BATCH 4

511832 K.SAI ASHISH

511805 B.VAMSI KRISHNA
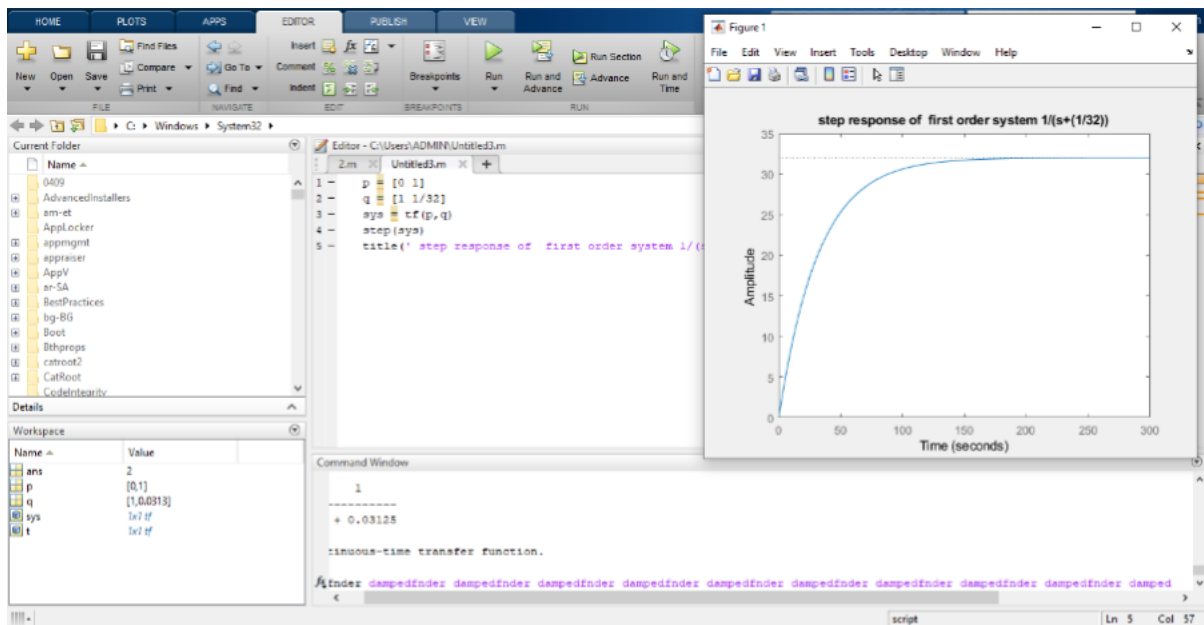
511817 CH.TARAK NAGARJUNA KUMAR

511856   P.RATNA PRAKASH
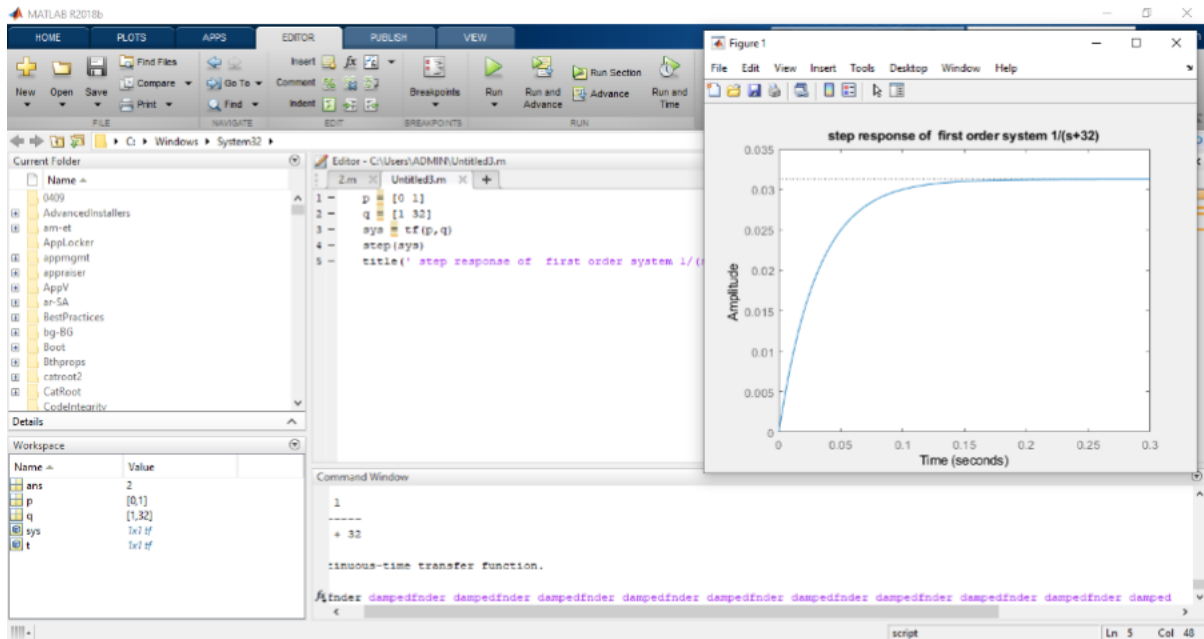
511869   S.GIREESH KUMAR

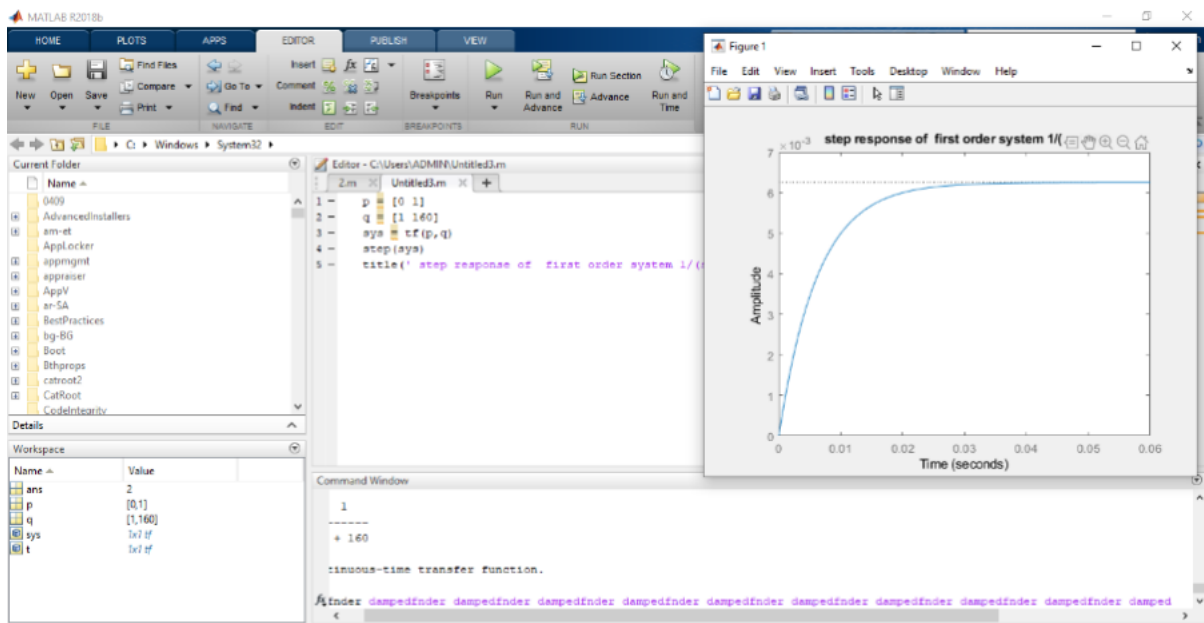# TIME RESPONSE OF FIRST ORDER AND SECOND ORDER SYSTEM
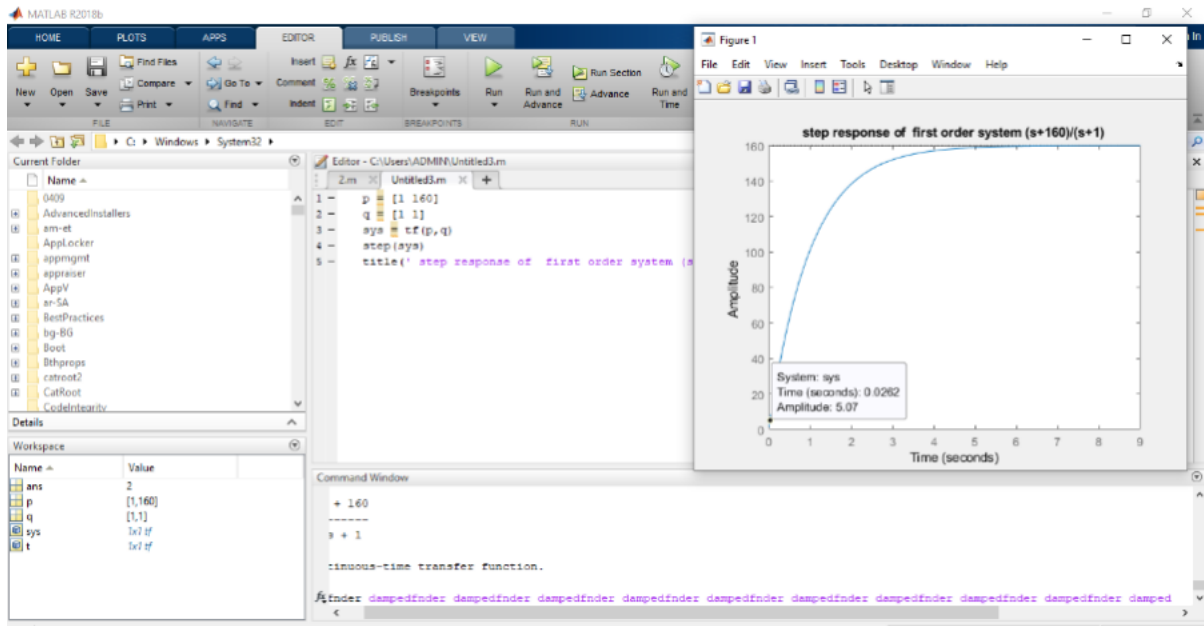
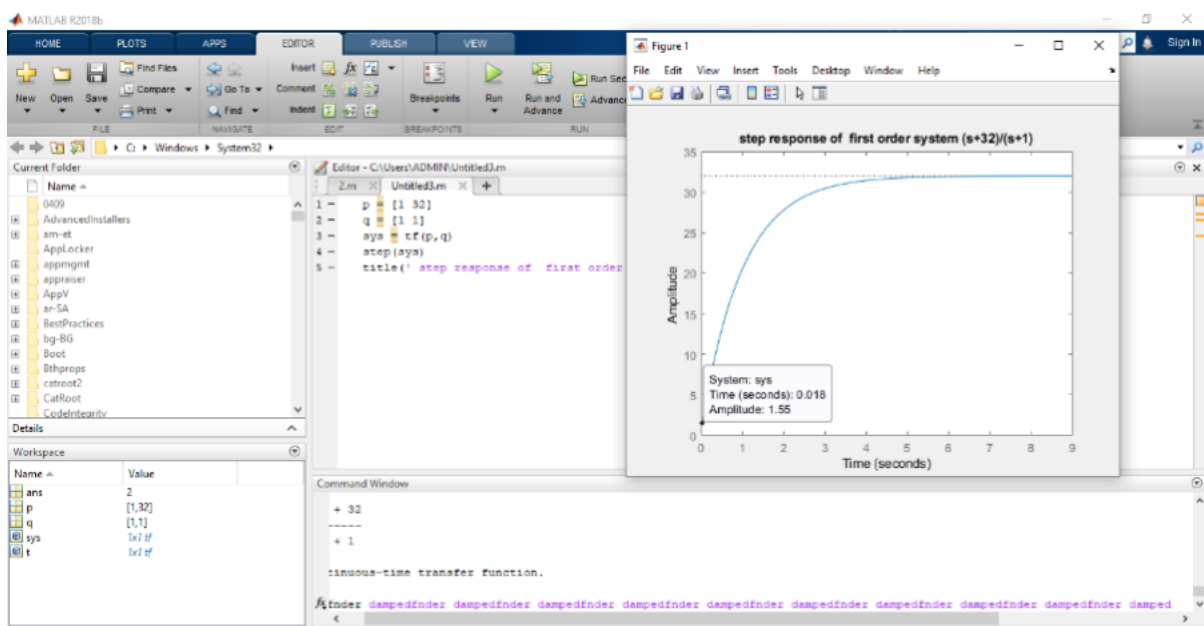## FOR FIRST ORDER STEP INPUT :

POLE AT -32
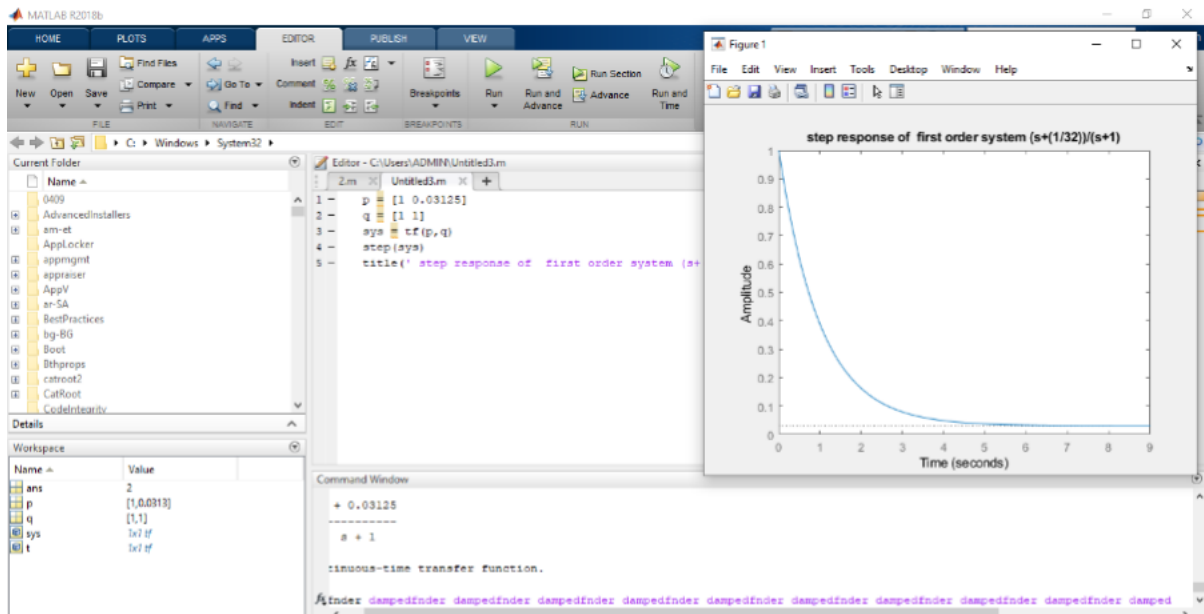

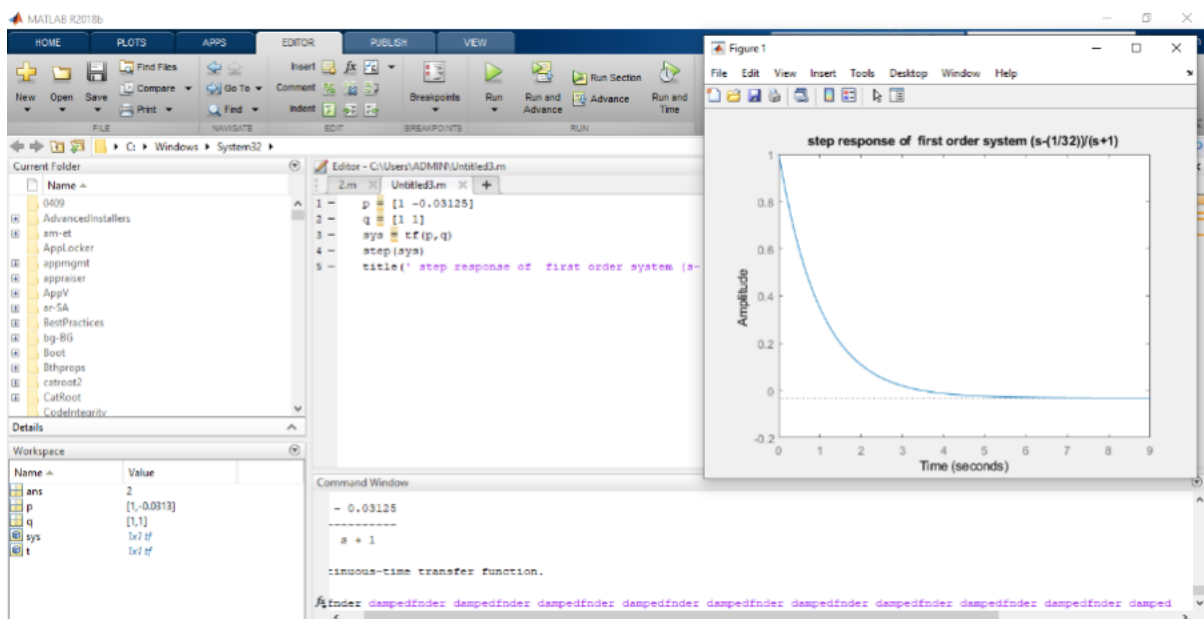# FOR POLE AT -160

FOR POLE AT -1, ZERO AT -160
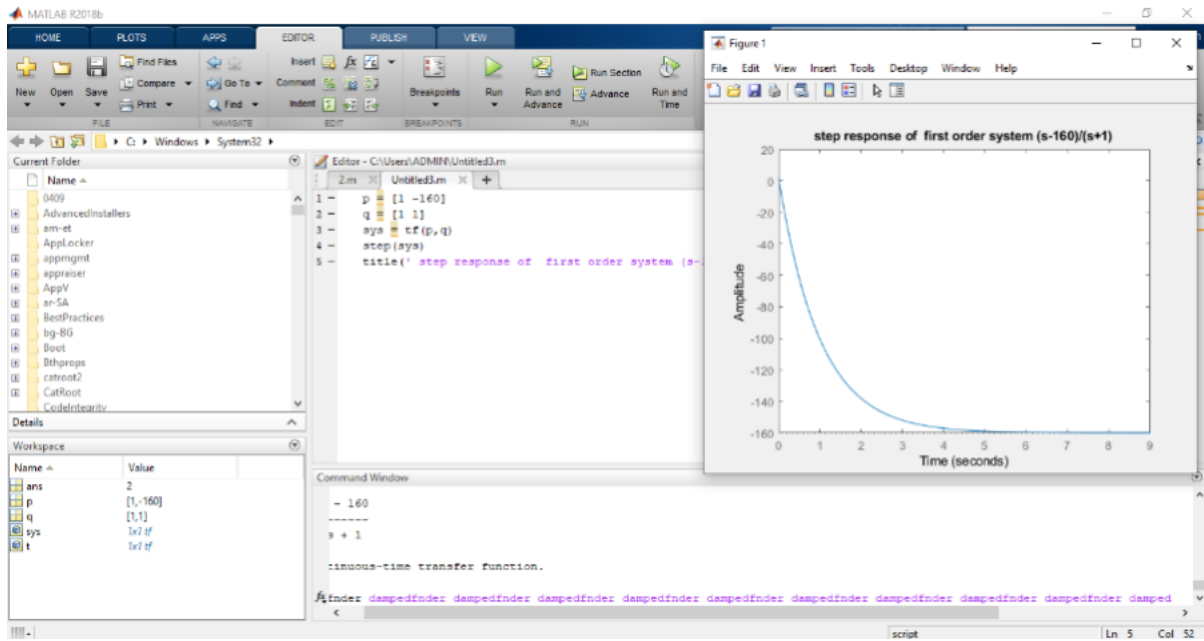

FOR POLE AT -1 , ZERO AT -32
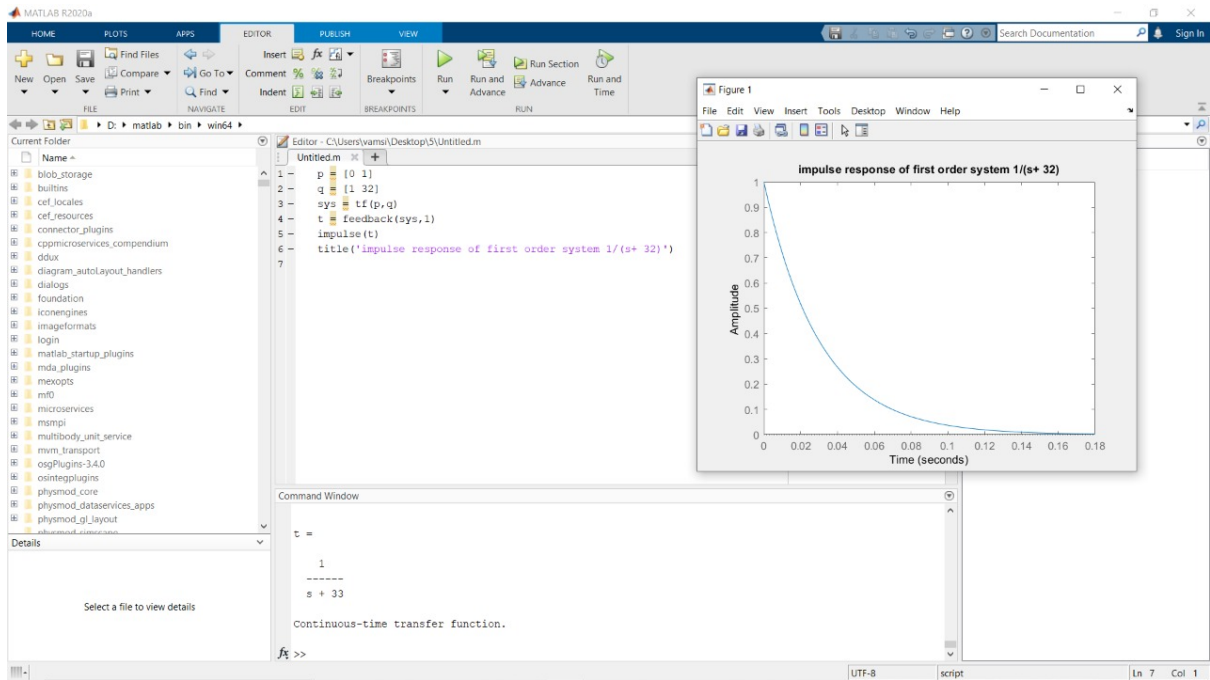
FOR POLE AT -1 , ZERO AT -1/32
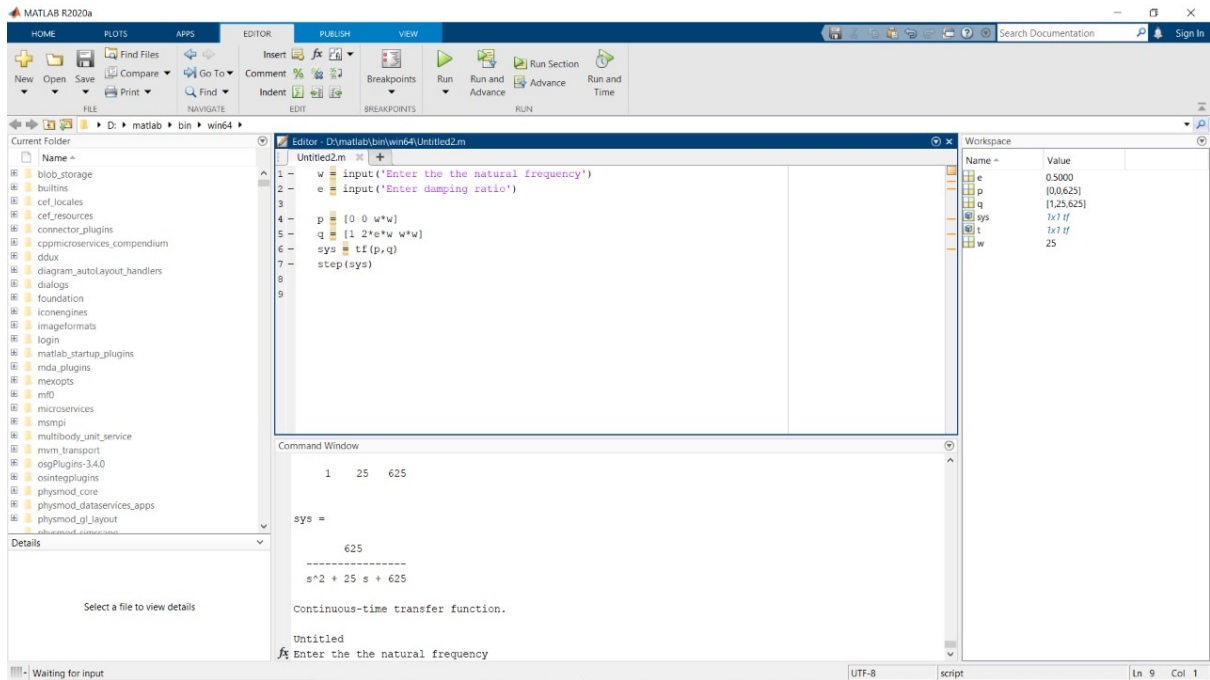

FOR POLE AT-1 , ZERO AT 1/32
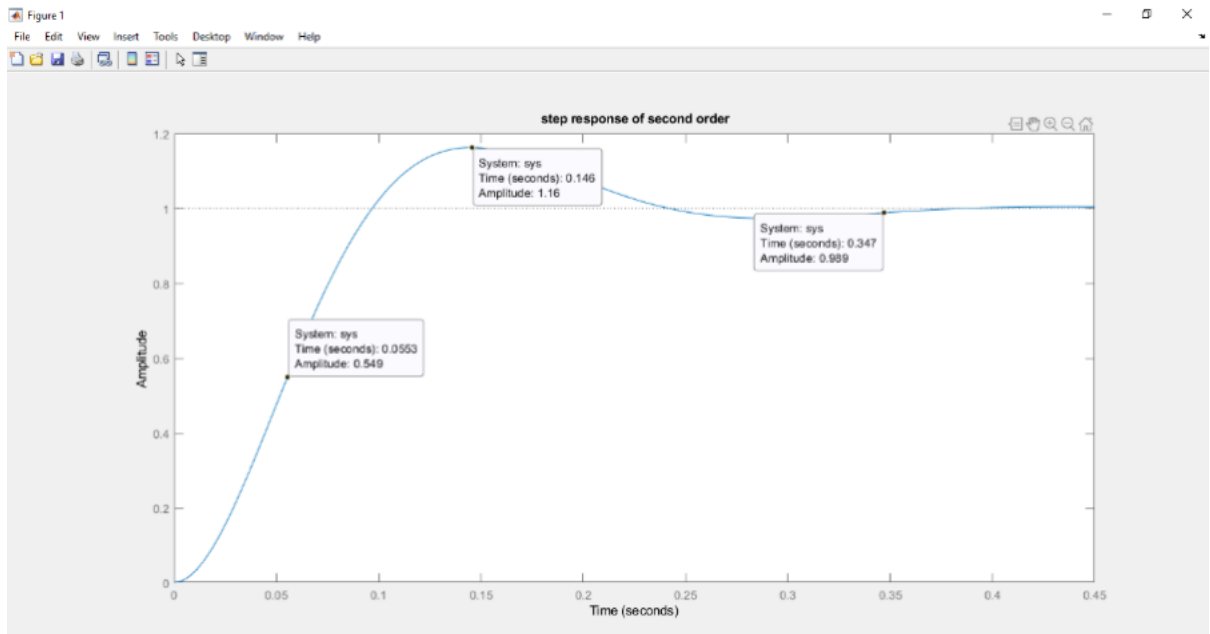
FOR POLE AT -1 , ZERO AT 160

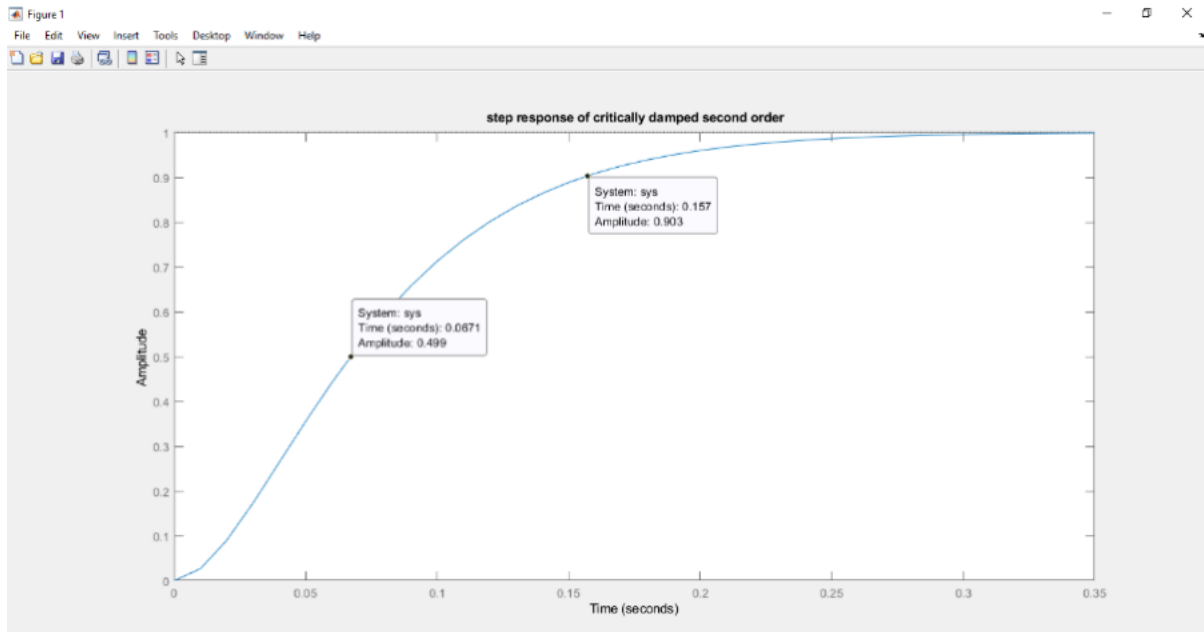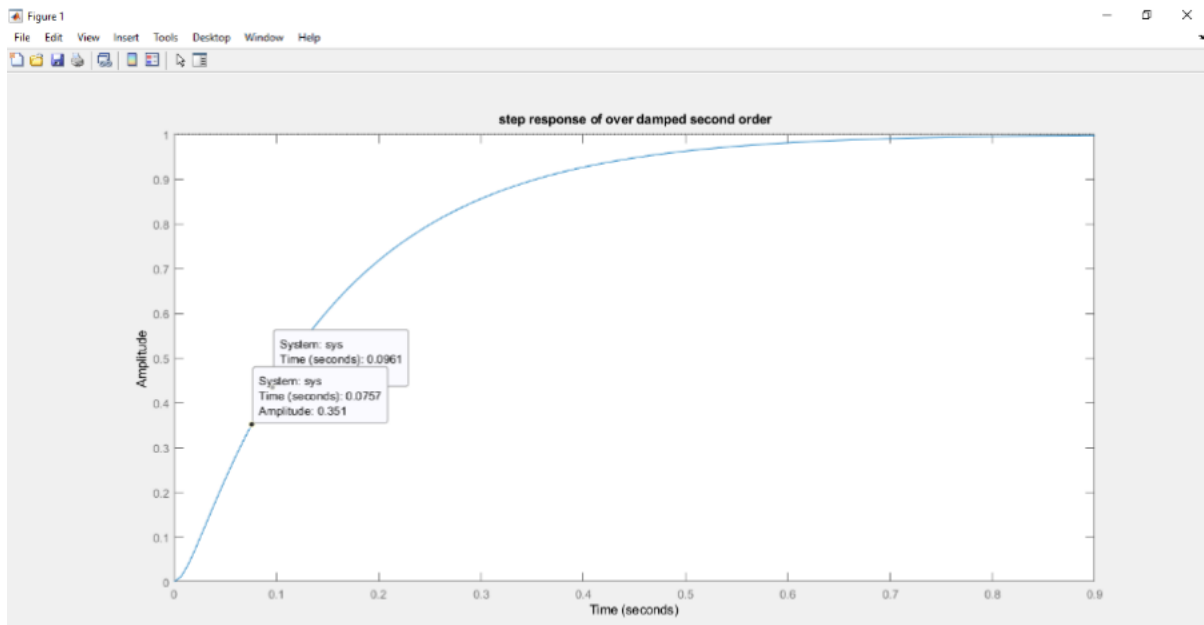# FOR FIRST ORDER UNIT IMPULSE SYSTEM:

FOR SECOND ORDER SYSTEM:

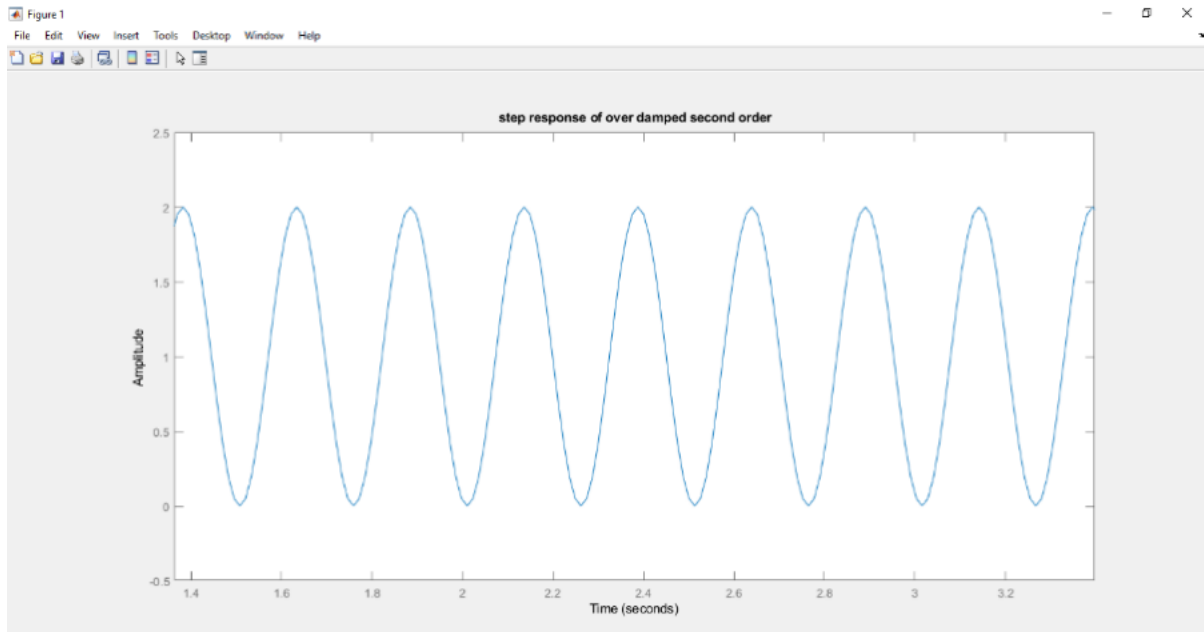# FOR UNDER DAMPED SECOND ORDER SYSTEM:

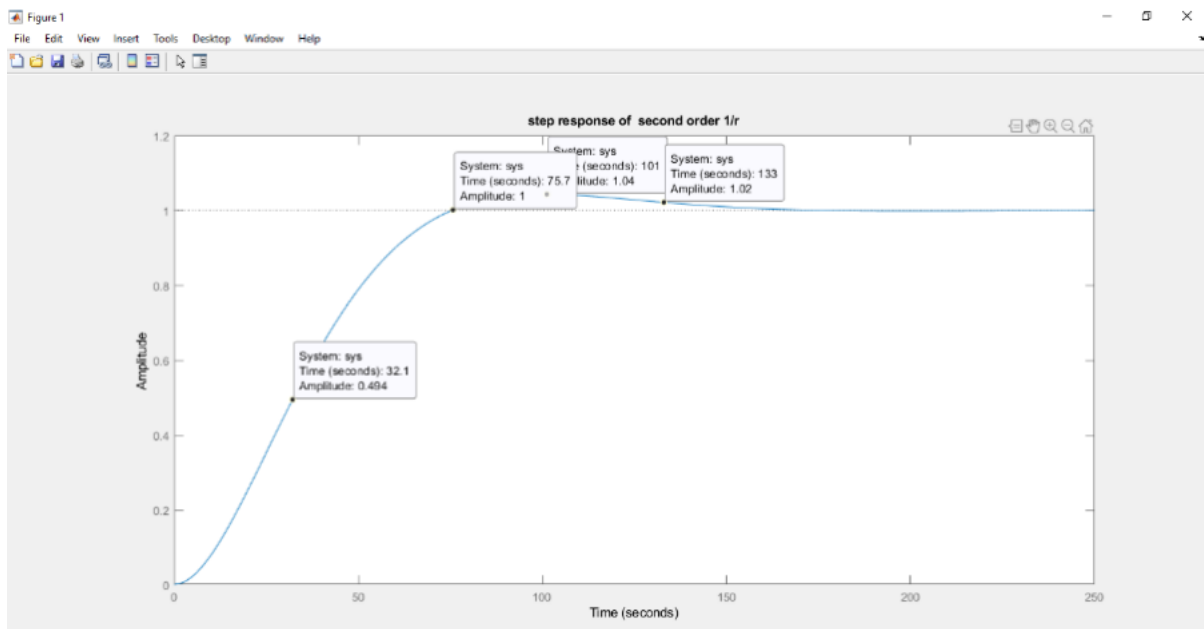# FOR CRITICALLY DAMPED SYSTEM:

FOR OVER DAMPED SYSTEM;

FOR UNDAMPED SYSTEM:

FOR SECOND ORDER POLE PAIRS (-a+ai),(-a-ai)

FOR a=1/R=1/32:

FOR a=R=32

step response of second order for a=r

System: sys
Time (seconds): 0.097
Amplitude: 1.04

System: sys
Time (seconds): 0.074
Amplitude: 1

System: sys
Time (seconds): 0.126
Amplitude: 1.02

System: sys
Time (seconds): 0.161
Amplitude: 1

System: sys
Time (seconds): 0.031
Amplitude: 0.486

FOR a=5R=160

step response of second order for a=5r

System: sys
Time (seconds): 0.0149
Amplitude: 1

System: sys
Time (seconds): 0.019
Amplitude: 1.04

System: sys
Time (seconds): 0.0245
Amplitude: 1.03

System: sys
Time (seconds): 0.0066
Amplitude: 0.526