GROUP ASSIGNMENT (groups of 2)

1. Chapter 6, problem #12

2. Calculate the gain margin and phase margin for the following system using Matlab Bode plots:

   **process:** \( g_p(s) = \frac{4.12\cdot \exp(-11s)}{(63.6s+1)} \)

   **controller:** PI controller \((k_c = 4.35, \tau_i = 69)\)

   • Generate your own Bode plots, and check them against those shown on p. 240 of your book.

3. Chapter 7, problem #8

4. Chapter 7, problem #9