

# Soundness of reset workflow nets

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LiCS 2024

Tallin

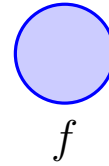
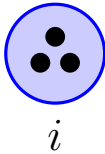
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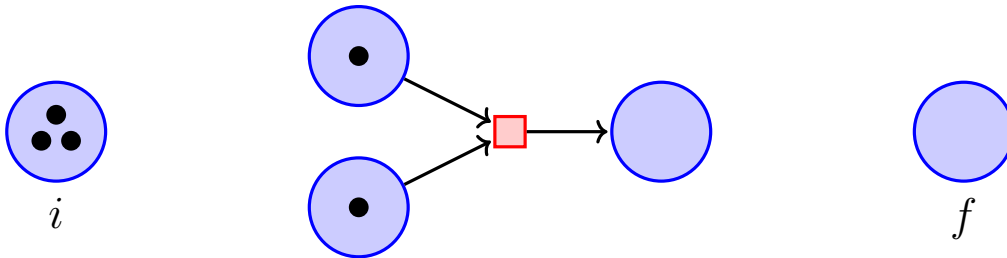
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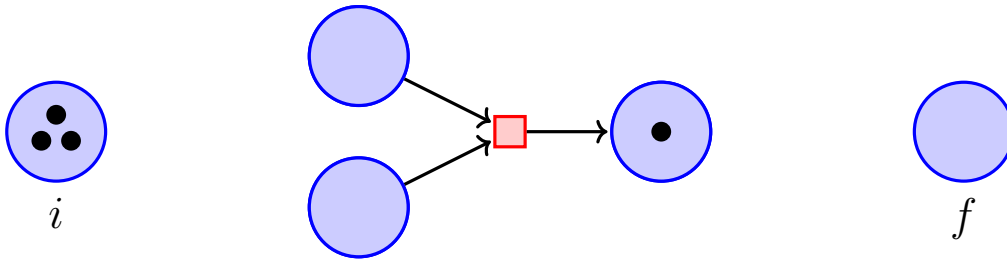
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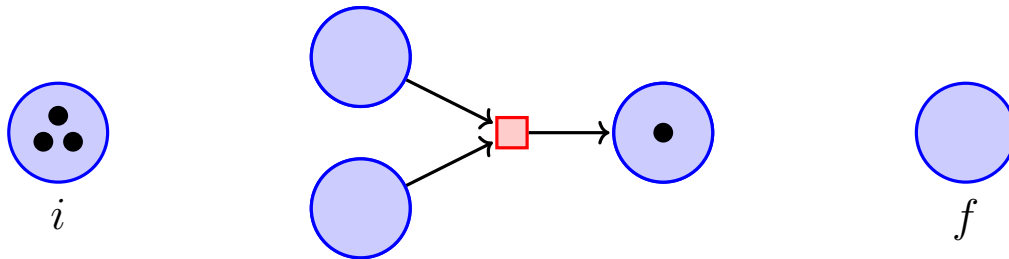


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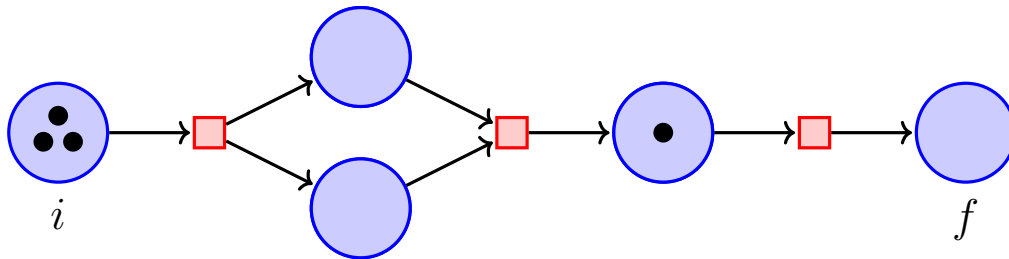
You cannot: add tokens to  $i$  and remove tokens from  $f$



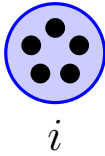
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Petri nets for business processes [van der Aalst, 1997]

- Processes are initialised and finalised
- There are some transitions moving the tokens  
You cannot: add tokens to  $i$  and remove tokens from  $f$
- Everything is on a path from  $i$  to  $f$

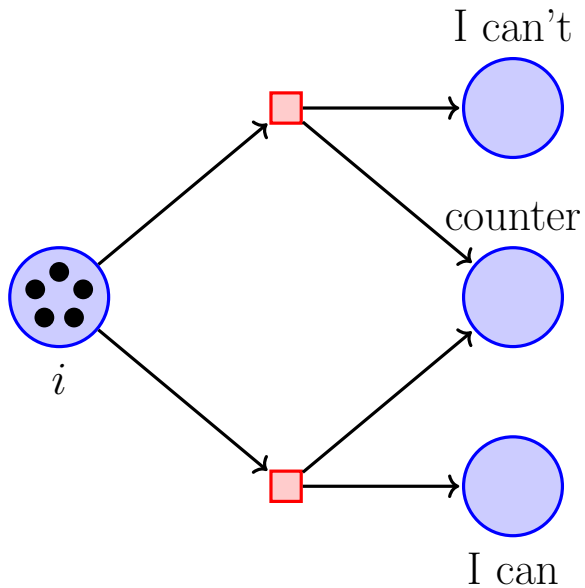


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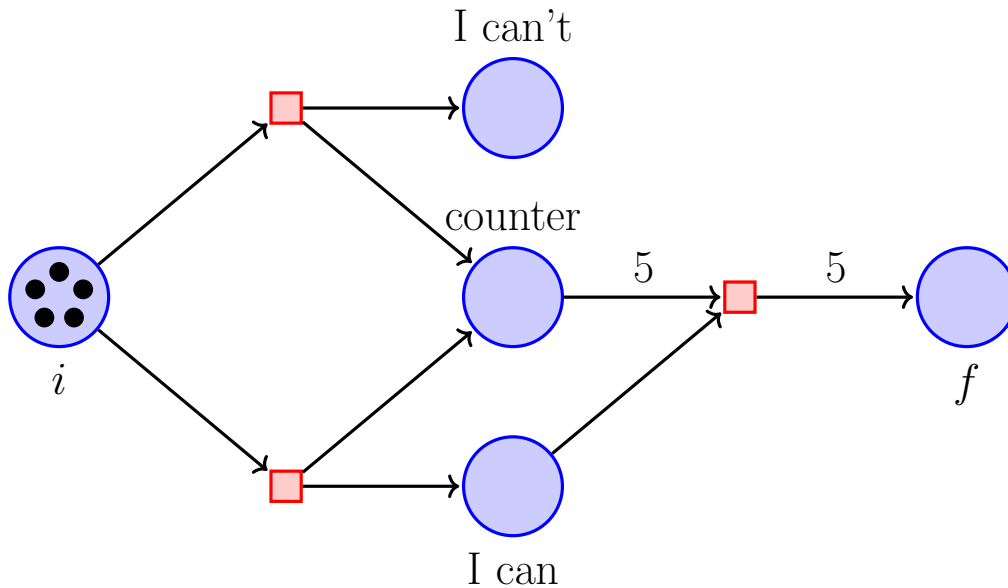




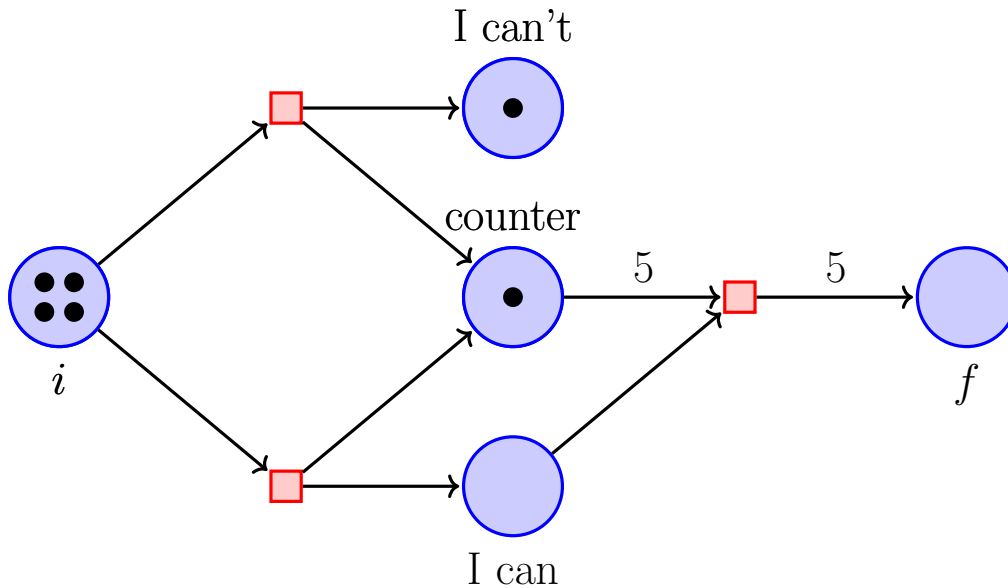
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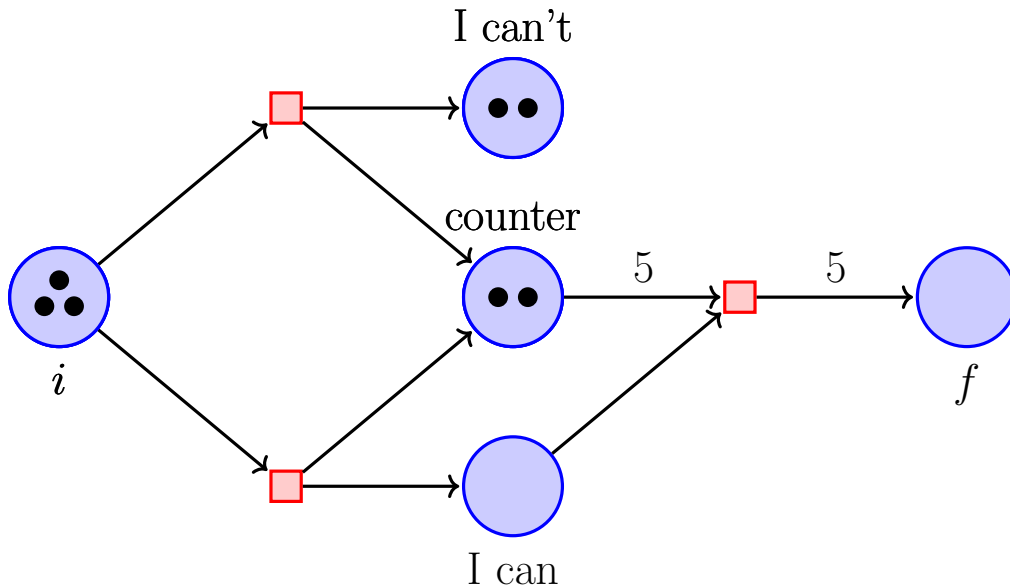
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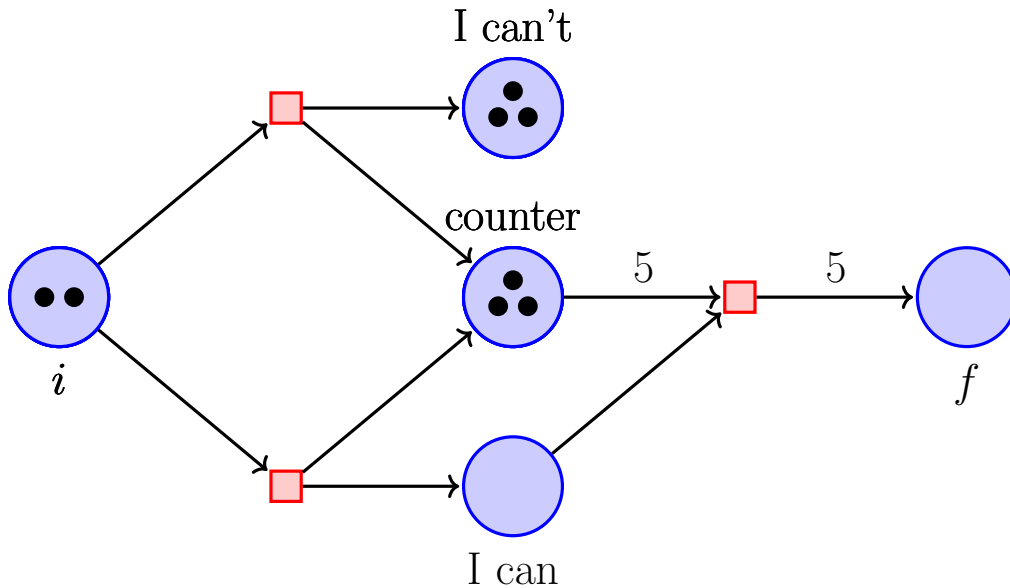
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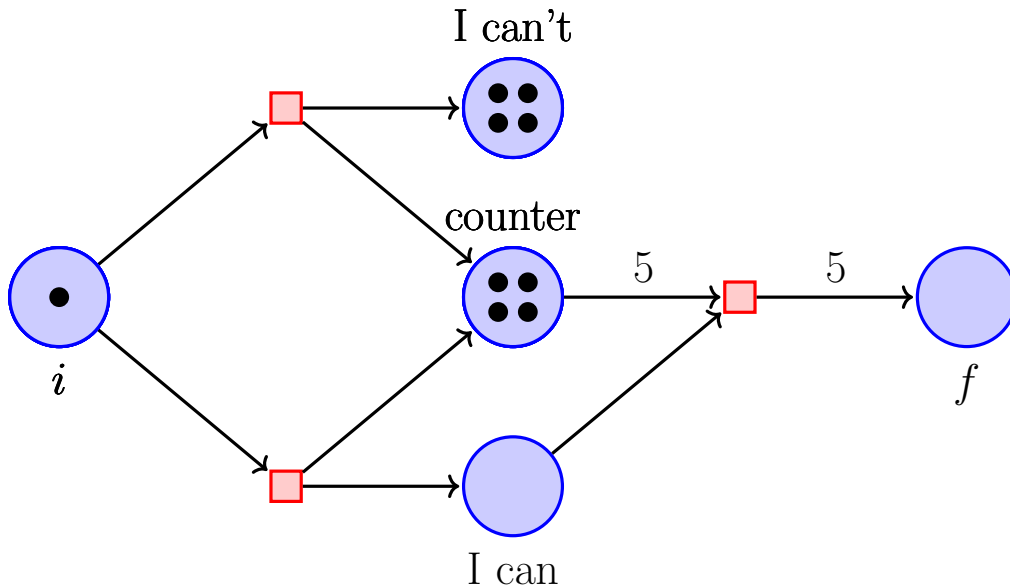
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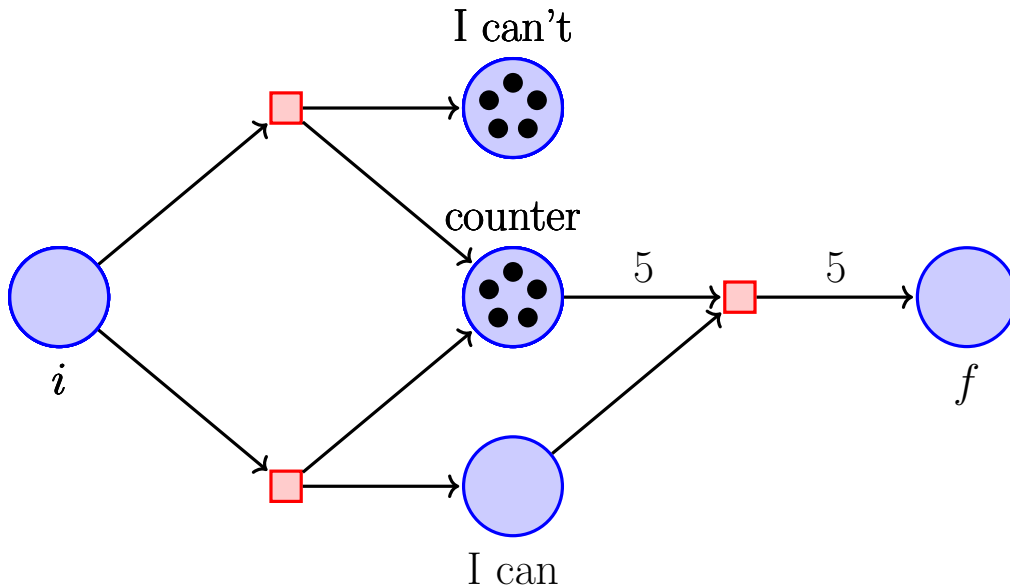
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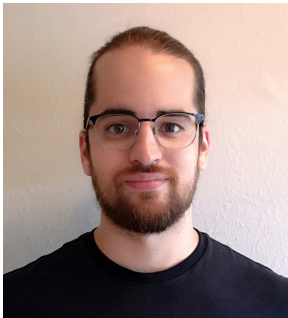
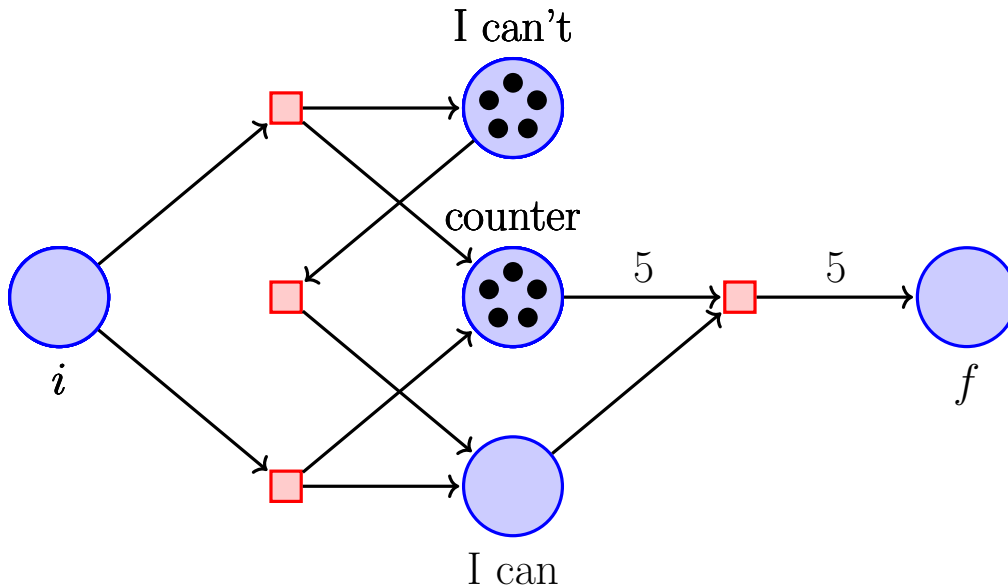
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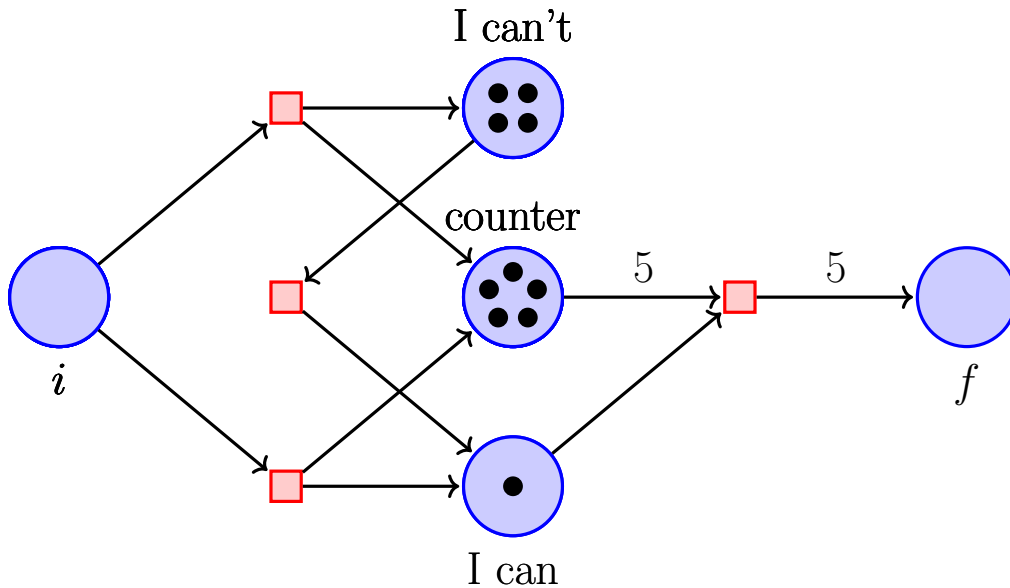


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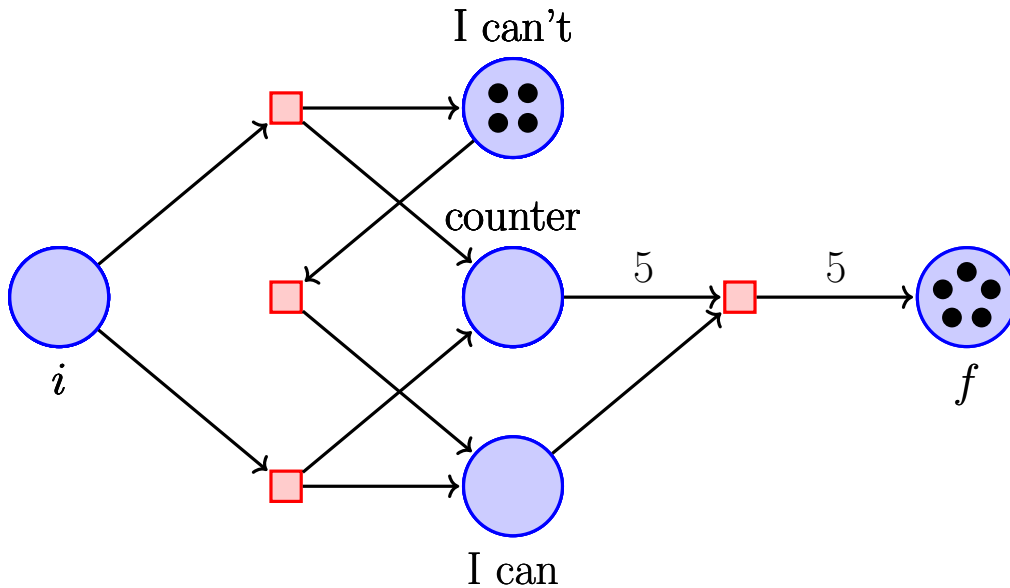




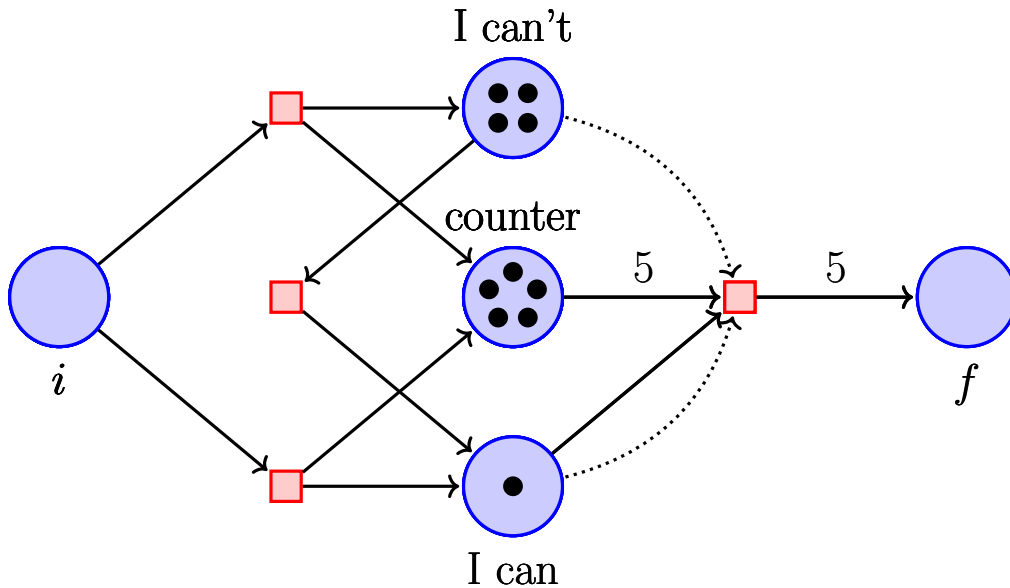
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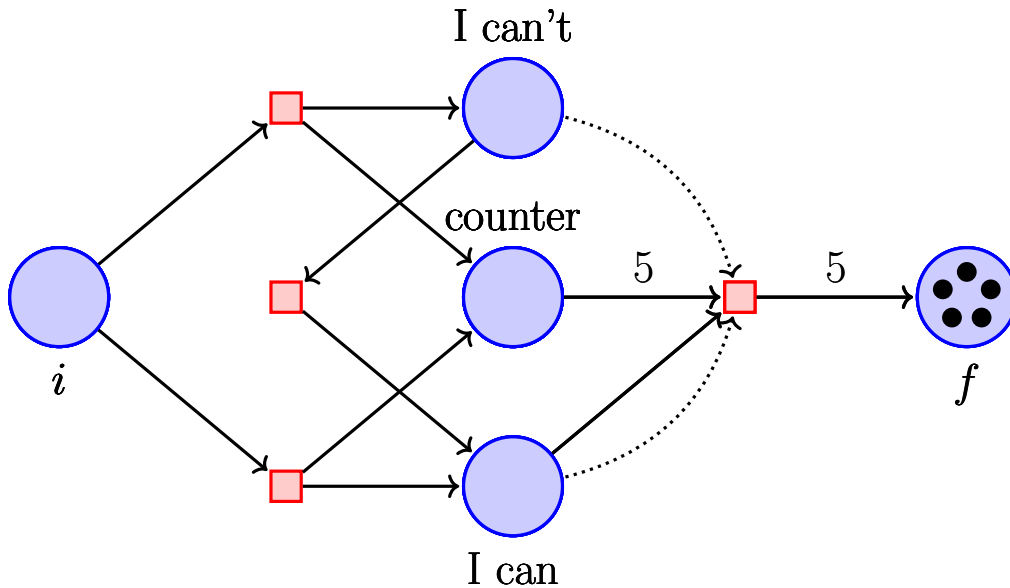
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(In Ackermann time)

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- What about workflow nets with a pushdown stack?