



Exercise: Time Domain

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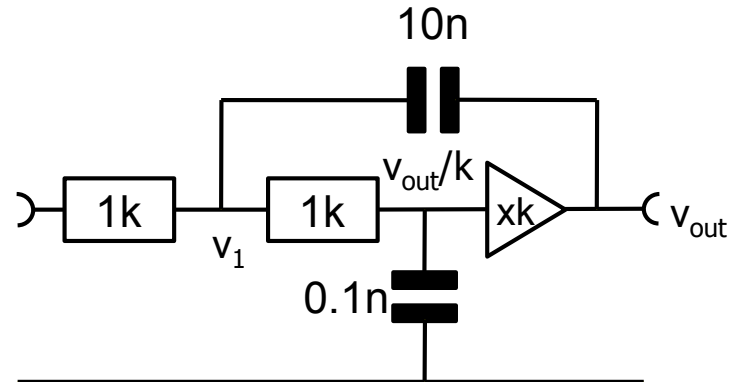
Exercise 1

- A filter is made up of a low-pass and a (buffered) high-pass with same corner frequencies
- What is the time response of this filter to a unit step ?



Exercise 2

- Derive $H[s]$ for the following active filter.



- For which k do you get a divergence ?
- For $k=1$, derive the step response of the circuit
- Simulate the circuit and compare quantitatively.