

**THE UNIVERSITY OF TEXAS AT ARLINGTON, TEXAS  
DEPARTMENT OF ELECTRICAL ENGINEERING**

**EE 5321 - 001**

**OPTIMAL CONTROL**

**HW # 1**

**ASSIGNMENT**

**by**

**SOUTRIK MAITI**

**1001569883**

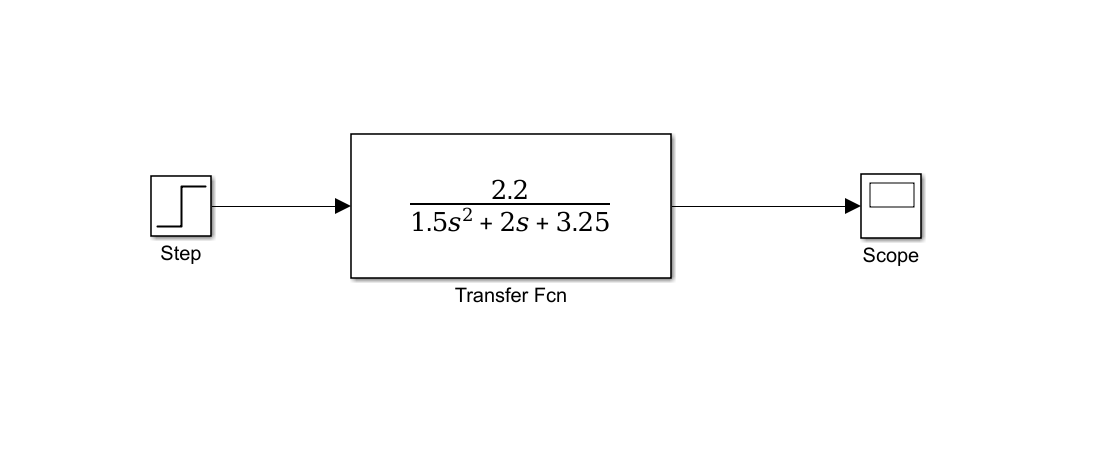
**Presented to**

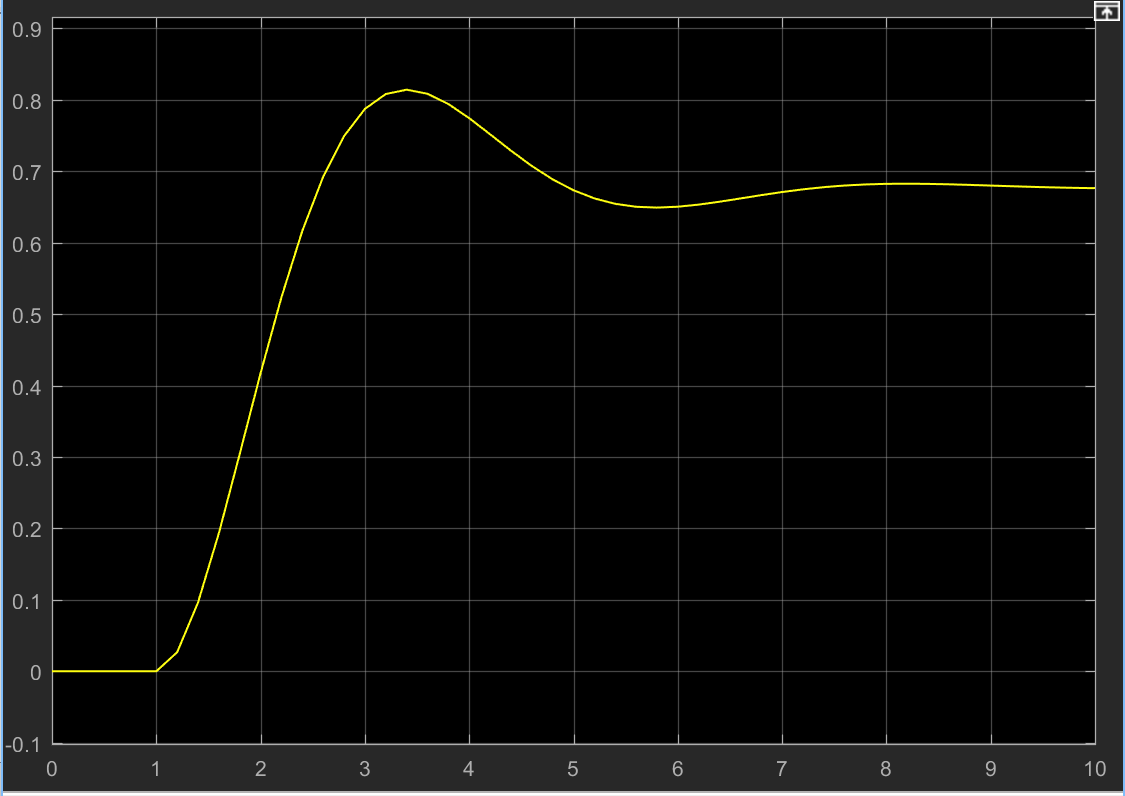
**Prof. Michael Niestroy**

**Jan 25,2018**

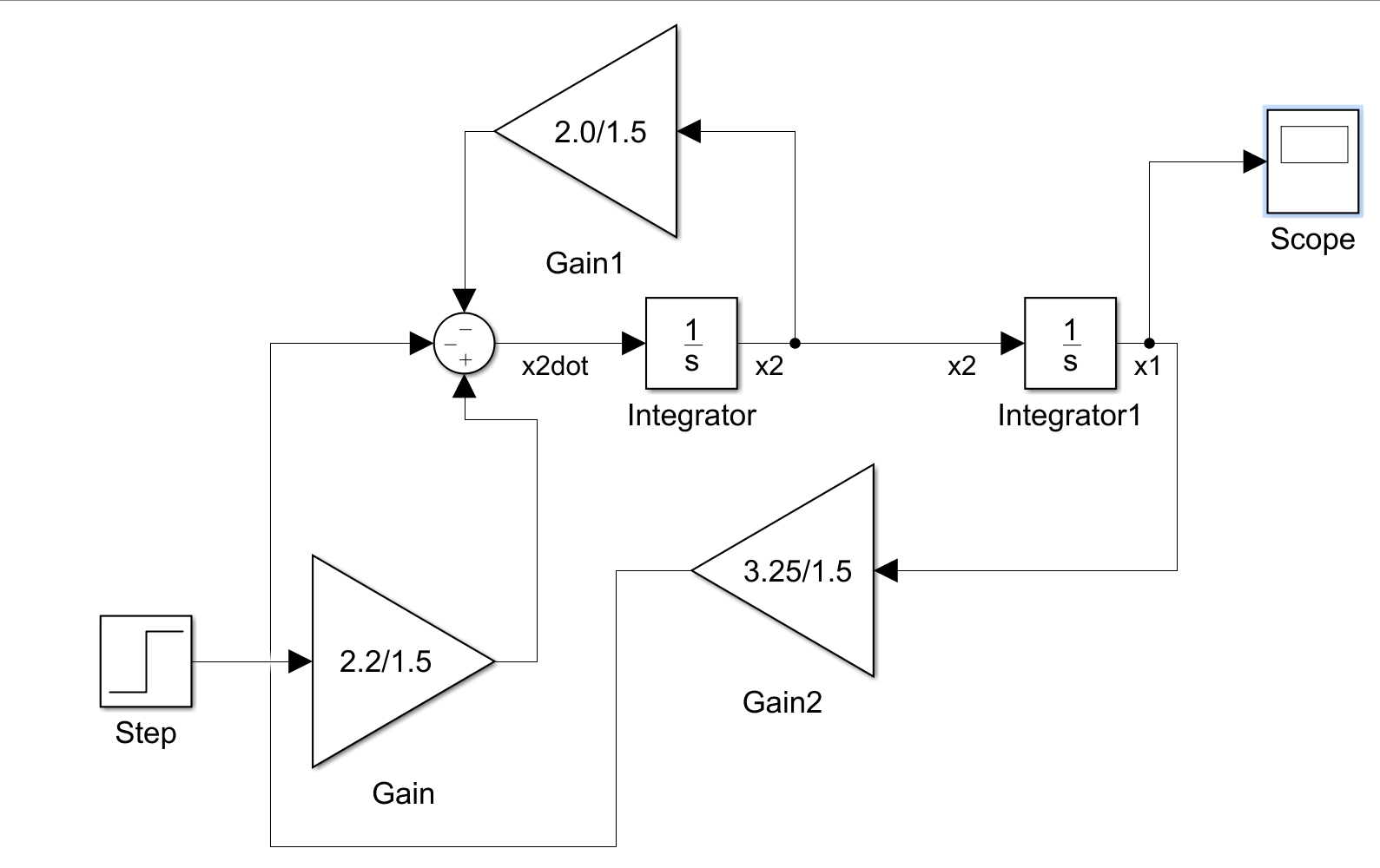
Problem 1:

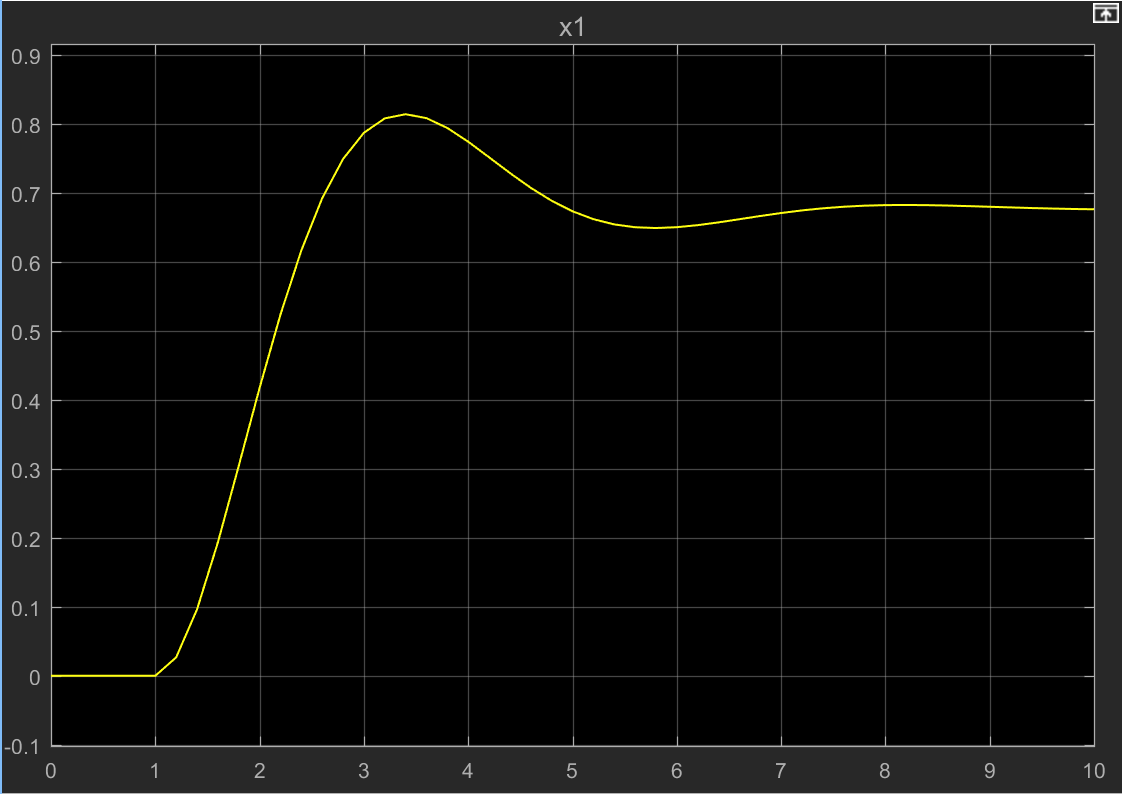
a)



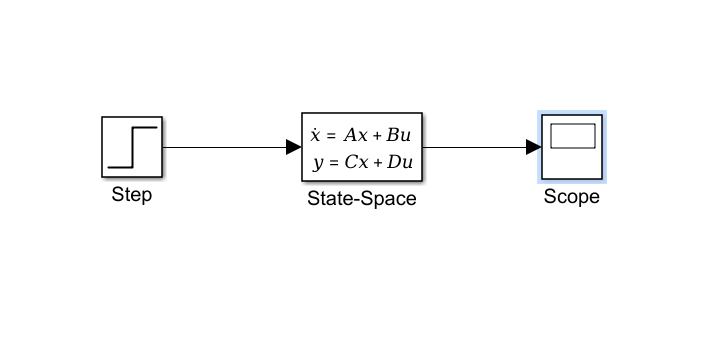


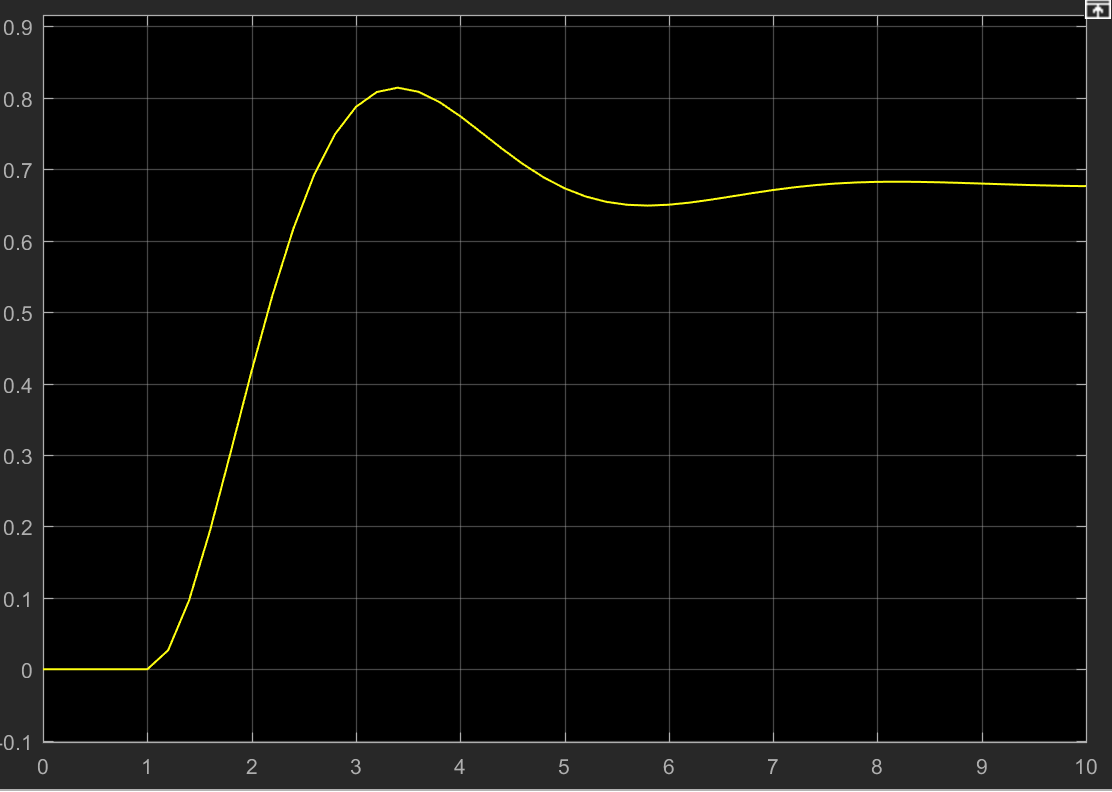
b)





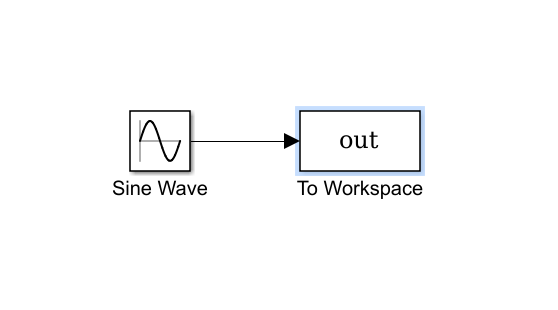
C)



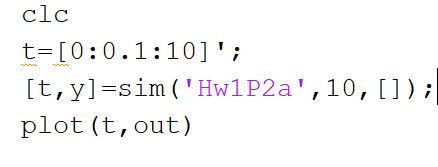


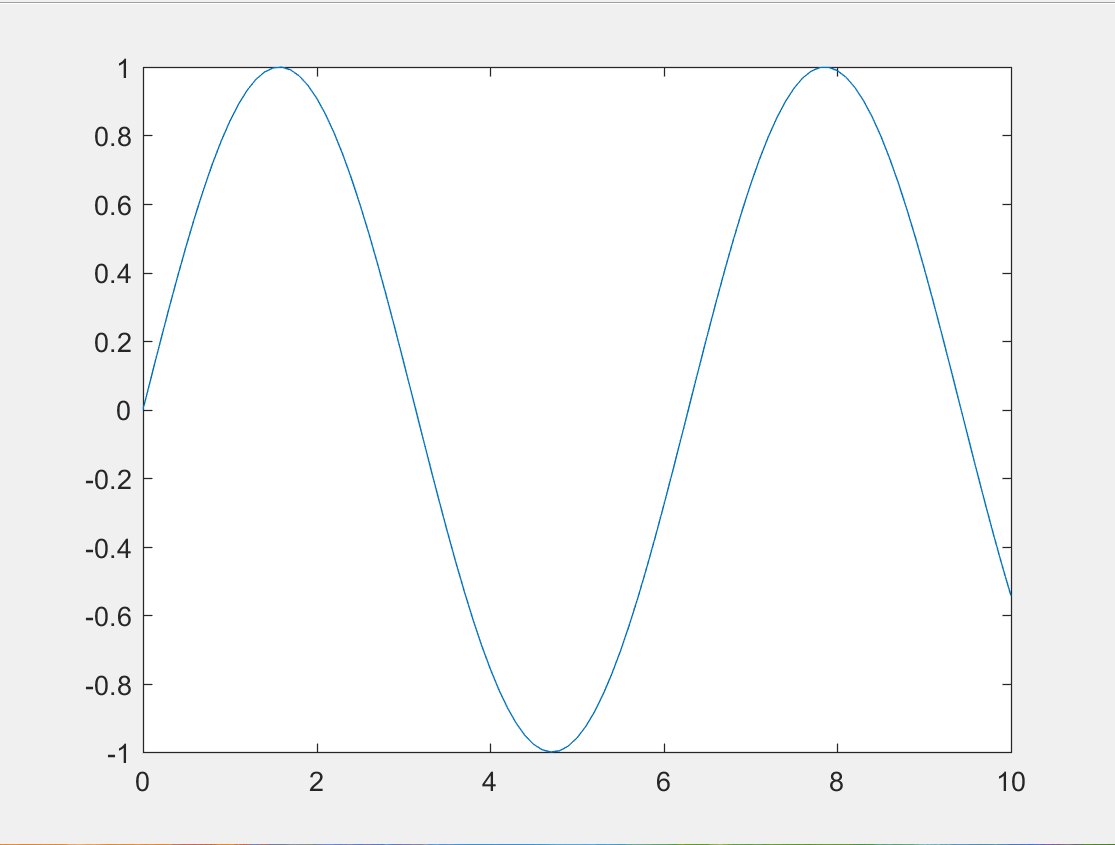
Problem 2:

a)

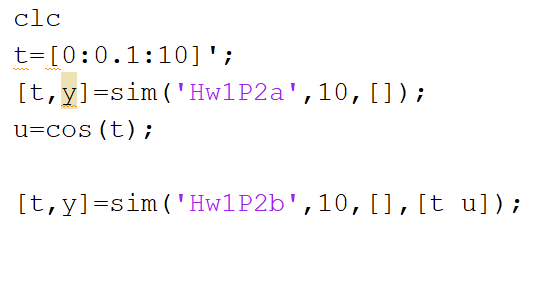


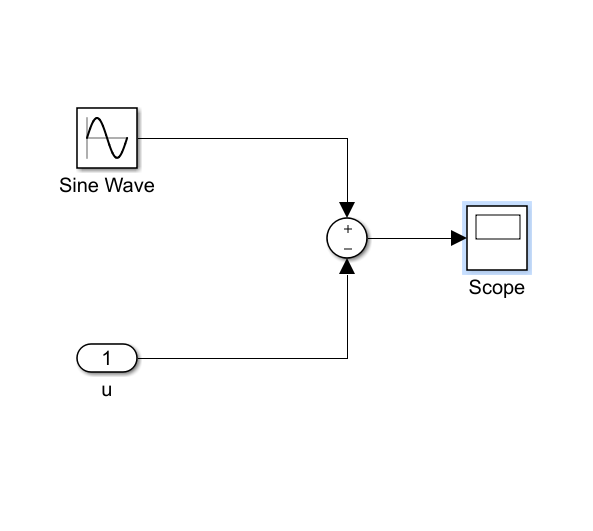
MATLAB CODE:

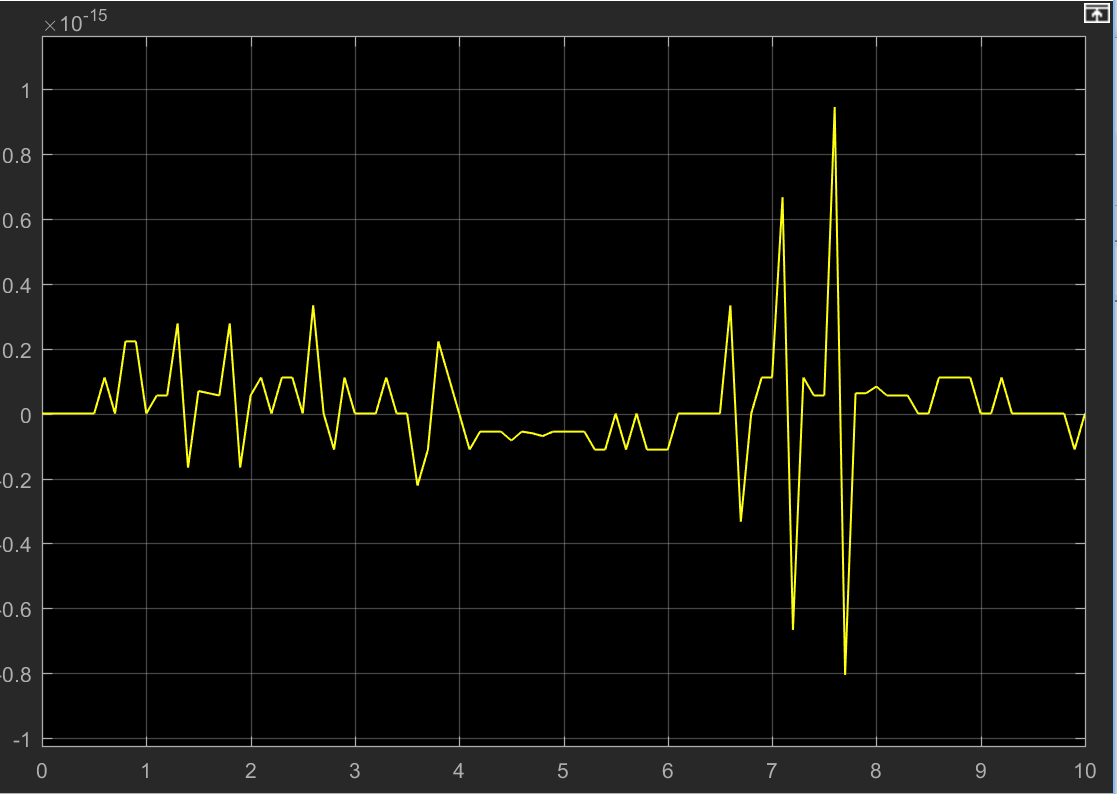




b) MATLAB CODE:

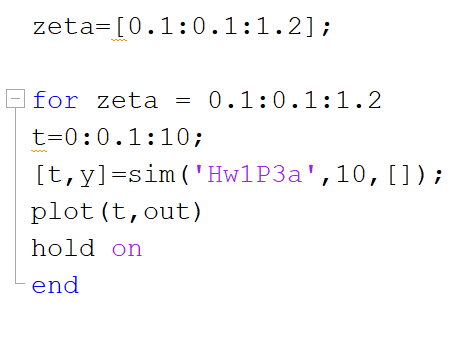


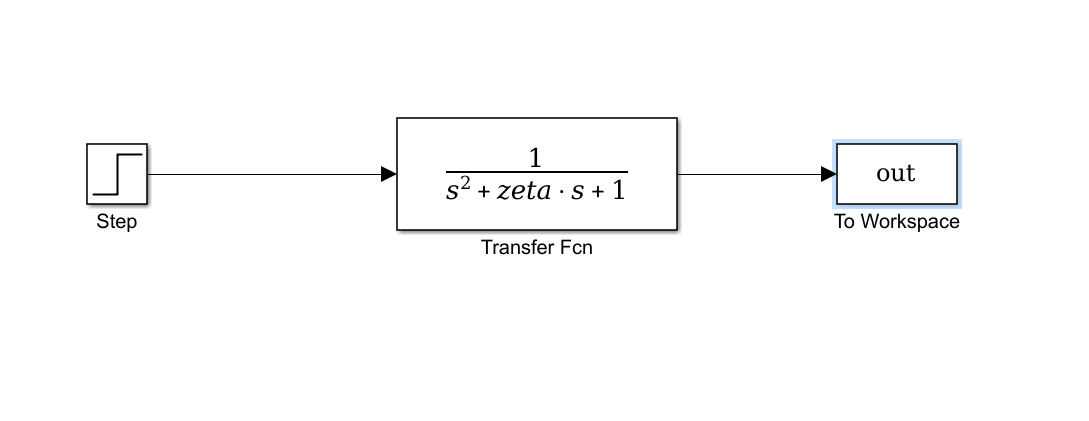


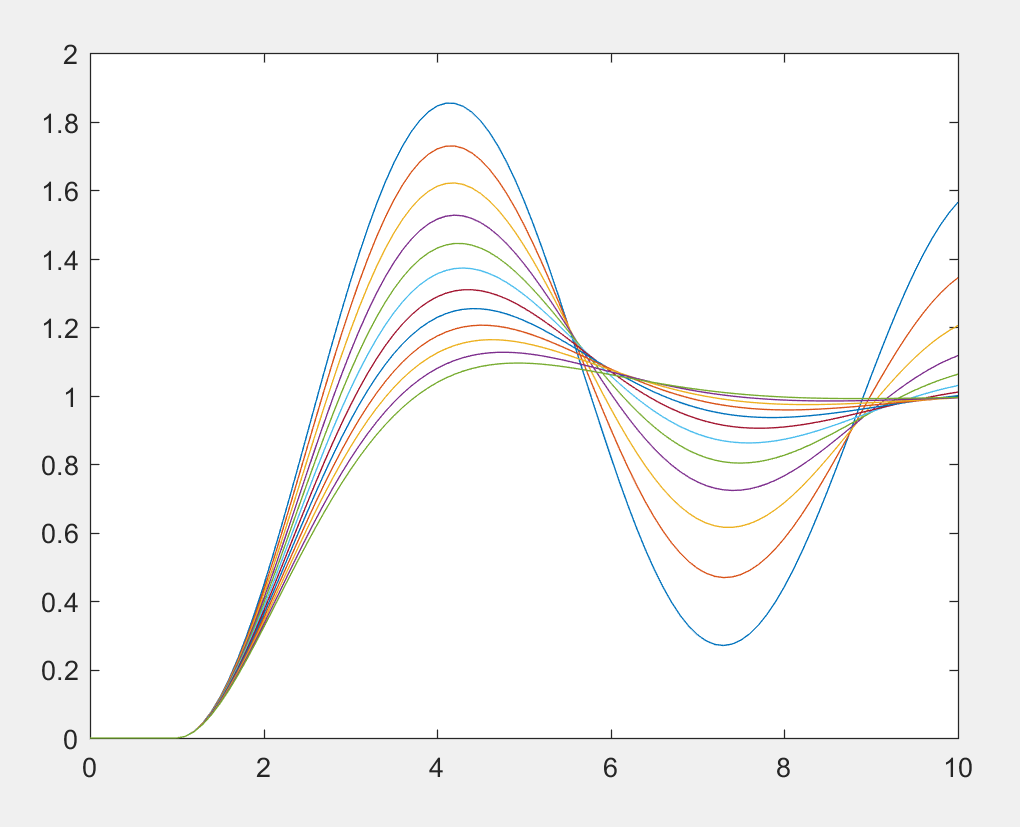


Problem 3:

1. MATLAB CODE:









MATLAB CODE:

