**Lab 08**

A logo of a university of engineering and technology

Description automatically generated

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Registration Number**:**

**20PWCSE1952**

Section:

**C**

Submitted To**:**

**Dr. Muniba Ashfaq**

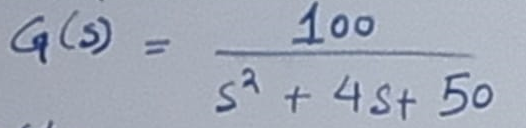
January 31, 2024

**Department of Computer System Engineering**

**University of Engineering and Technology Peshawar**

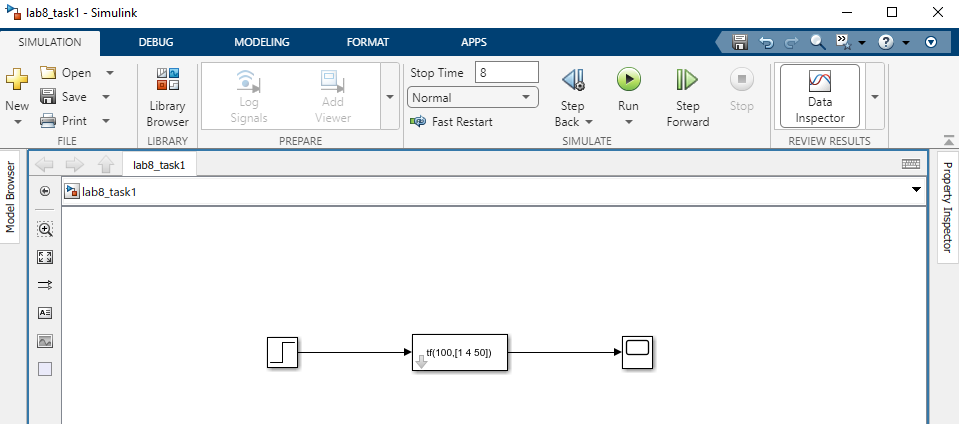
**Task 1:**

Design a system in Simulink where transfer function is :



Input signal = unit step signal

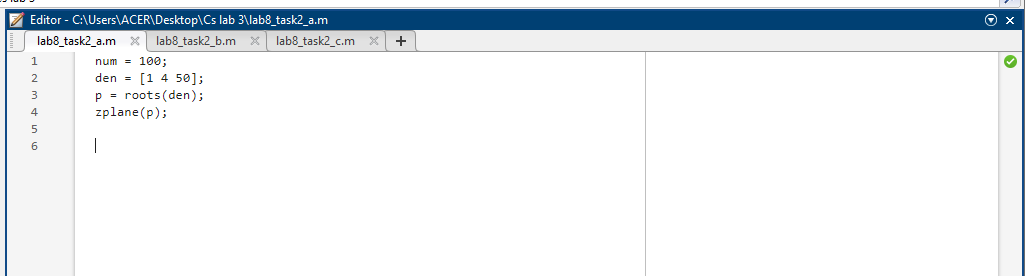
Simulation time = 8 sec

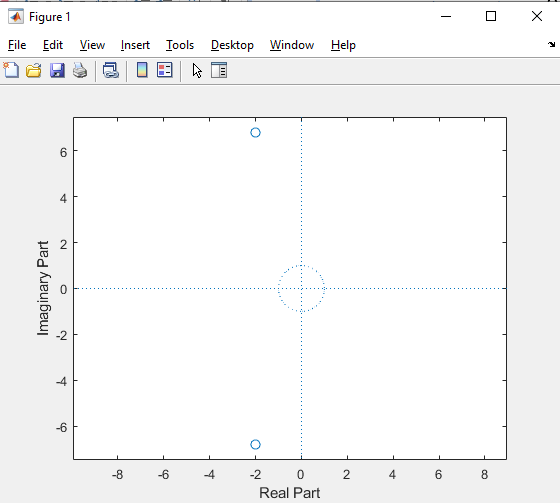


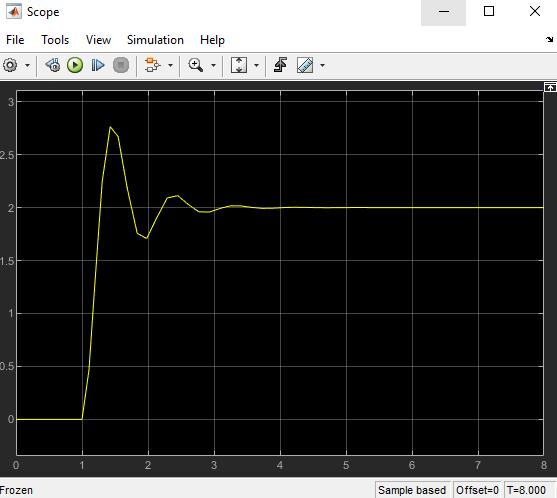
**Task 2:**

Design 3 systems with complex poles such that one system is stable ,unstable and marginally stable.

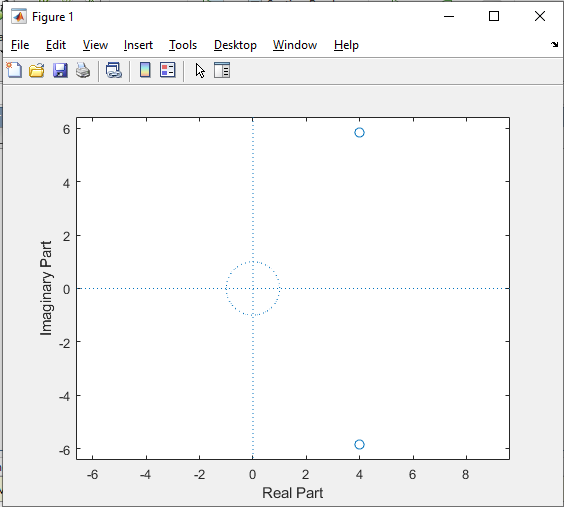
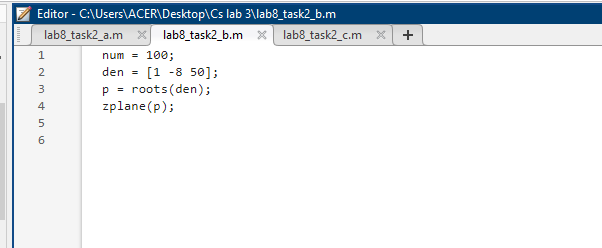
1. STABLE:

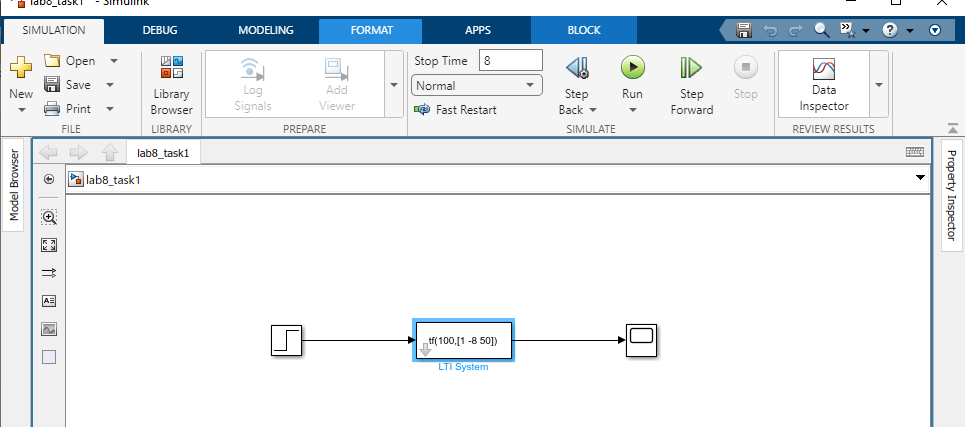


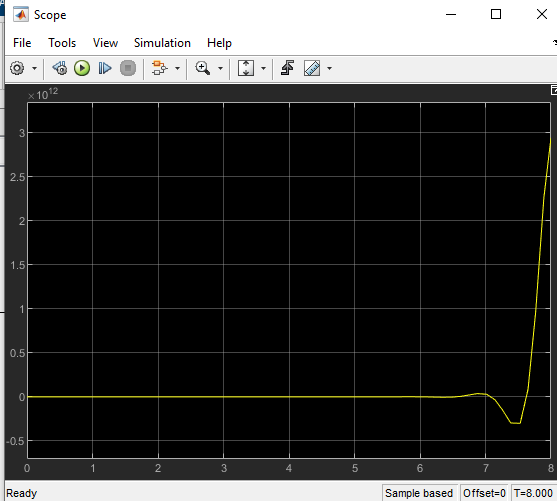




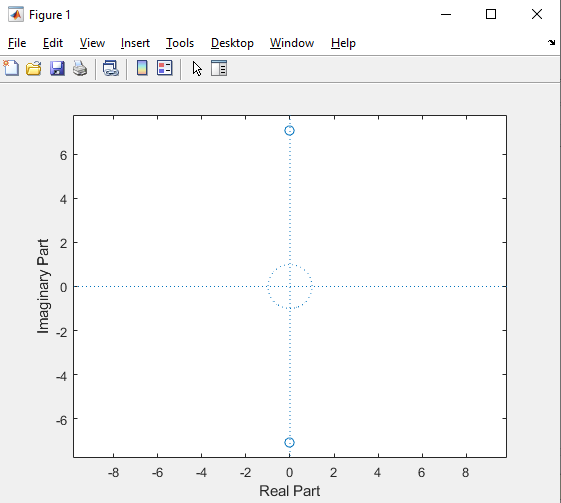
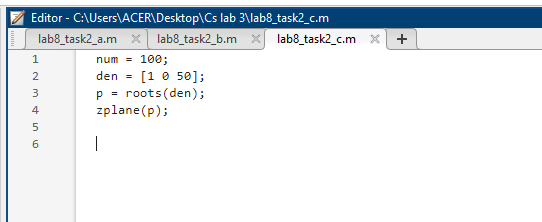
1. UNSTABLE:

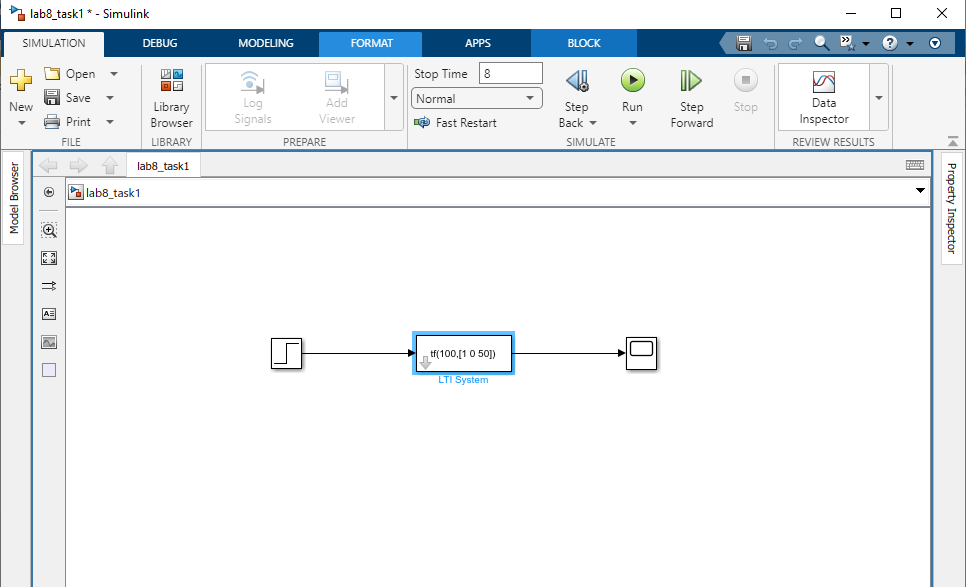


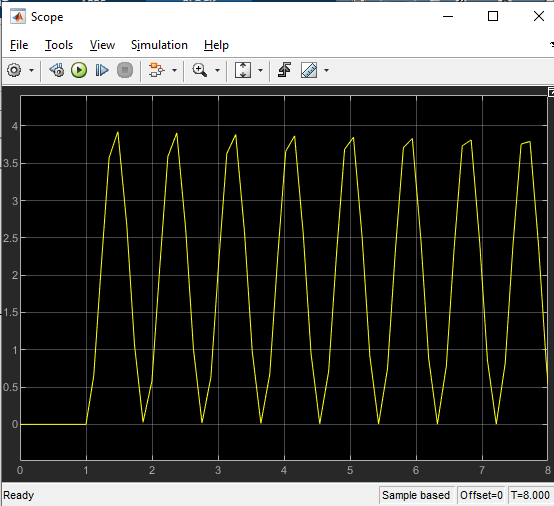




1. MARGINALLY STABLE:







**TASK#03**

ANALYZE :

