Theoretische Informatik Aufgabenblatt 3 Löesung

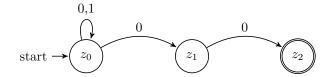
Lukas Pensler und Simon Struck

6. Dezember 2018

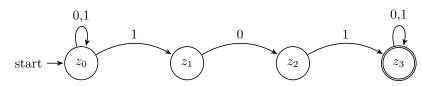
Aufgabe 1 1

a) Weil die gleichen eingaben zu verschiedenen Ergebnissen Ergbenissen fuehren koennen.

b) A1:



A2:



c)

$$\begin{split} L_{NEA}(A1) &= \{\omega 01 | \omega \in \{0,1\}^*\} \\ L_{NEA}(A2) &= \{\omega^* 101 \omega^* | \omega \in \{0,1\}\} \end{split}$$

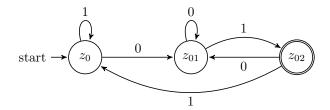
d) A1:

$$\begin{array}{c|cccc} & 0 & 1 \\ \hline z_0 & z_{01} & z_0 \\ z_{01} & z_{01} & z_{02} \\ z_{02E} & z_{01} & z_0 \end{array}$$

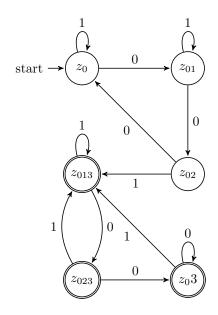
A2:

	U	1
z_0	z_0	z_{01}
z_{01}	z_{02}	z_{01}
z_{02}	z_0	z_{013}
z_{013E}	z_{023}	z_{013}
z_{023E}	z_{03}	z_{013}
z_{03E}	z_{03}	z_{013}
Minimiert:		
	0	1
z_0	z_0	z_{01}
z_{01}	z_{02}	z_{01}
z_{02}	z_0	z_{013}
z_{0123E}	z_{0123}	z_{0123}

A1:



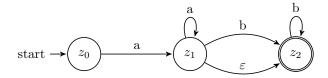
A2:



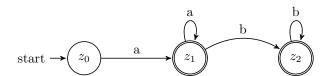
2 Aufgabe 2

a)

$$L = \{aa^{nb^m|n,m \ge 0}\}$$



b) NEA:



DEA:

