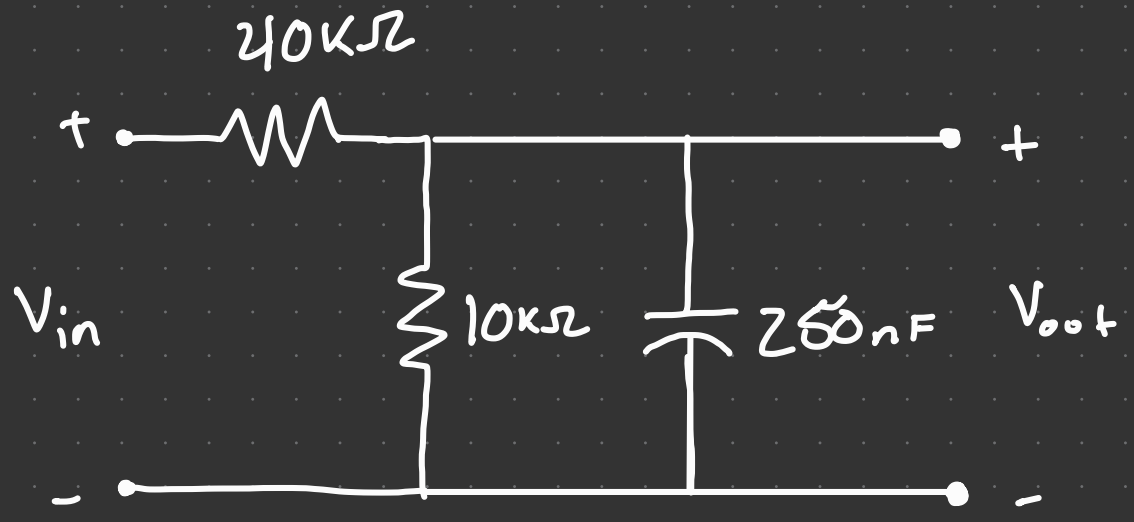
1.) $H(s) = \frac{V_{out}(s)}{V_{in}(s)}$

2.) Find impulse response $h(t)$ $\left(\frac{1}{s+a} = e^{-at}\right)$



1.) $V_{out}(s) = 260nF = \frac{1}{250s}$

$V_{in}(s) = 50K\Omega + 250nF = 50 + \frac{1}{250s}$

$$H(s) = \frac{\frac{1}{250s}}{50 + \frac{1}{250s}} = \frac{1}{S(60)(250) + 1} = \frac{1}{12600s + 1}$$

$$H(s) = \frac{1}{12,600s + 1}$$

2.) $h(t) = 12,500e^{-t}$