



Course of "Automatic Control Systems"  
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# Problems: Input-output and state-space representations

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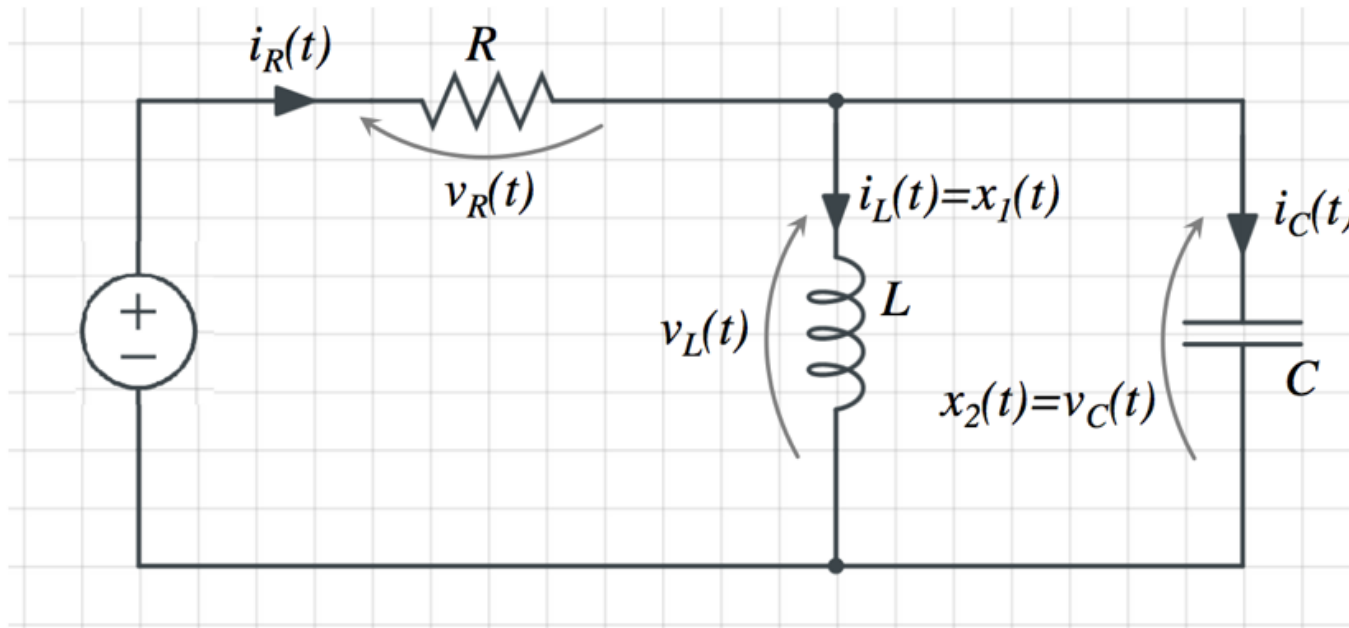
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Team code: **uxbsz19**

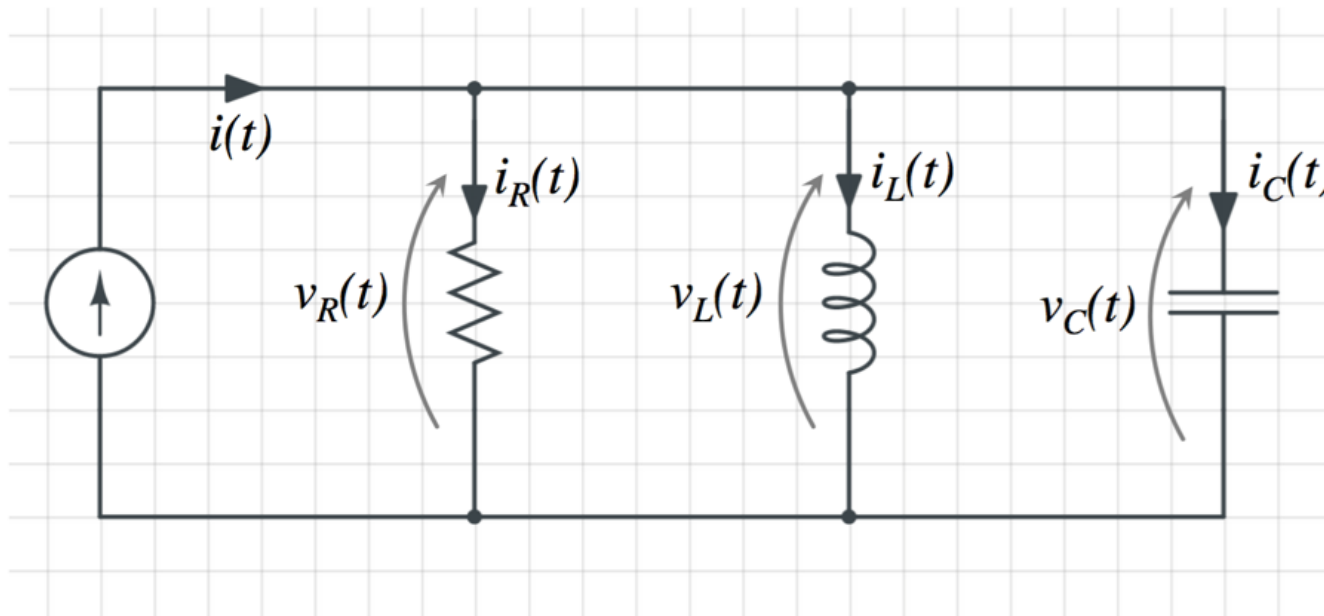
# Problem -1

Find the input-output (i-u) and state-space (s-s) representations of the following circuit:



- $u = v$
- $y = v_C$

**Find the input-output (i-u) and state-space (s-s) representations of the following circuit:**



$$\mathbf{u}(t) = \mathbf{i}(t)$$

$$\mathbf{y}(t) = \mathbf{i}_L(t)$$