**Applied Automata Theory** (WS 2014/2015)

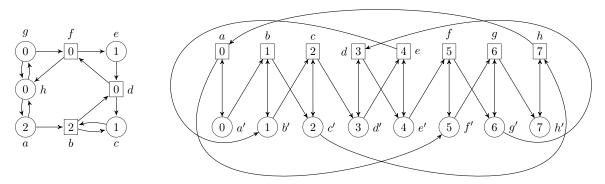
Technische Universität Kaiserslautern

Due: Tue, Feb 3

## **Exercise Sheet 12**

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For this sheet, consider the following parity games:



Reminder: positions of A are  $\bigcirc s$  and positions of P are  $\square s$ .

## **Exercise 12.1 Parity Game Attractors**

- (a) Compute the attractor of  $\{a, b\}$  for player A in the left hand side game.
- (b) Compute the attractor of  $\{c, c'\}$  for player A in the right thand side game.

## **Exercise 12.2 Parity Game Strategies**

- (a) Give a positional strategy of P winning from a in the right hand side game.
- (b) Give a positional strategy of A winning from b in the right hand side game.

## **Exercise 12.3 Parity Game Determinacy**

Use the McNZSolver procedure from the lecture notes to solve the parity games.