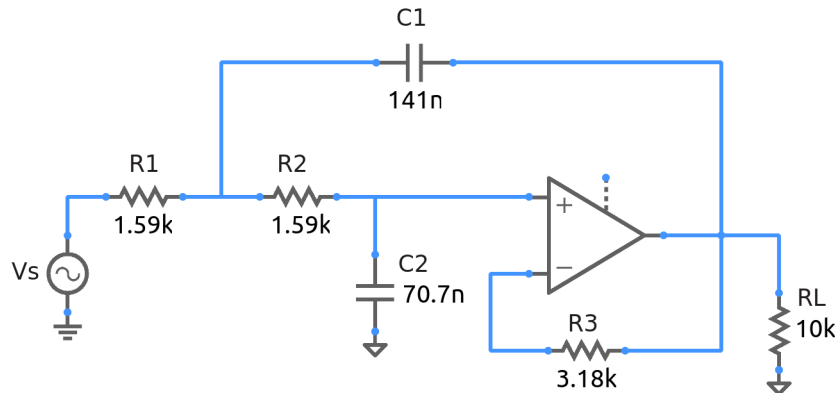


## low\_pass\_filter\_1.sqproj



### Exercise Set

1. Simulate the circuit. Plot the magnitude frequency response (log-log plot) and the phase frequency response (log-linear plot). Comment on the functionality of this filter circuit. What is the cut-off frequency? What are the gain and phase at the cut-off frequency?
2. How will the filter response change if the capacitance values are doubled? Verify with simulation.
3. Study the response of this filter circuit in the time domain (see `low_pass_filter_trns_1.sqproj`).

### References:

1. J. M. Fiore, *Op amps and linear integrated circuits*, Delmar, 2001.