# Tutorials 7

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## 1  Exercise

Consider linear recursive sequences (LRS) over the semiring $(\mathbb{Q}, +, \cdot, 0, 1)$. Show an example of two LRS $\langle u_n \rangle$, $\langle v_n \rangle$ such that $\langle w_n \rangle$ defined as $w_n = \min(u_n, v_n)$ is not an LRS.

## 2  Exercise

Assume that the Skolem-Mahler-Lech theorem works for LRS over $\mathbb{Z}$. Extend it to LRS over $\mathbb{Q}$.