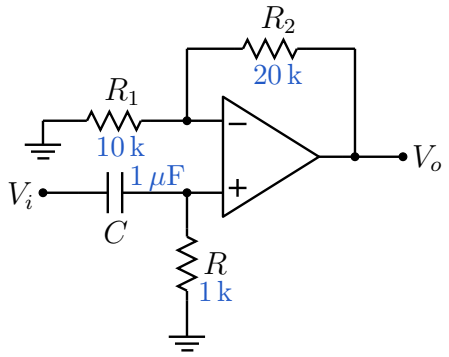
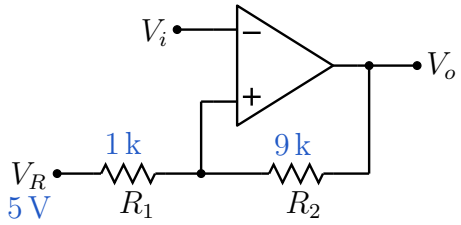
EE 112 (MBP): HW 9 (April 10, 2017)

1. For the op-amp filter shown in the figure, obtain an expression for the transfer function $H(j\omega)$. What type of filter is this? What is its corner frequency?



2. For the Schmitt shown in the figure, find the threshold points V_{TH} and V_{TL}. Plot V_o versus V_i. ($\pm V_{\text{sat}} = \pm 12\,\text{V}$)



3. The circuit shown in the figure is used to solve an ODE (ordinary differential equation) of the form $\dfrac{dV}{dt} = f(V_i, V)$. Find the ODE. Assume that all Op Amps are operating in the linear regime.