RC circuit
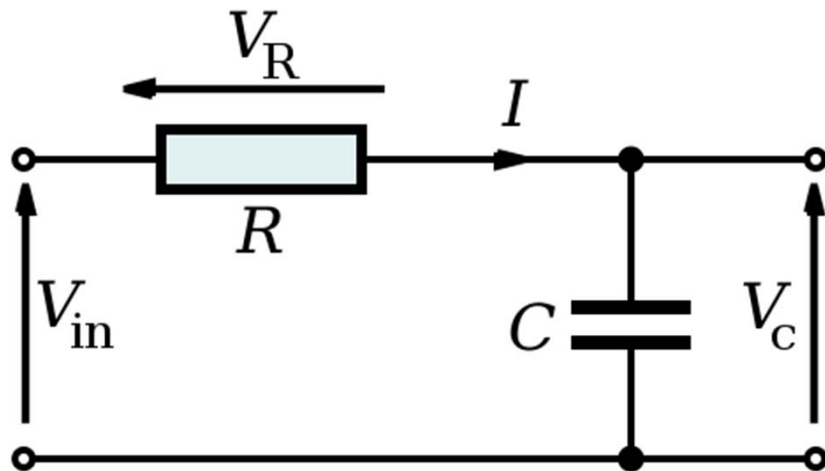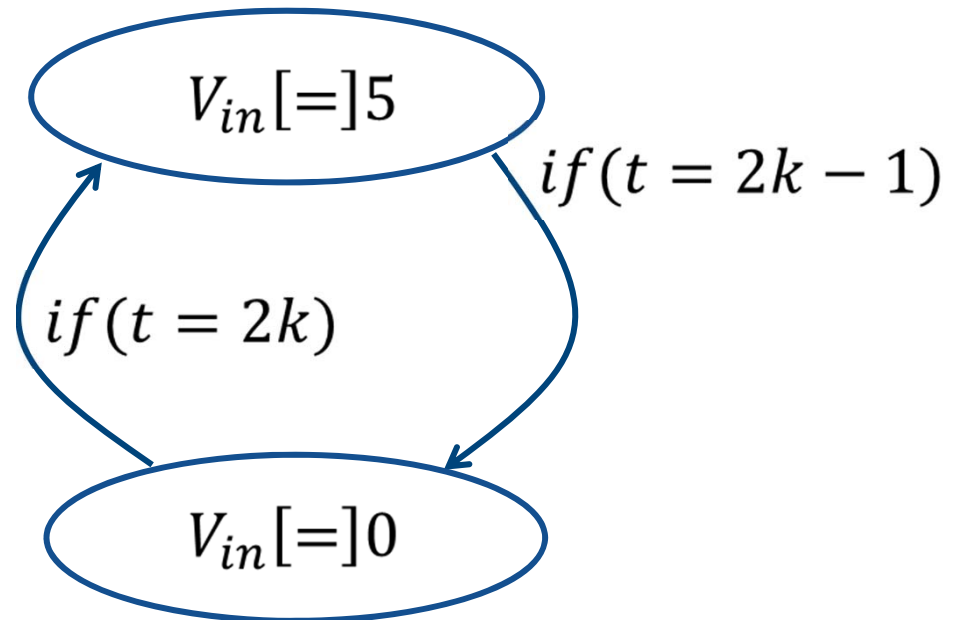
For $k = 1, 2, \ldots$

Mode 1: charge

$$\dot{V_c} [=] \frac{V_{in} - V_c}{RC}$$

$V_{in}[=]5$

$if(t = 2k - 1)$

$if(t = 2k)$

$V_{in}[=]0$

Mode 2: discharge