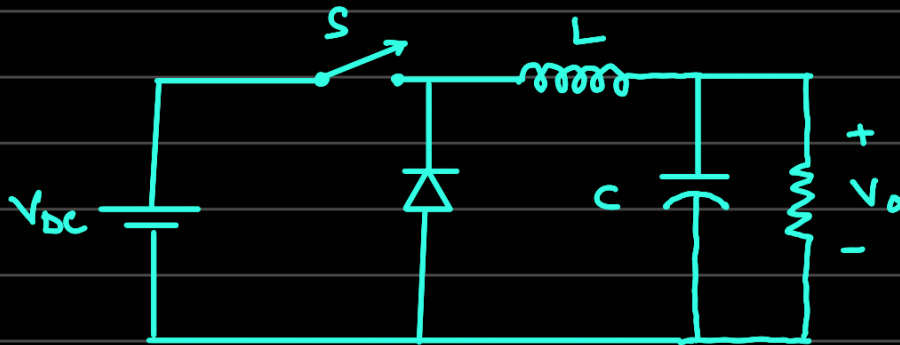


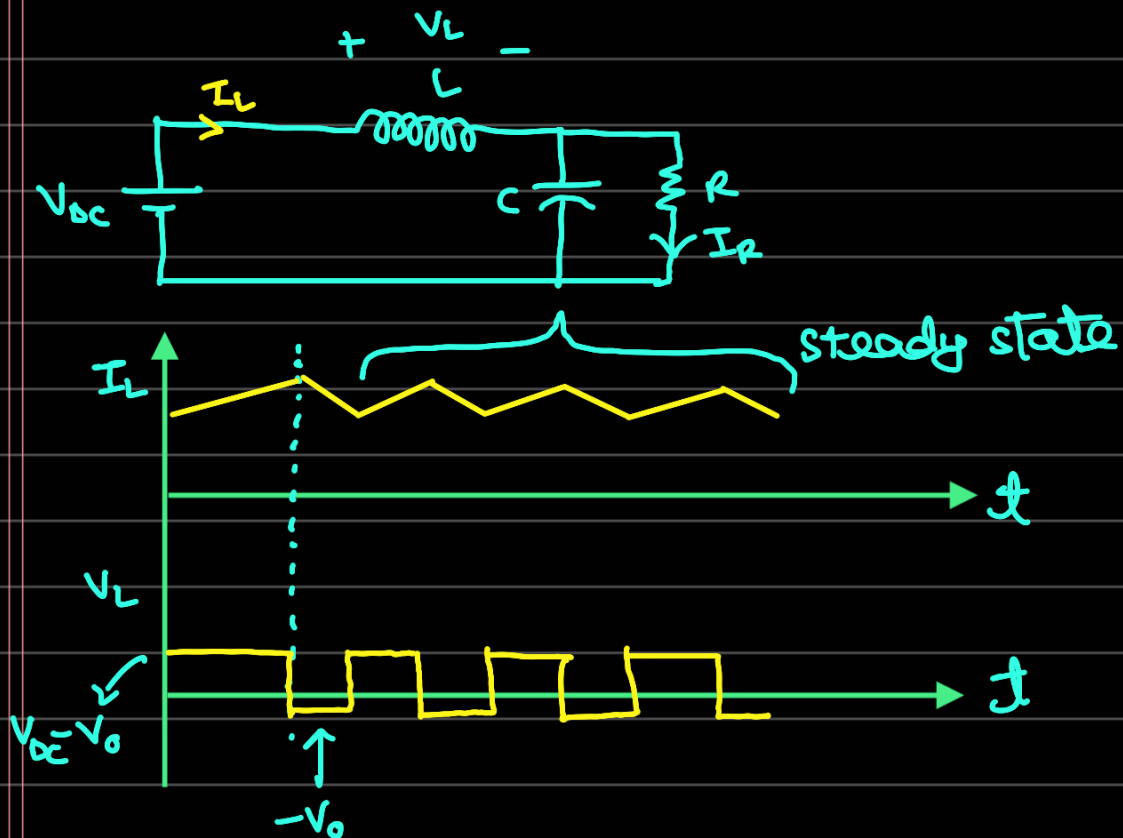
Day-12

→ DC-to-DC converters:



Buck Converter
(Buck means reducing)

When S is on:



$$\begin{aligned} \text{Area} &= DT(V_{dc} - V_o) - V_o(1-D)T \\ &= V_{dc}DT - DTV_o - V_oT + V_oDT \\ &= T(DV_{dc} - V_o) \end{aligned}$$