**SIMULATION OF FIRST & SECOND ORDER SYSTEMS**

**Experiment Number: 05**

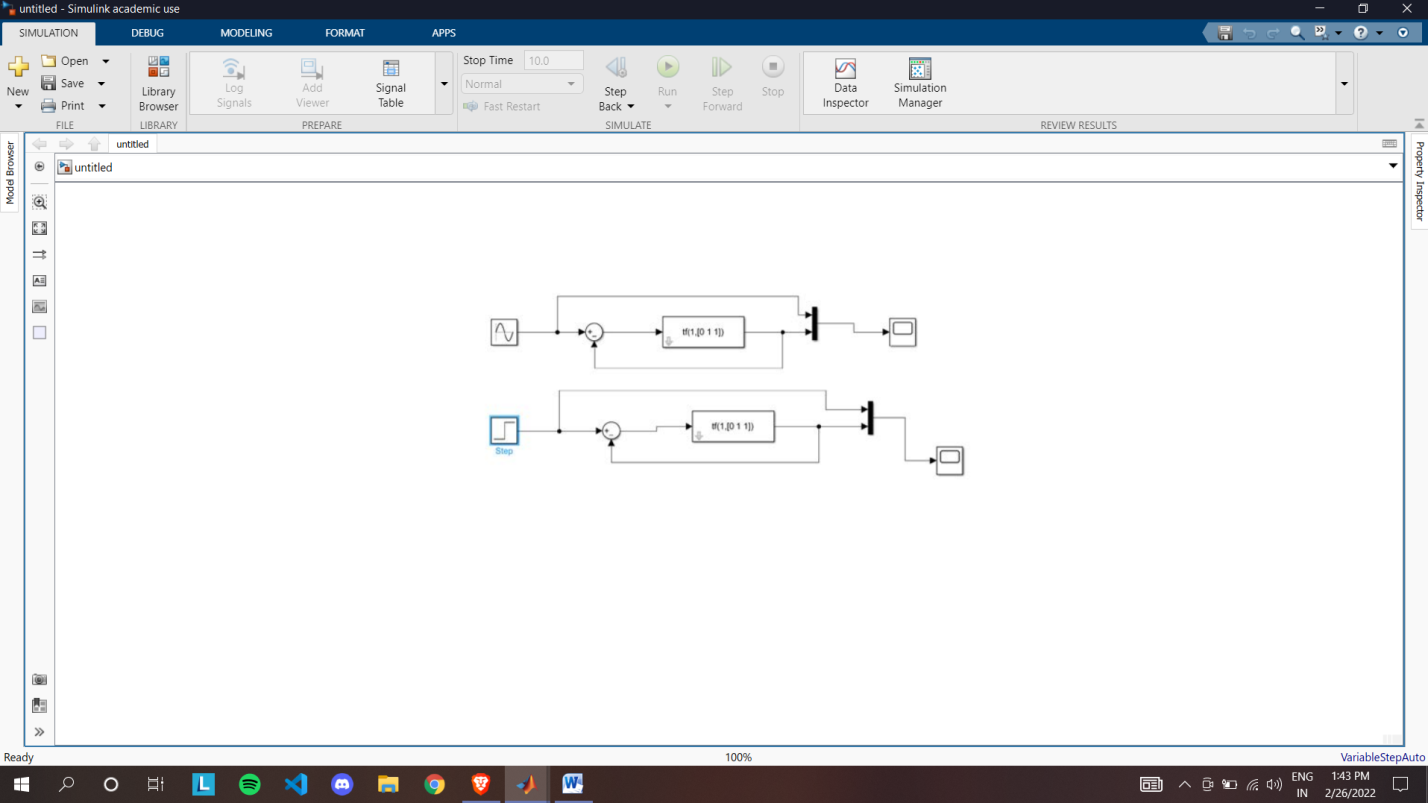
Name: Preyash

Registration Number: 20BPS1022 Date: 26/02/2022

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

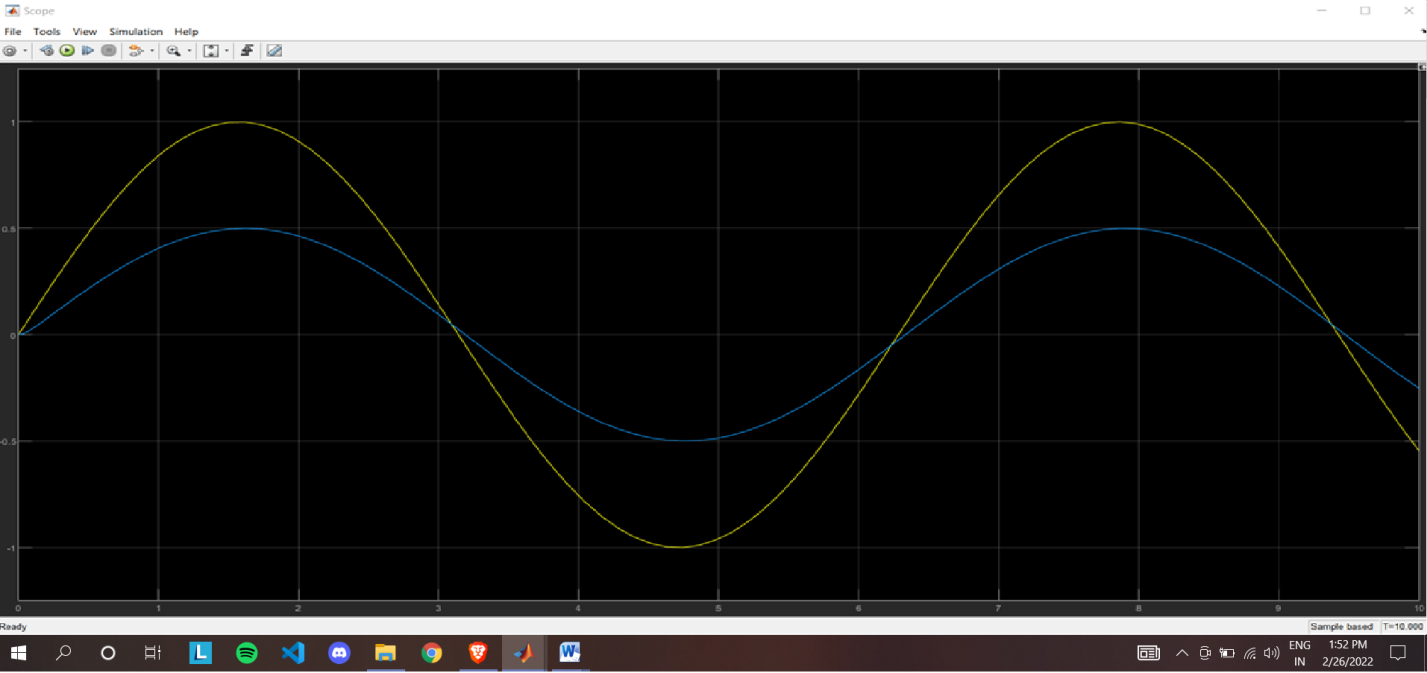
**FIRST-ORDER SYSTEM:**

BLOCK-DIAGRAM:

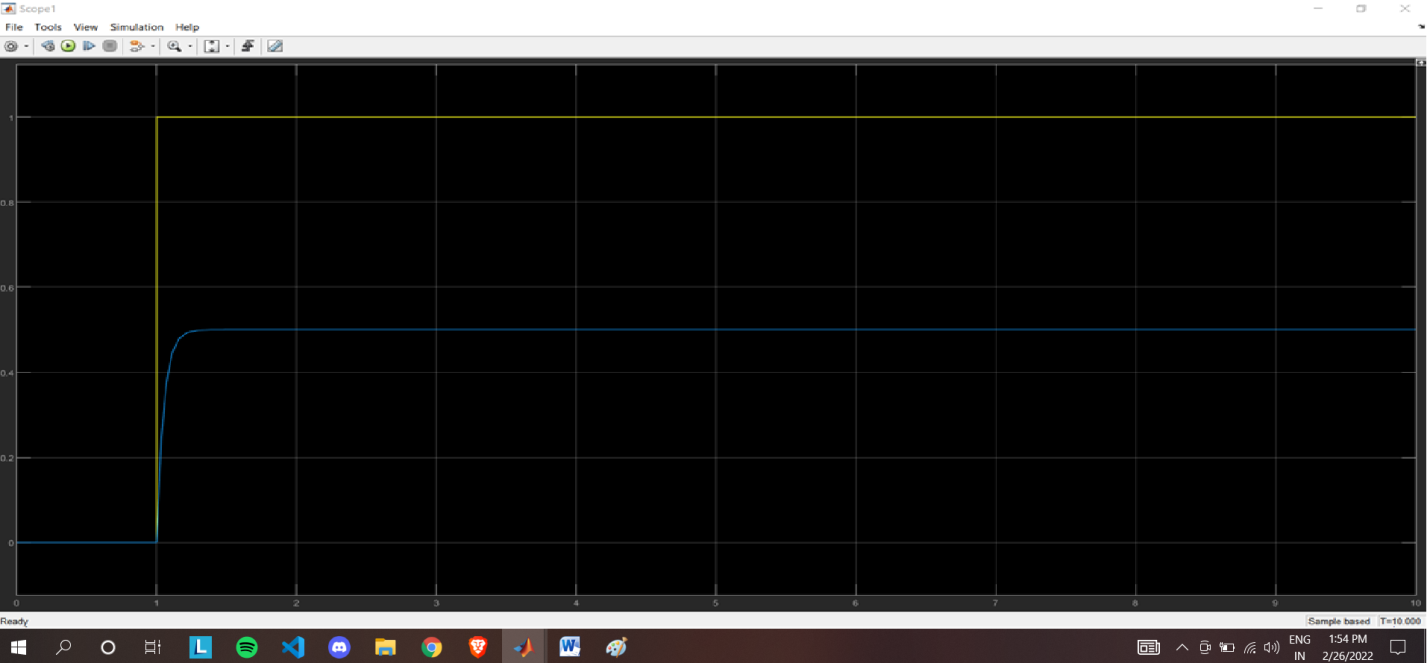


OUTPUT:

SINE RESPONSE:

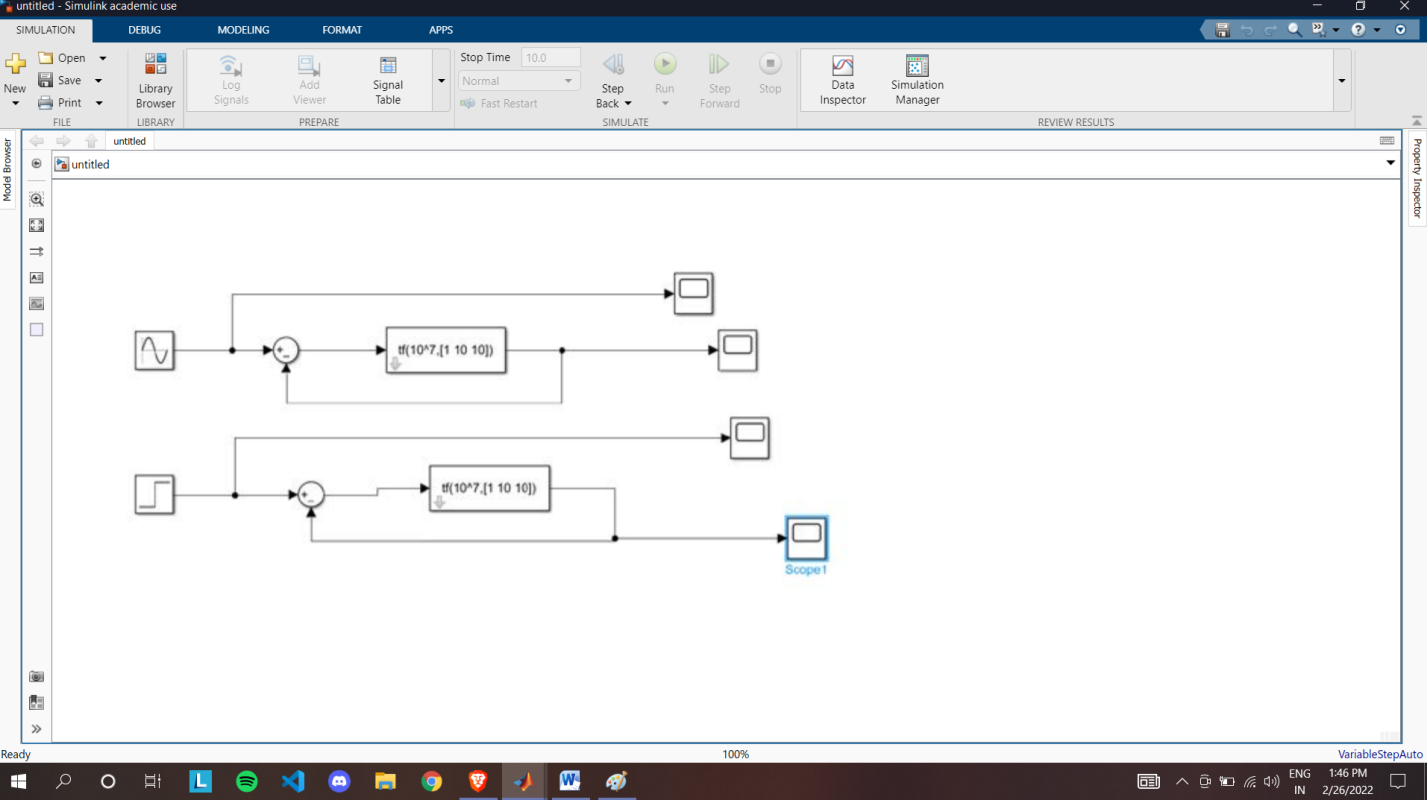


STEP RESPONSE:



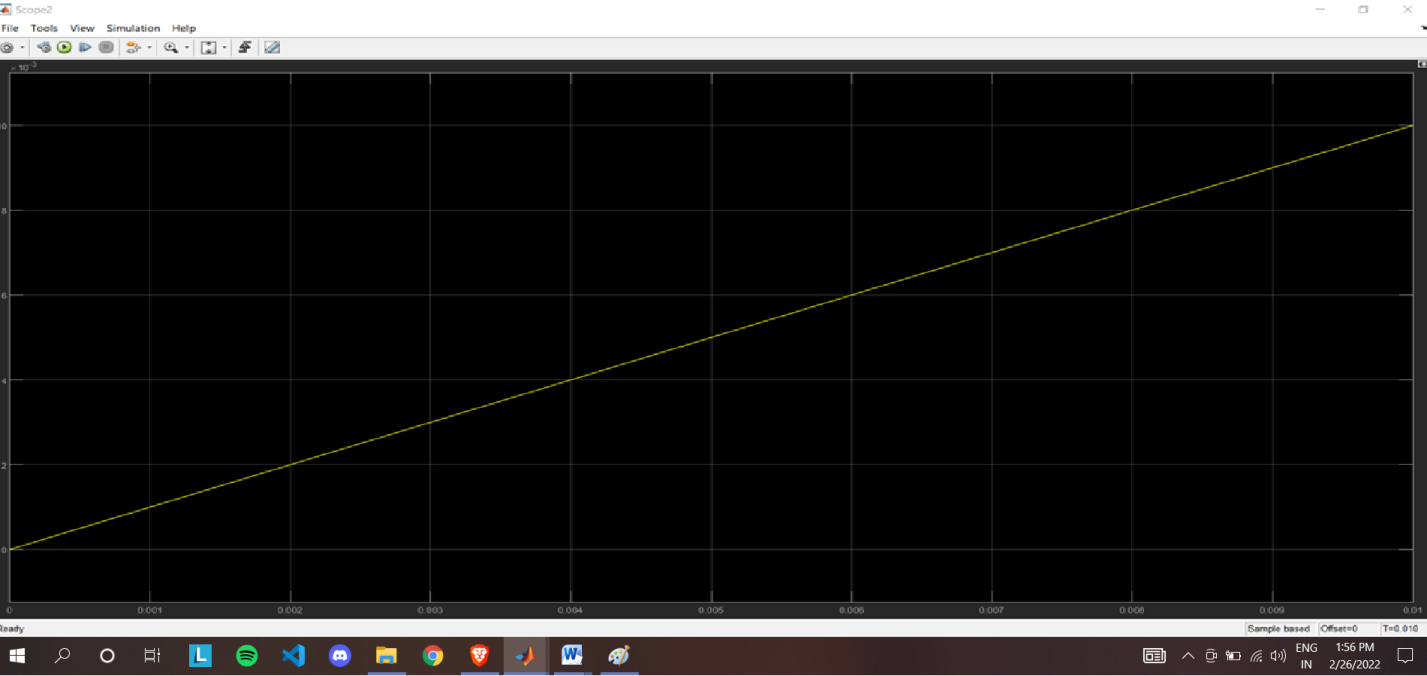
**SECOND-ORDER SYSTEM:**

BLOCK-DIAGRAM:

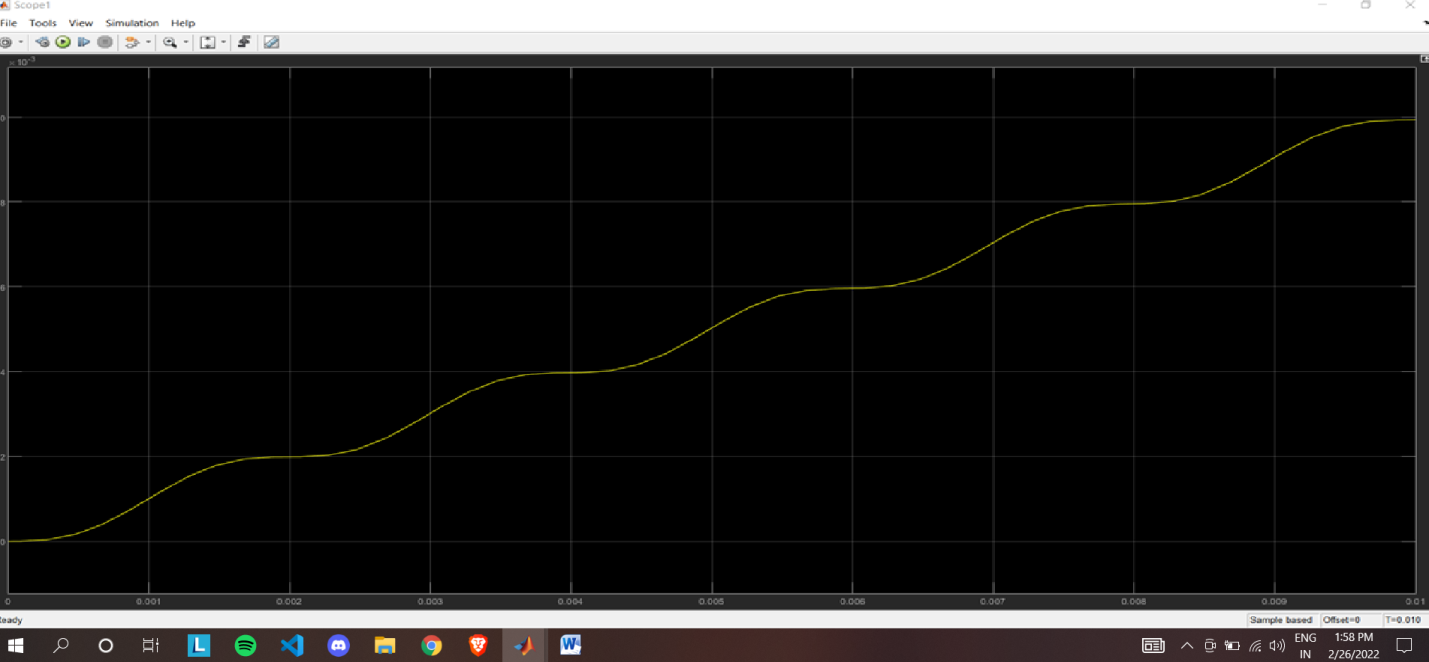


OUTPUT:

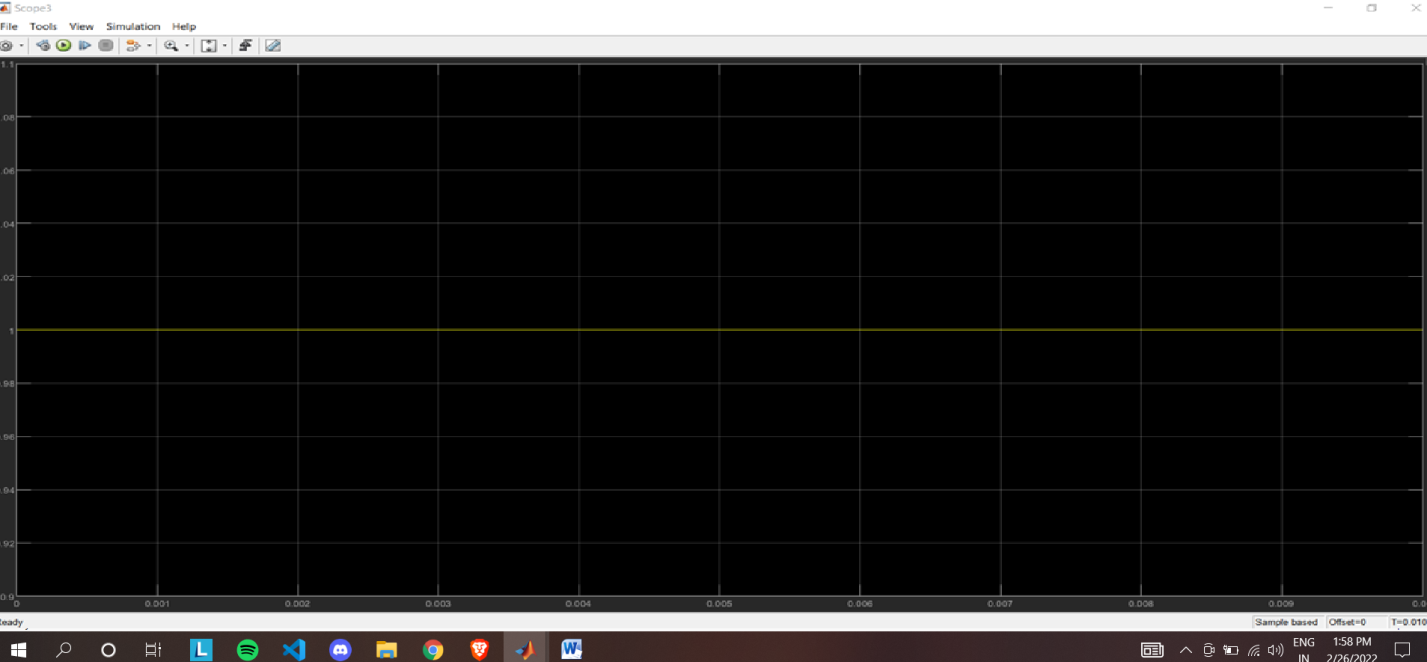
SINE INPUT:



SINE RESPONSE:



STEP INPUT:



STEP RESPONSE:

