

# SIMULATION OF FIRST & SECOND ORDER SYSTEMS

## Experiment Number: 05

Name: Preyash

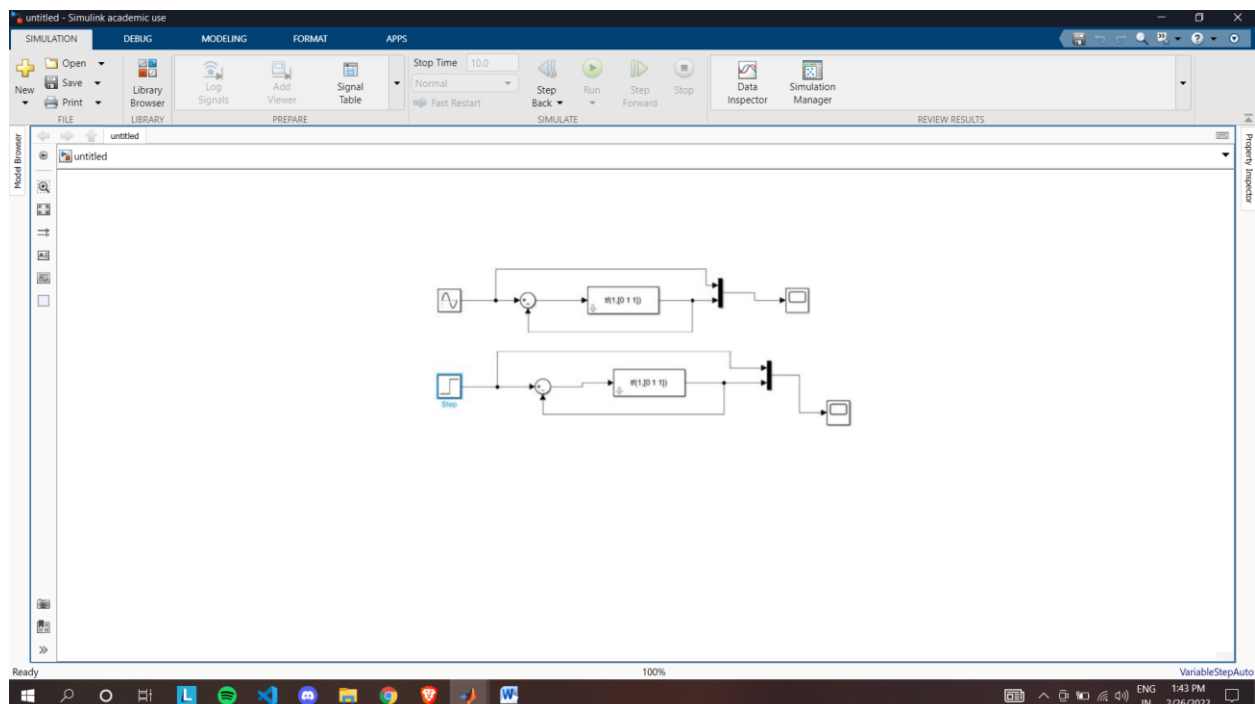
Registration Number: 20BPS1022

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**Aim:** To digitally simulate the time response characteristics of a linear system without non-linearities and to verify it manually.

### FIRST-ORDER SYSTEM:

BLOCK-DIAGRAM:

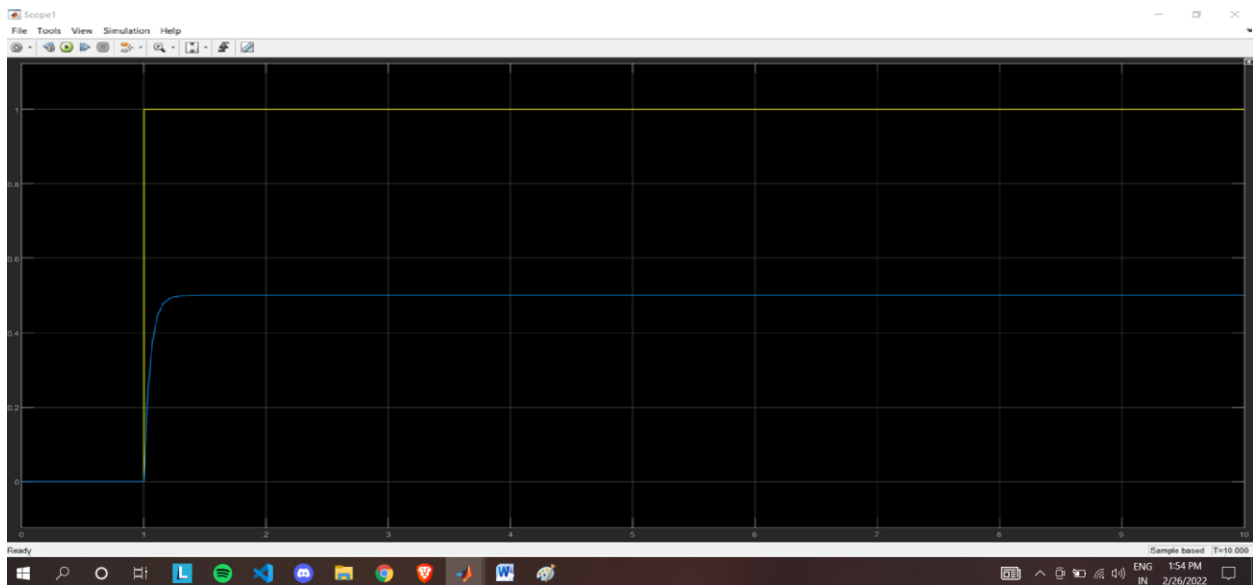


OUTPUT:

SINE RESPONSE:

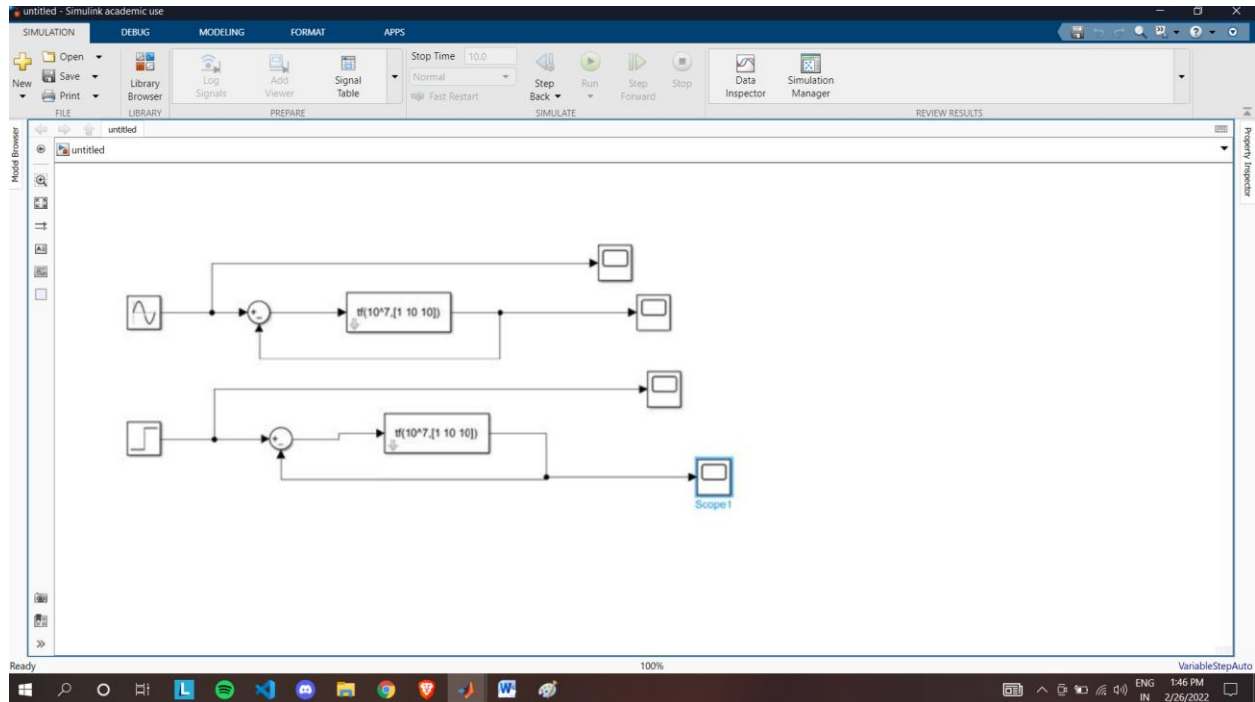


STEP RESPONSE:



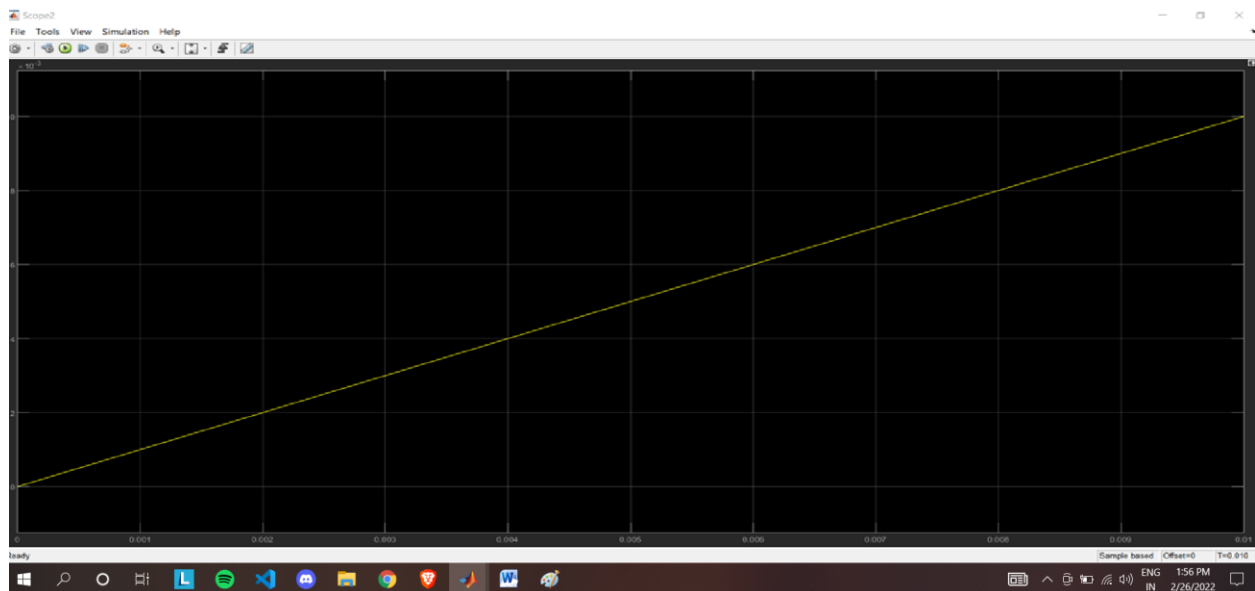
## SECOND-ORDER SYSTEM:

BLOCK-DIAGRAM:

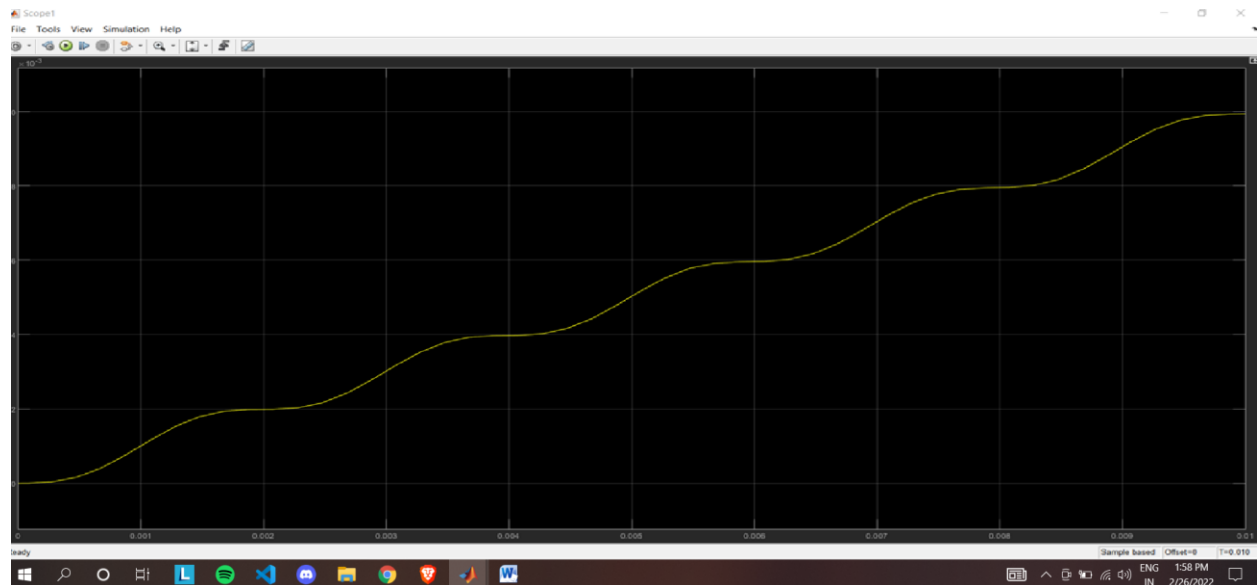


OUTPUT:

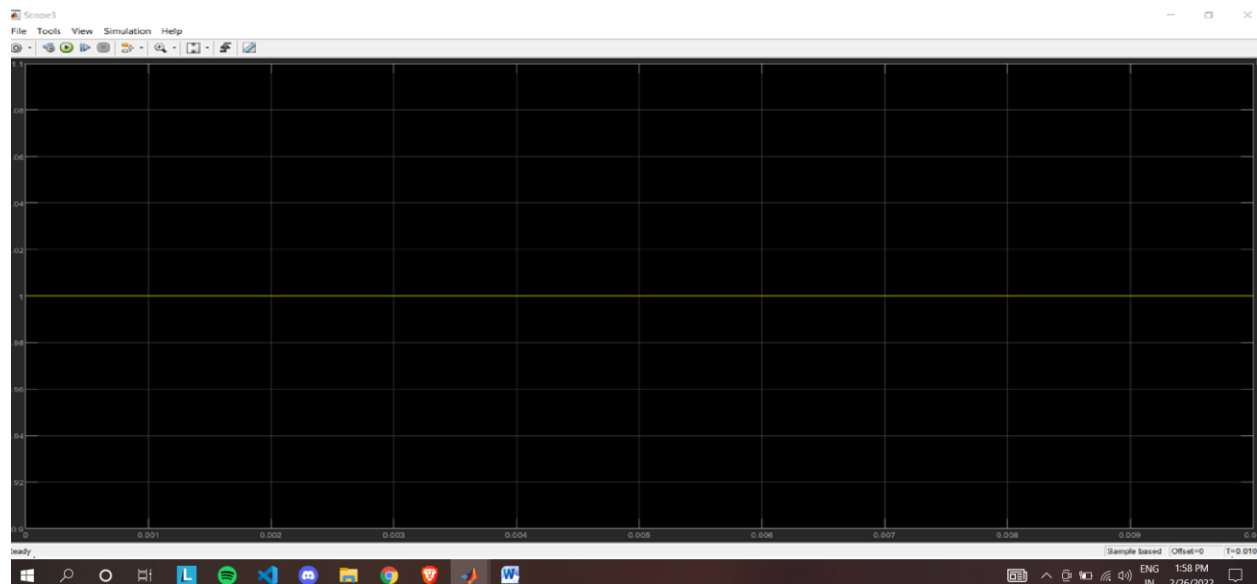
SINE INPUT:



## SINE RESPONSE:



## STEP INPUT:



STEP RESPONSE:

