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The objective of the experiment is to solder RC circuits on a printed circuit board and then test the circuit as a low-pass and high-pass filter. To solder the resistor and capacitor, a soldering iron is used by melting metal onto the ends of the resistor and capacitor on a printed circuit board. After soldering, the output voltage given a sine wave input is measured at different frequencies using the oscilloscope. The filters use a function generator with an internal resistance of (50Ω) as the input voltage. The function generator is in series with a $10k\Omega$ resistor and a $1nF$ capacitor. For the low-pass filter, the capacitor's voltage is measured with the oscilloscope. For the high-pass filter, the $10k\Omega$ resistor's voltage is measured by connecting it to the negative terminal of the function generator and measuring with the oscilloscope. After taking the measurements, the transfer function ($H(s) = \frac{V_{out}(s)}{V_{in}(s)}$) for both filters are plotted as a function of frequency on a log-log scale. Lastly, the impulse response is measured by sending a pulse signal that is shorter than the RC time constant. The measured responses are then compared to the theoretical responses.