INSIGHTS FOR FILTER DESIGN

Both filters are voltage dividers of the general form

In RC circuit:

In RL circuit:

Is there a way to combine these behaviors to produce a "better" low-pass filter? [See Homework 4]

Hint for LAB: What can you choose for \( Z_1 + Z_2 \)?

\[
H(w) = \frac{V_{out}}{V_{in}} = -\frac{Z_2}{Z_1}
\]