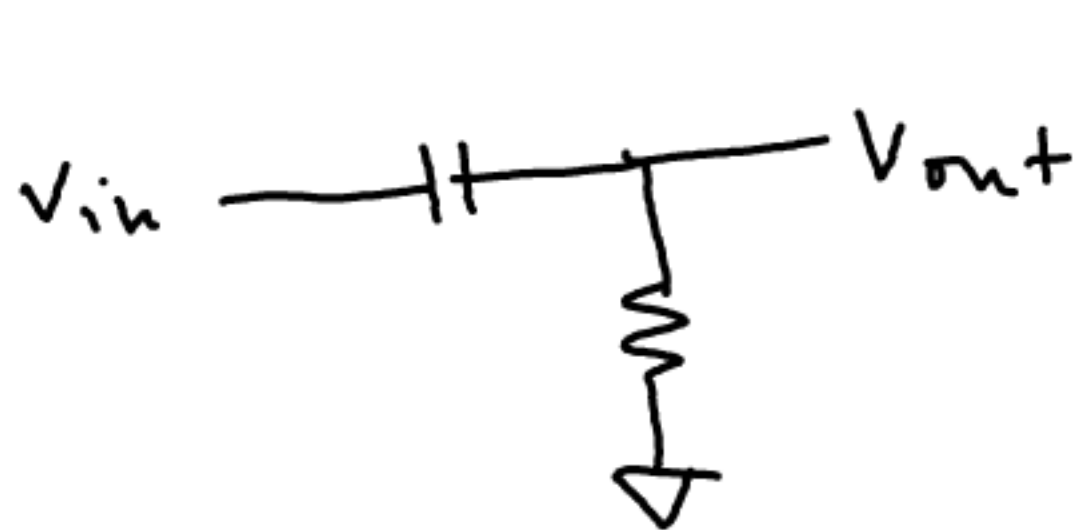


What makes a good lab report?

- should make a statement that can be supported by evidence
(like an argumentative essay)
- analyzes results through some model framework
↳ compare to a model
ex: curve-fitting, comparison test, p-value

For our lab: we want to know if the high-pass filter behaves according to our model



$$\tan \phi = \frac{1}{RC\omega}$$
$$G = \frac{R^2}{\frac{1}{\omega^2 C^2} + R^2}$$

① Does the data exactly match those lines?

② Could it match with different values for R and C ?

reduced χ^2 ,
least squares

fitting to extract
"real" RC

ex thesis: my circuit contains some additional attenuating element that alters V_{out} .
(input impedance)

Writing for clarity

Sections should be clearly labeled and well isolated.

- abstract: contains thesis and brief summary of results.
Include supporting values + key methodology.
- Intro / background (theory + model)
- methods (set-up, measurement choices, limitations)
- results + discussion
(analysis choices and numerical results)
(commentary)
- conclusion: restate your thesis and
briefly summarize evidence

Use efficient sentences and active voice.

Avoid repeating yourself.

Figures:

- use summary figures to reduce the number
- clear labeling: axes, units, legends
- brief but complete captions pointing out important features.

* you can usually skip data tables if your data is represented in a plot.

References : mainly for complicated or new information. If a formula is very well known, you don't need to cite it. also important equipment specs.

We don't really have anything to cite in this report.