1. Suppose you create the circuit shown in Fig. V-1 with a 0.1 µF capacitor and a 10 kilo-ohm resistor in series. Consider the gain expression in section III of the lab description. If you consider the output of the circuit to be the voltage drop on the resistor, will this circuit act as a high-pass or low-pass filter?

2. For the circuit considered above, what is the cutoff frequency $f_0$ for the filter?