Due: 03/06/2024

1. For the following filters, assume the op-amps are ideal.
   i. Derive the transfer functions, $T(s)$
   ii. If $R_1 = 10k\Omega$, $R_2 = 100k\Omega$, $C_1 = 1\mu F$, $C_2 = 0.1\mu F$, $L_1 = 1nH$, and $L_2 = 1\mu H$, plot the magnitude and phase responses of each filter.

(a)

(b)

(c)

(d)