Languages, automata and computation II
Homework 3 (draft version)

Problems: deadline XX/01/2025

Problem 1. Show that the following problem is decidable:

1. **Input.** A deterministic register automaton, defining language $L \subseteq \mathbb{A}^*$;
2. **Question.** Does the language satisfy

$$w \in L \quad \Leftrightarrow \quad \sigma(w) \in L$$

for every function $\sigma : \mathbb{A} \to \mathbb{A}$, not necessarily a permutation.

Star problems

Open problems