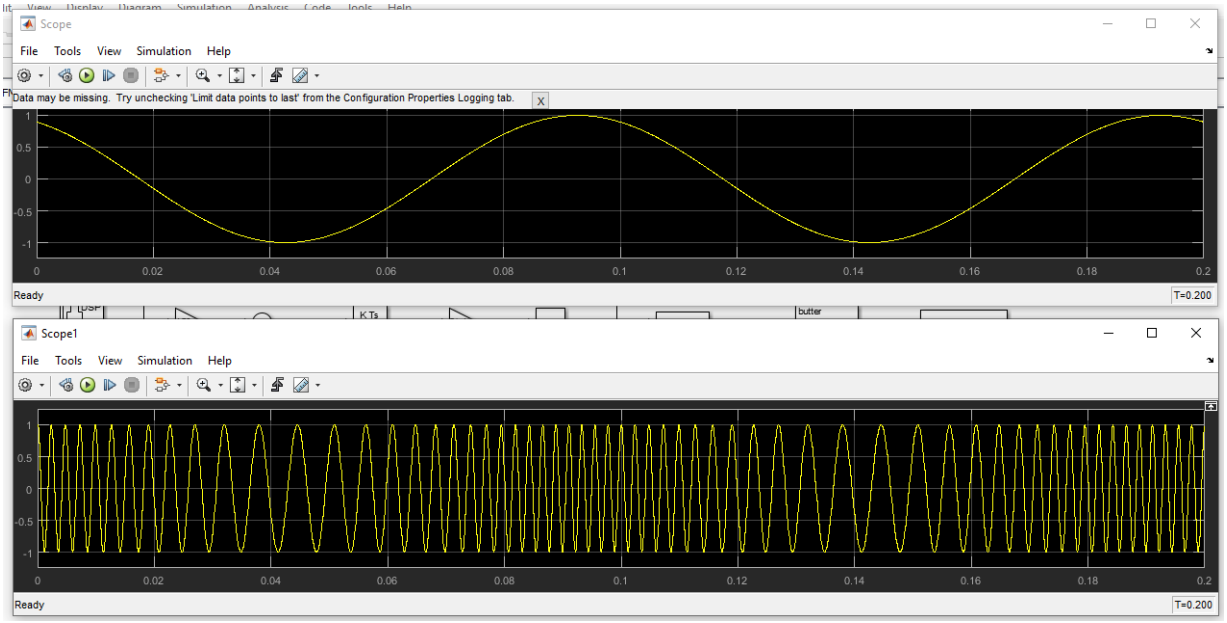
Title:

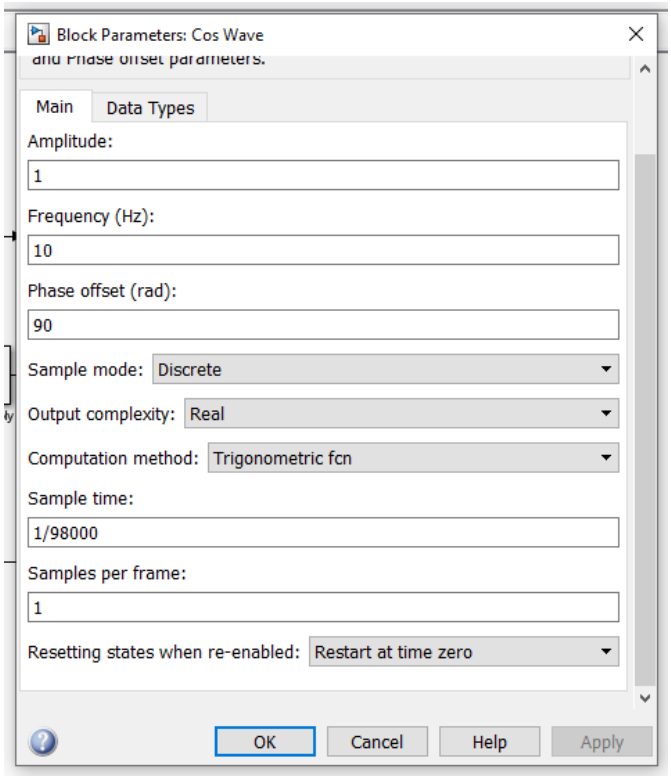
Study of Frequency Modulation and Demodulation using Simulink.

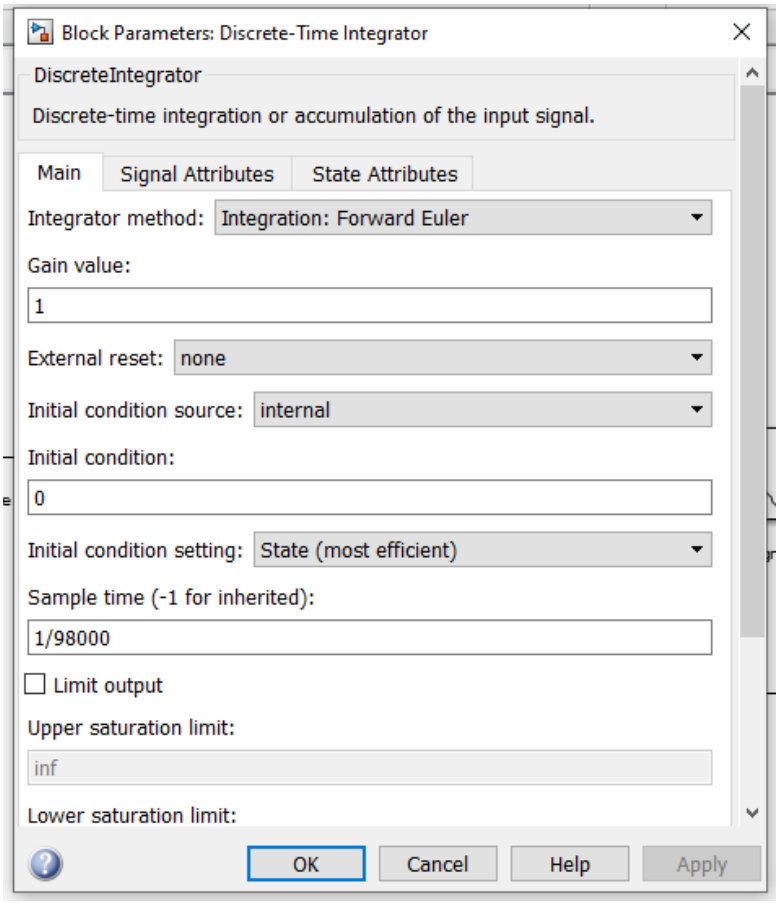
Simulink Model:

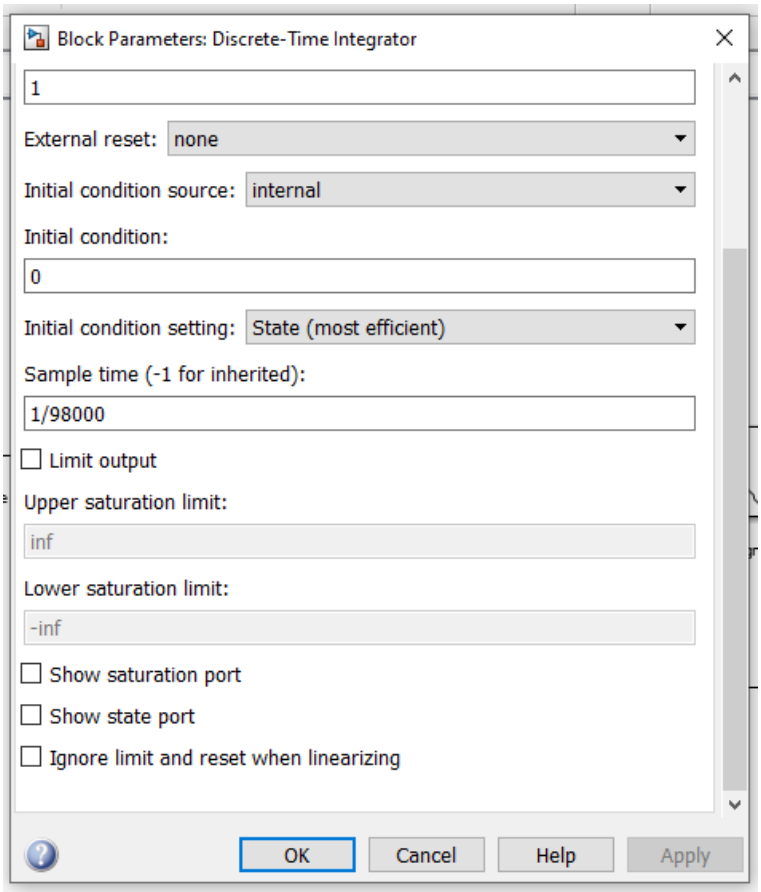


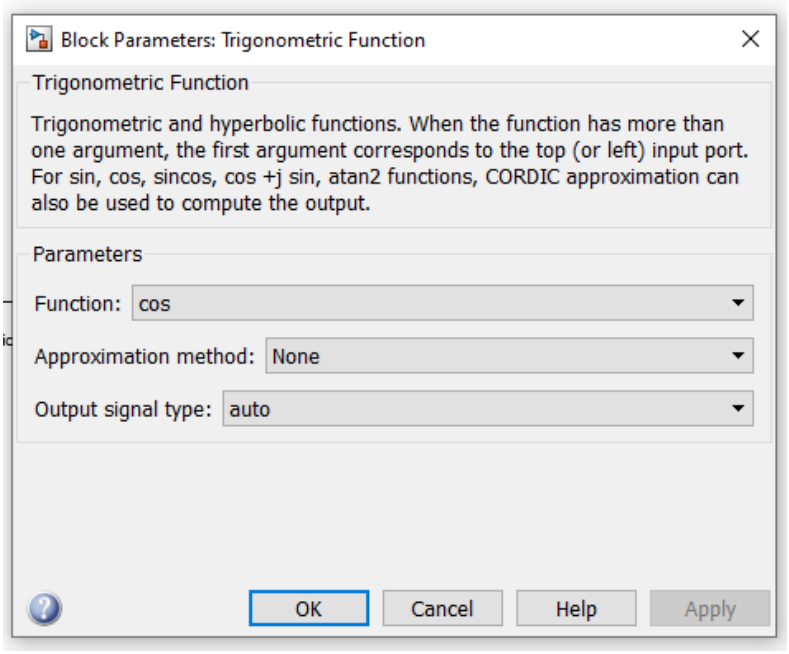


Parameters:


Block Parameters: Cos Wave
and Phase offset parameters.
Main
Data Types
Amplitude:
1
Frequency (Hz):
10
Phase offset (rad):
90
Sample mode: Discrete
Output complexity: Real
Computation method: Trigonometric fcn
Sample time:
1/98000
Samples per frame:
1
Resetting states when re-enabled: Restart at time zero
OK
Cancel
Help
Apply


Block Parameters: Discrete-Time Integrator
DiscreteIntegrator
Discrete-time integration or accumulation of the input signal.
Main
Signal Attributes
State Attributes
Integrator method: Integration: Forward Euler
Gain value:
1
External reset: none
Initial condition source: internal
Initial condition:
0
Initial condition setting: State (most efficient)
Sample time (-1 for inherited):
1/98000
Limit output
Upper saturation limit:
inf
Lower saturation limit:
OK
Cancel
Help
Apply


Block Parameters: Discrete-Time Integrator
1
External reset: none
Initial condition source: internal
Initial condition:
0
Initial condition setting: State (most efficient)
Sample time (-1 for inherited):
1/98000
Limit output
Upper saturation limit:
inf
Lower saturation limit:
-inf
Show saturation port
Show state port
Ignore limit and reset when linearizing
OK
Cancel
Help
Apply


Block Parameters: Trigonometric Function
Trigonometric Function
Trigonometric and hyperbolic functions. When the function has more than one argument, the first argument corresponds to the top (or left) input port. For sin, cos, sincos, cos +j sin, atan2 functions, CORDIC approximation can also be used to compute the output.
Parameters
Function: cos
Approximation method: None
Output signal type: auto
OK
Cancel
Help
Apply