



Studentsgroup:		Responsible for lab report:
Date:		Other participants
Lecturer:		

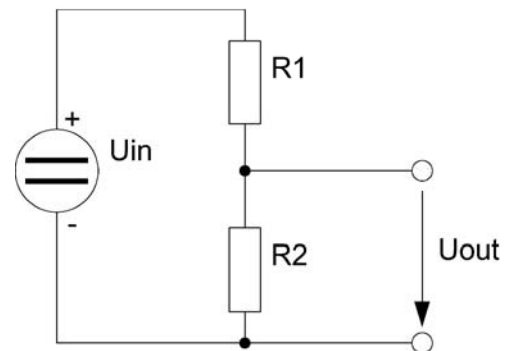
Task 1:

Basic circuits with passive components

1. Voltage divider

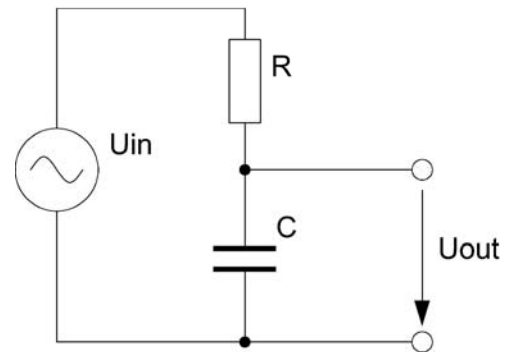
Devise a resistive voltage divider having a division factor of 0:25 (When choosing the order of magnitude for the resistors, consider the matching with the generator, which has a source resistance of 50 Ohms) Check the division factor by measurement

- a) with a DC-voltage of 4 Volts
- b) with an AC-Voltage of 4 Volts rms, varying the frequency from 100 Hz to 10 kHz in a 1-2-5-sequence.



2. R - C - lowpass

Devise an R - C - Lowpass of 1st order for a corner frequency of 1 kHz. Check the transfer factor versus frequency (100 Hz to 10 kHz), using an AC-Voltage of 4 Volts rms.



3. Parallel resonant circuit

Devise a parallel resonant circuit with the resonant frequency of 1 kHz. Check the transfer factor versus frequency (100 Hz 10 kHz), using an AC-voltage of 4 Volts rms.

