

Theoretische Informatik
Aufgabenblatt 3 Loesung

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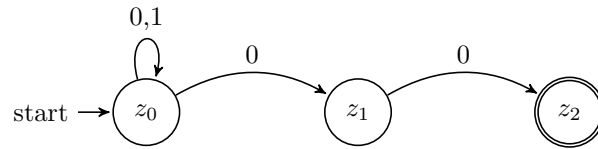
4. Dezember 2018

1 Aufgabe 1

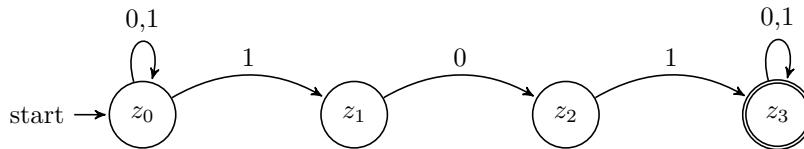
a) Weil die gleichen eingaben zu verschiedenen Ergebnissen Ergbenissen fuehren koennen.

b)

A1:



A2:



c)

$$L_{NEA}(A1) = \{\omega 01 | \omega \in \{0, 1\}^*\}$$

$$L_{NEA}(A2) = \{\omega^* 101 \omega^* | \omega \in \{0, 1\}^*\}$$

d)

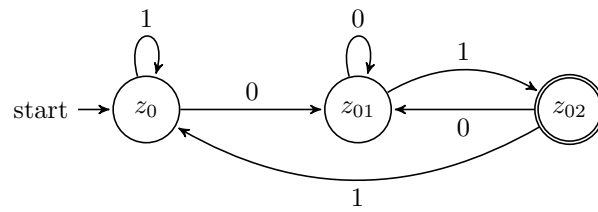
A1:

	0	1
z_0	z_{01}	z_0
z_{01}	z_{01}	z_{02}
z_{02E}	z_{01}	z_0

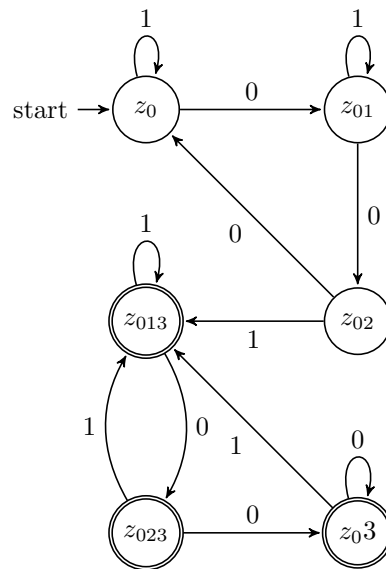
A2:

	0	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}

A1:



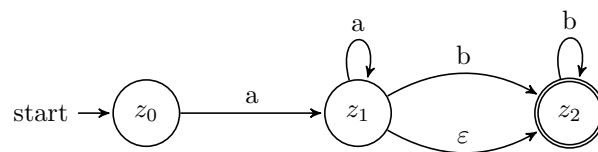
A2:



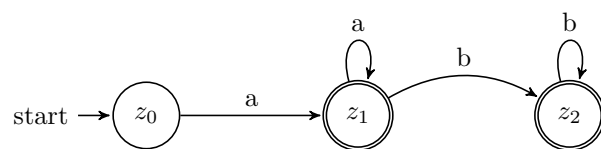
2 Aufgabe 2

a)

$$L = \{aa^n b^m \mid n, m \geq 0\}$$



b) NEA:



DEA:

