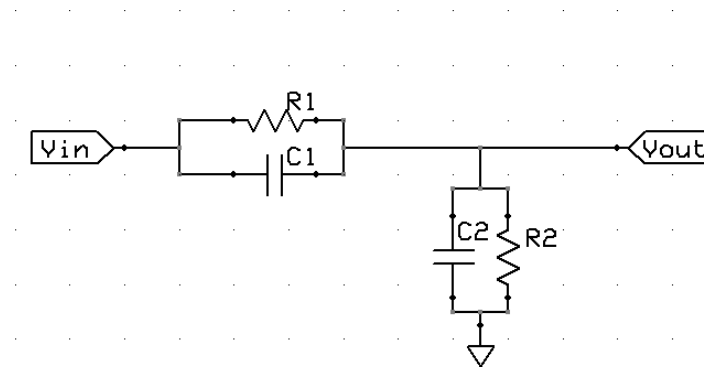


Handout 2

Exercise 1

Analyze the first order circuit schematic which includes a pole and a zero, given in the following figure, and provide its transfer function:



From the calculated transfer function, simulate the frequency response with Excel or Matlab, drawing the amplitude, phase and Nyquist plot under the following set of conditions for the pole frequency (p) and the zero frequency (z):

- $p = 1$ and $z = 10$
- $p = 1$ and $z = 100$
- $z = 1$ and $p = 10$
- $z = 1$ and $p = 100$