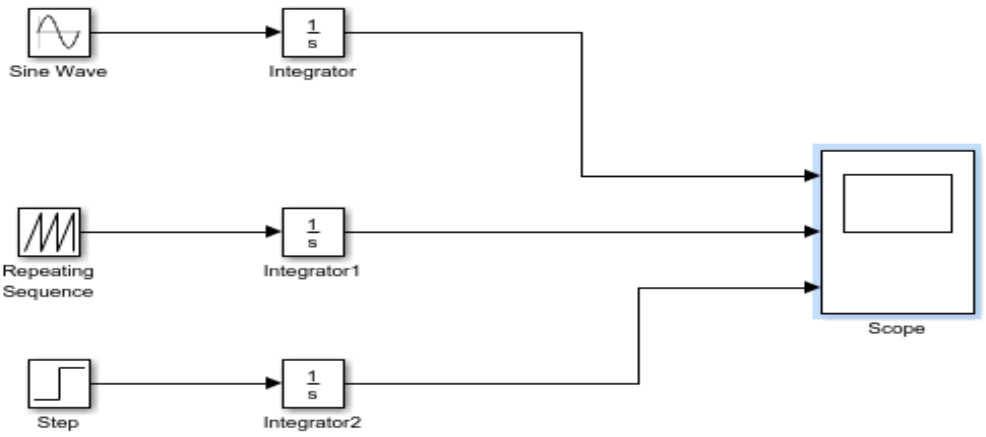
SIM LAB ASSIGNMENT

SUBMITTED BY: AKSHAY S RAO

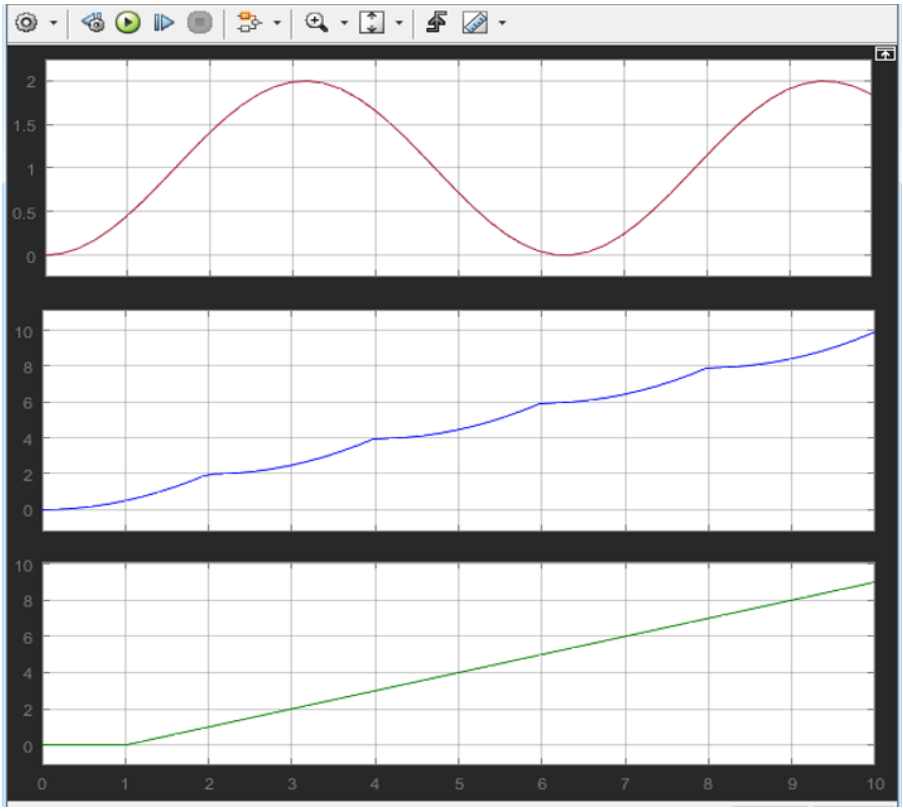
A1 BATCH,

3RD SEM, ECE

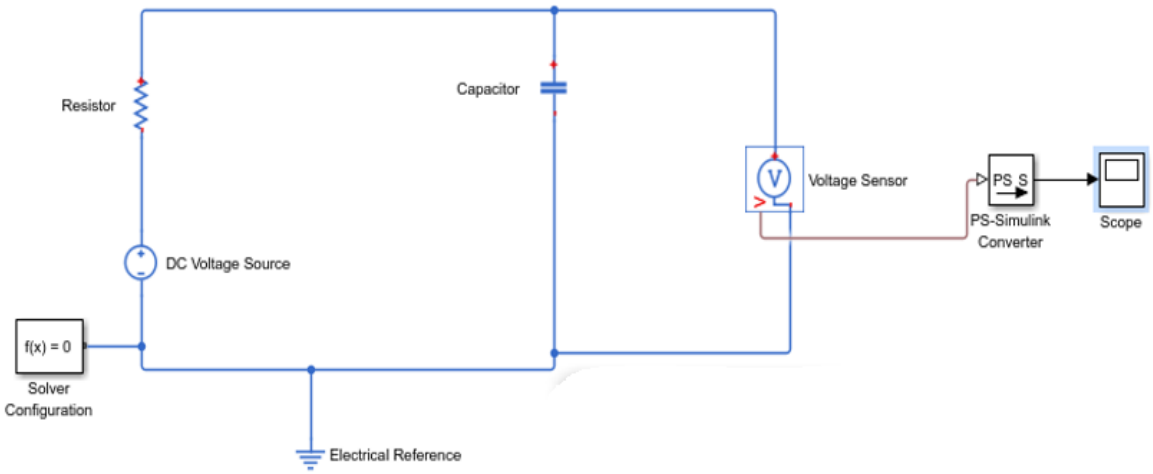
Q1.Create a SIMULINK model to integrate sine wave, saw tooth wave and square wave.



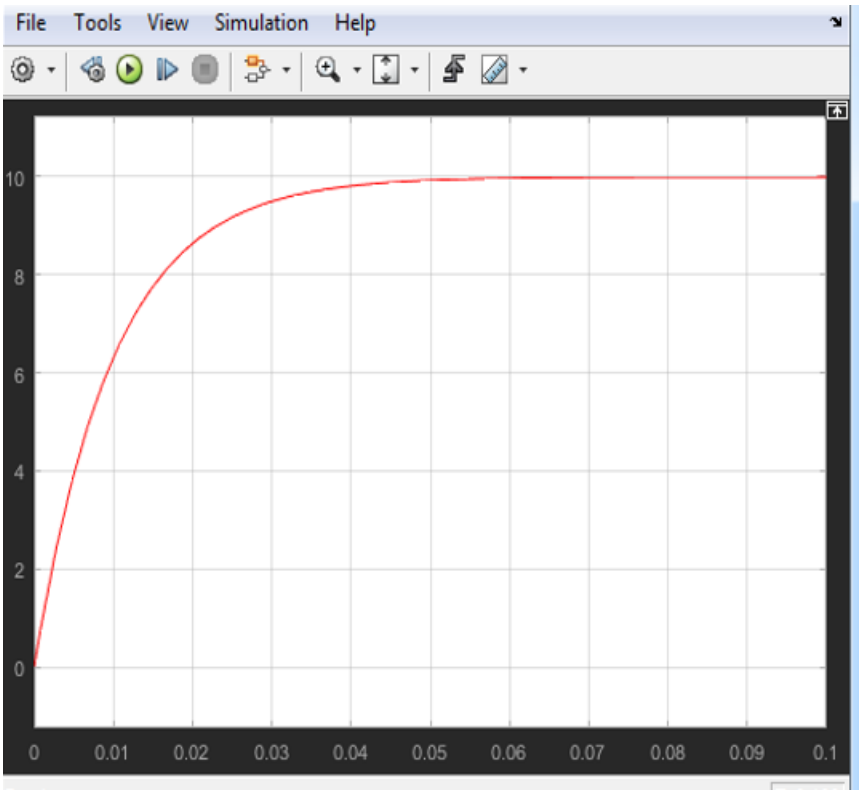
OUTPUT



Q2. Create model for first order system (RC) and show the step response.

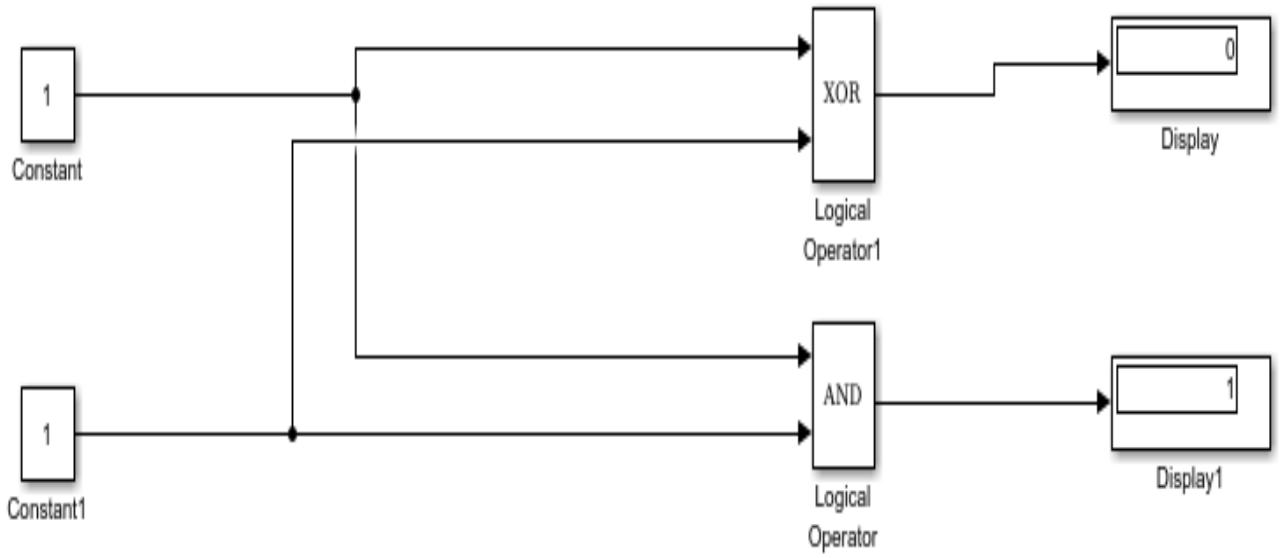


OUTPUT:

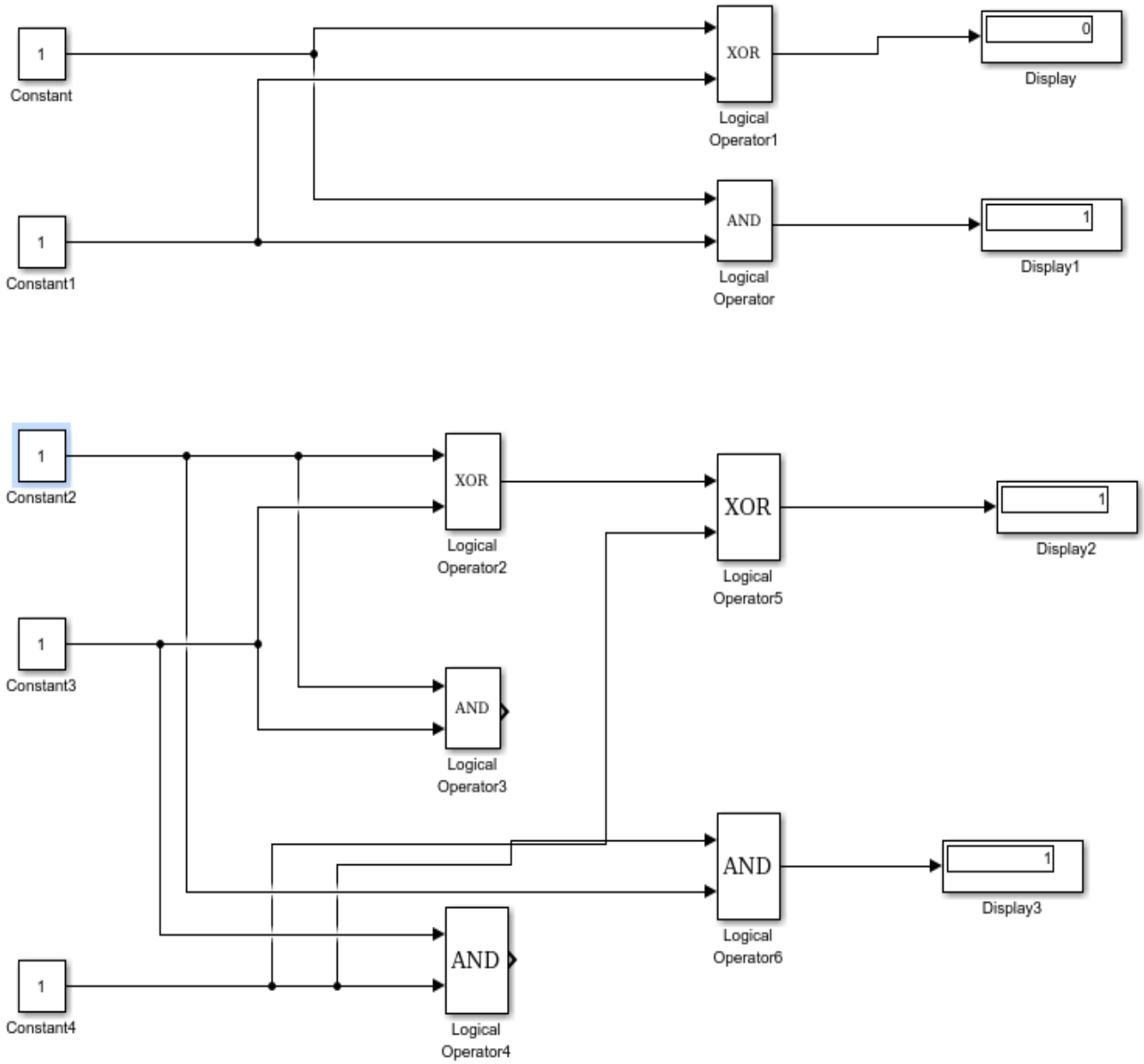


Q3.Generate Simulink block to perform full adder logical operation with y output and A, B inputs.

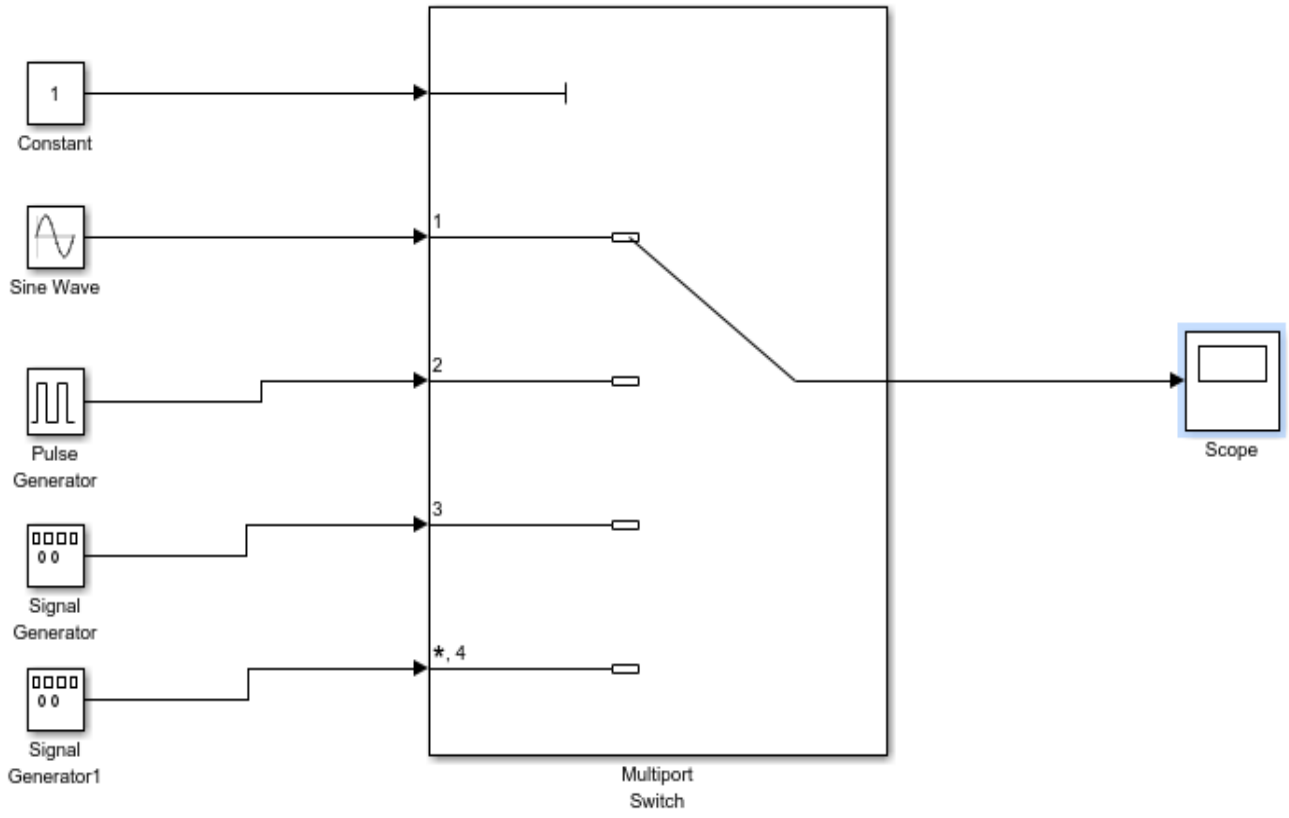
Half Adder block diagram:



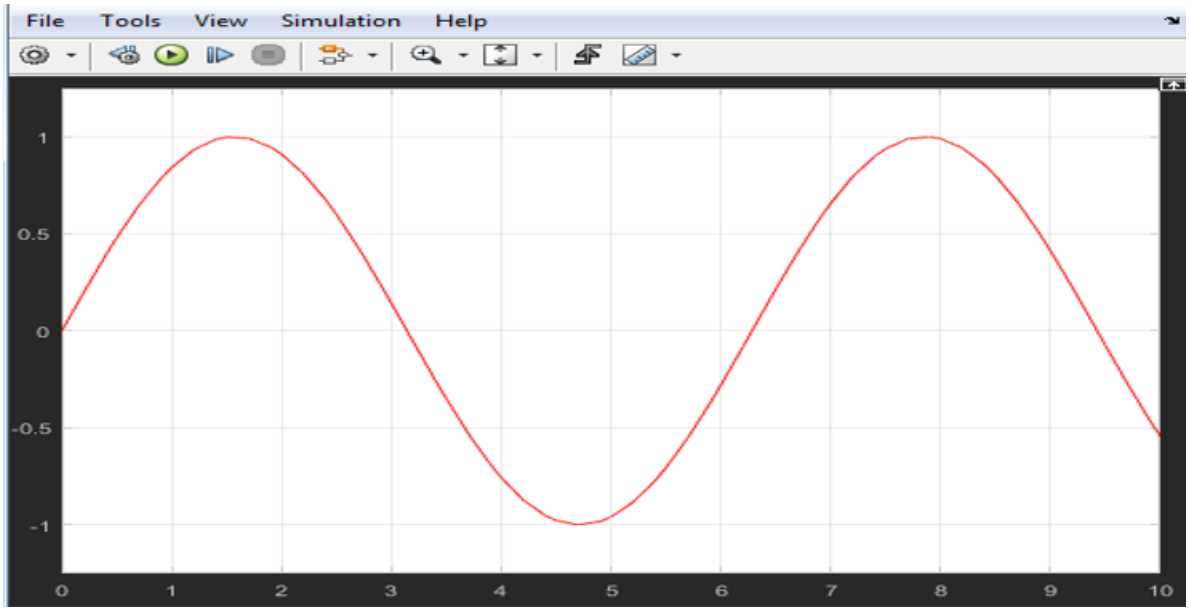
Full Adder block diagram:

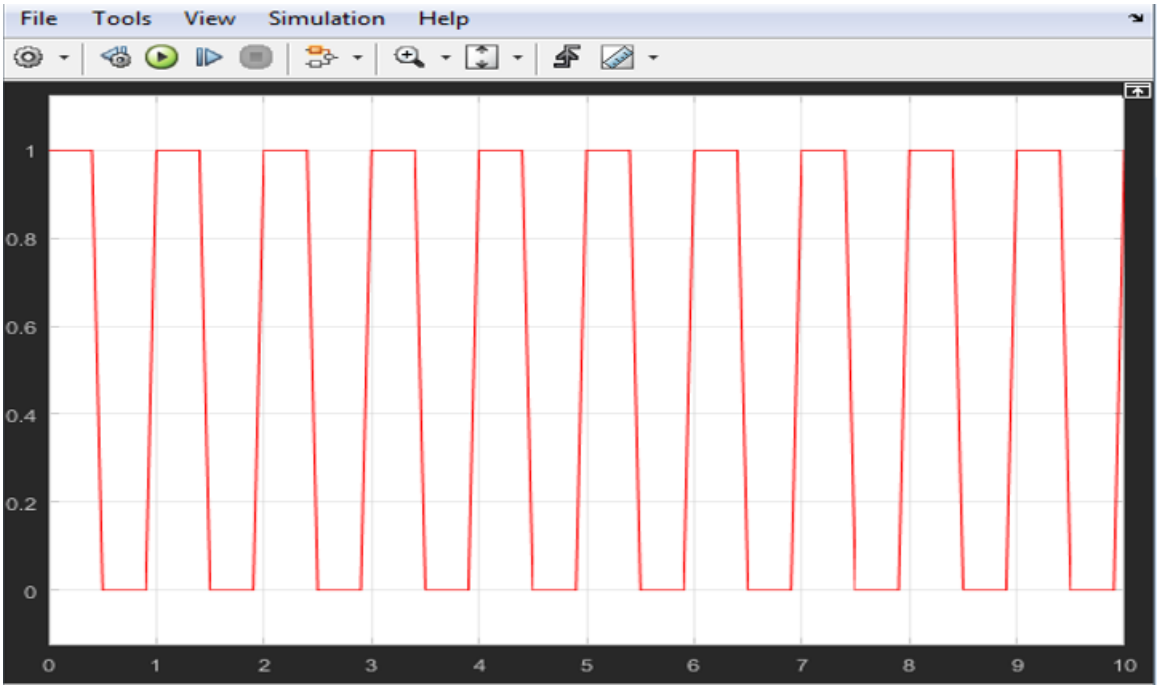


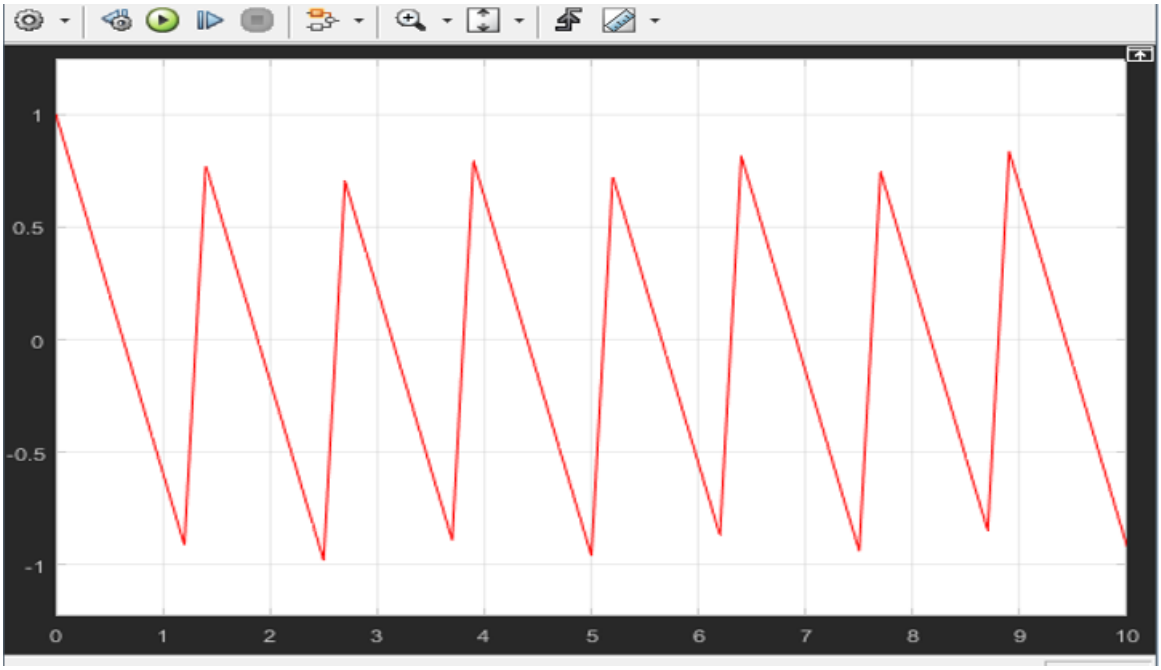
Q4.) Create SIMULINK model for transmitting four different waveforms using 4:1 MUX and display each waveform based on select line.

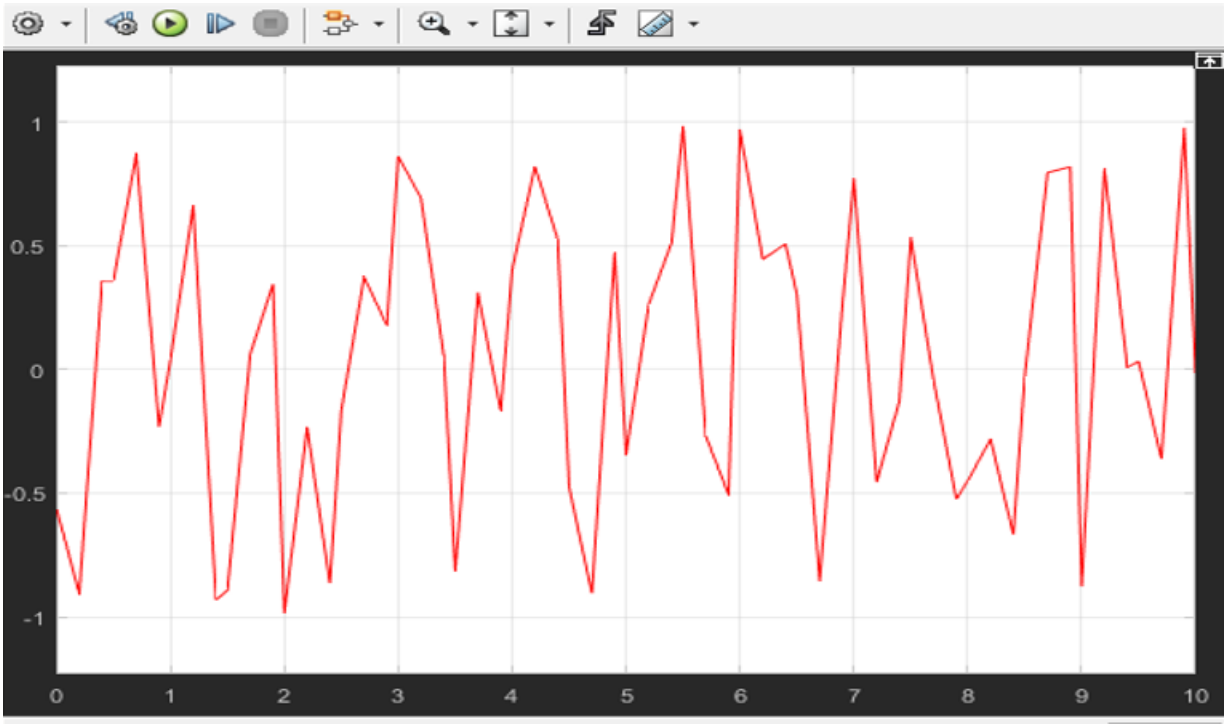


OUTPUT:


File Tools View Simulation Help
1
0.5
0
-0.5
-1
0 1 2 3 4 5 6 7 8 9 10

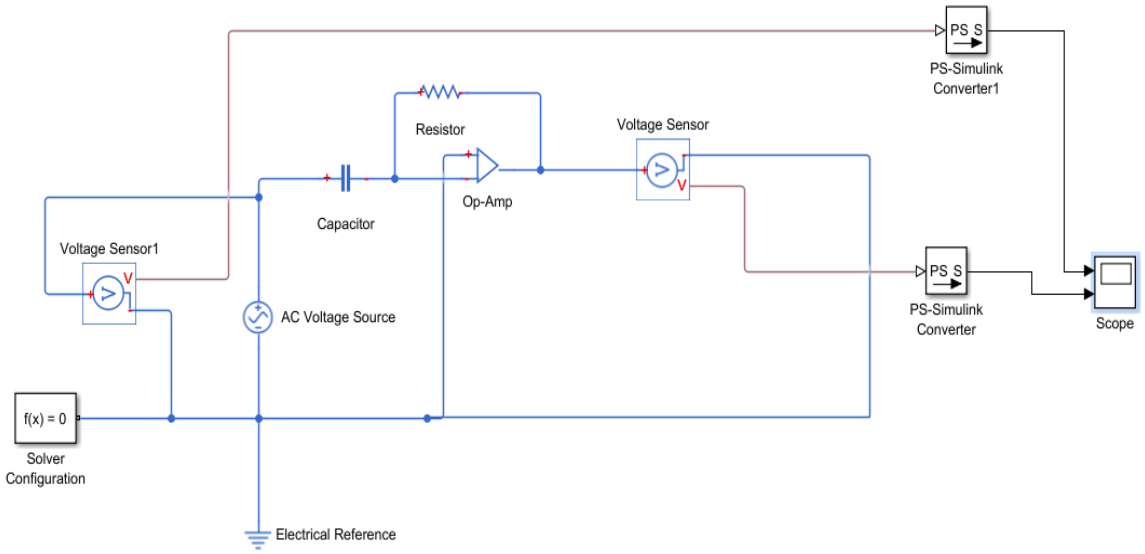

File Tools View Simulation Help
1
0.8
0.6
0.4
0.2
0
0 1 2 3 4 5 6 7 8 9 10


1
0.5
0
-0.5
-1
0
1
2
3
4
5
6
7
8
9
10

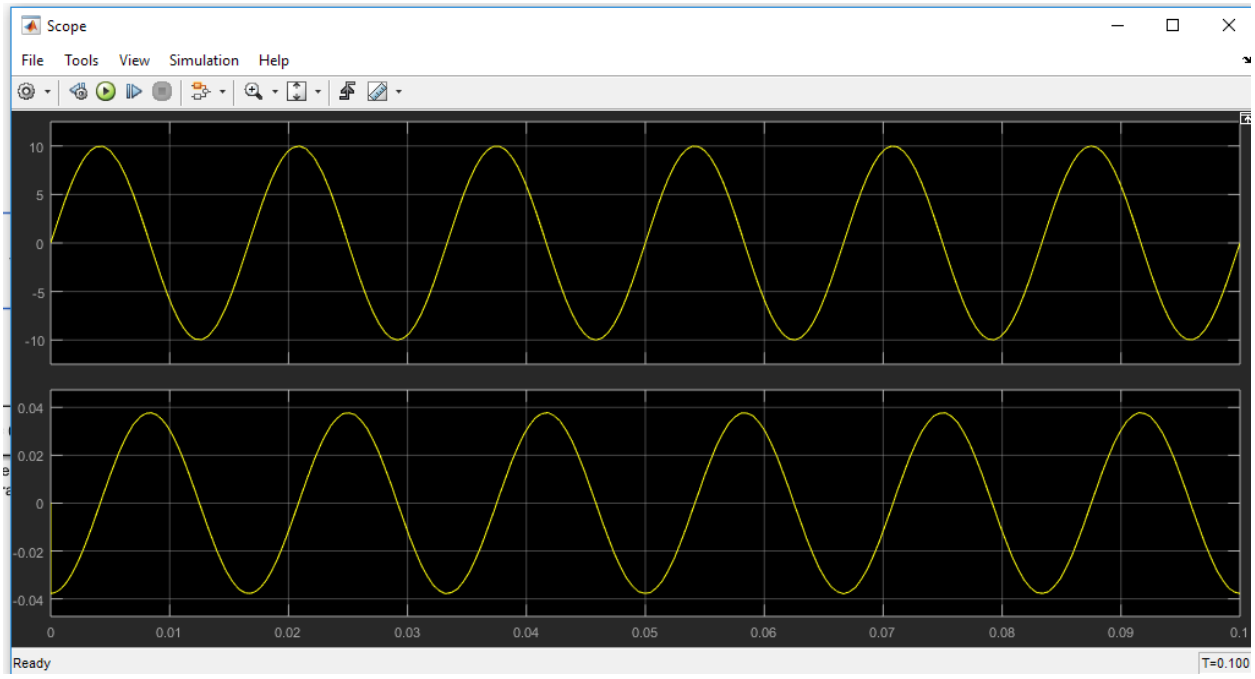

1
0.5
0
-0.5
-1
0
1
2
3
4
5
6
7
8
9
10

Q5.) Op-Amp Differentiator and Integrator.

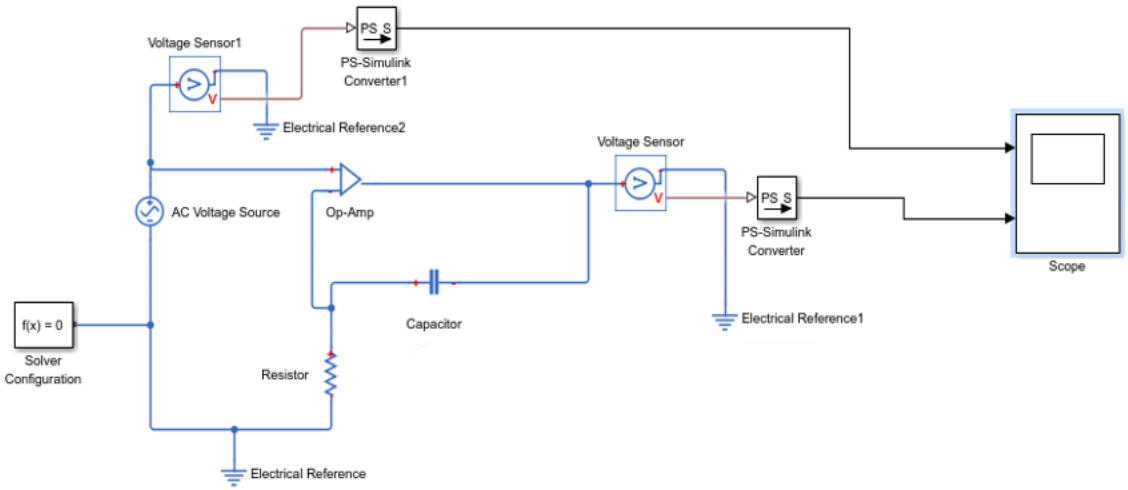
Op-Amp Differentiator.



OUTPUT:



Op-Amp Integrator.



OUTPUT: