

28/09/11

Πορτιοσπιο 3^ο

Μικρο Ακέραιος 2 από 1^η Σειρά Ακέραιων

$$f_{i+2} = f_{i+1} + f_i$$

$$f_0 = 0$$

$$f_1 = 1$$

$$f_n = f_{n-i} f_{i+1} + f_{n-i} f_i \quad 0 \leq i \leq n-1$$

Βασικ: $i=0$

$$f_n = f_n f_1 + f_{n-1} f_0 = f_n$$

Ε.Υ: $i=k$

$$f_n = \underbrace{f_{n-k} f_{k+1}}_2 + \underbrace{f_{n-k-1} f_k}_1$$

ΕΒ: $i=k+1$

$$f_{n-(k+1)} f_{(k+1)+1} + f_{n-(k+1)-1} f_{k+1}$$

$$= f_{n-k-1} f_{k+2} + f_{n-k-2} f_{k+1}$$

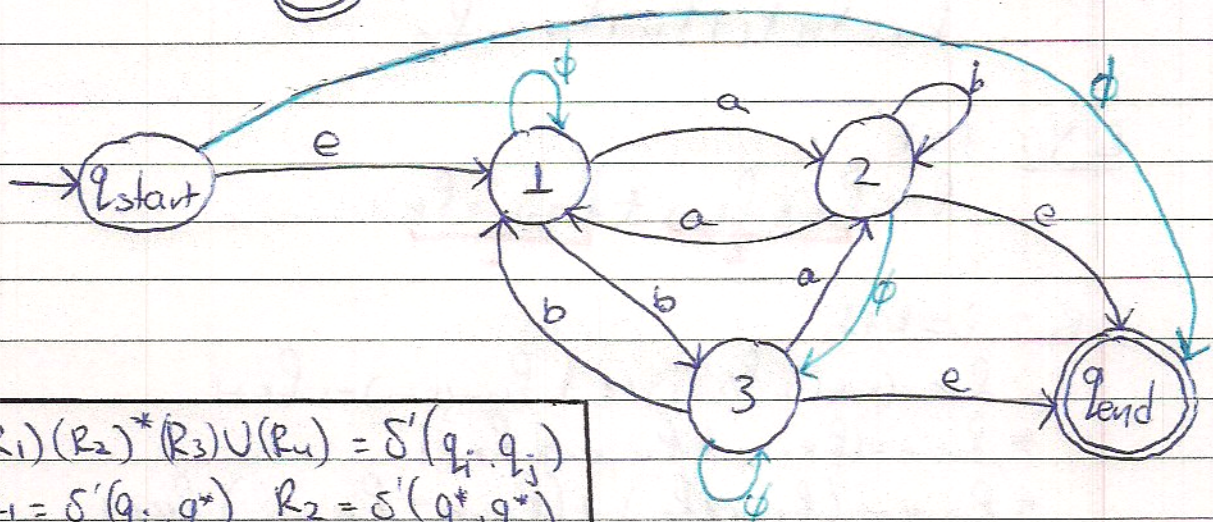
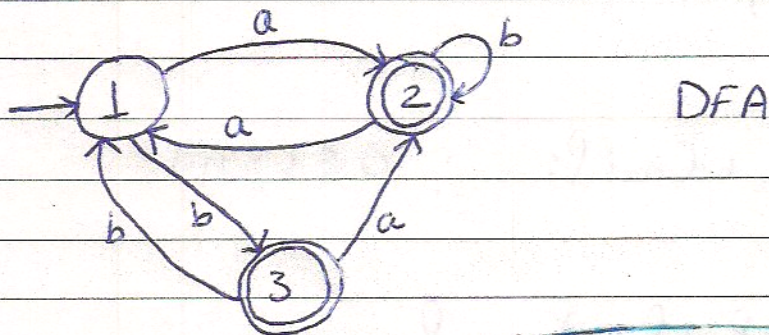
$$= f_{n-k-1} (f_{k+1} + f_k) + (f_{n-k} - f_{n-k-1}) f_{k+1}$$

$$= \cancel{f_{n-k-1} f_{k+1}} + \underbrace{f_{n-k-1} f_k}_1 + \underbrace{f_{n-k} f_{k+1}}_2 - \cancel{f_{n-k-1} f_{k+1}}$$

$$= f_n$$



Μετατροπή σε GNFA



$$(R_1)(R_2)^*(R_3) \cup (R_4) = \delta'(q_i, q_j)$$

$$R_1 = \delta'(q_i, q^*) \quad R_2 = \delta'(q^*, q^*)$$

$$R_3 = \delta'(q^*, q_j) \quad R_4 = \delta'(q_i, q_j)$$

Αφαιρούμε την κατάσταση 1

$$\delta'(q_3, q_{end}) = e$$

$$\delta'(q_{start}, q_3) = e\phi^*b \cup \phi$$

$$= eeb = b$$

$$\phi^* = e$$

$$\delta'(q_{start}, q_2) = e\phi^*a \cup \phi = a$$

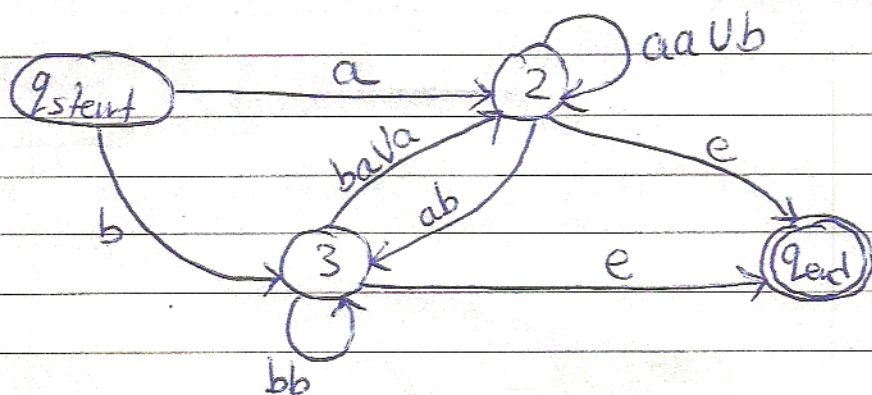
$$\delta'(q_3, q_2) = b\phi^*a \cup a = ba \cup a$$

$$\delta'(q_2, q_3) = a\phi^*b \cup \phi = ab$$

$$\delta'(q_2, q_{end}) = a\phi^*\phi \cup e = e$$

$$\delta'(q_2, q_2) = a \phi^* a \cup b = aa \cup b$$

$$\delta'(q_2, q_3) = b \phi b \cup \phi = bb$$



Abkürzungen einzeichnen

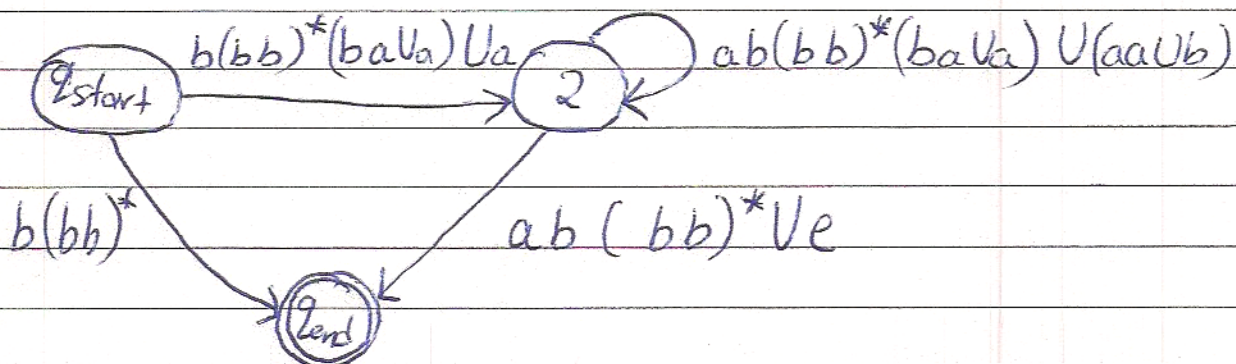
$$Q = \{q_{\text{start}}, q_{\text{end}}, 2\}$$

$$\delta'(q_{\text{start}}, q_2) = b(bb)^*(ba \cup a) \cup a$$

$$\delta'(q_2, q_{\text{end}}) = ab(bb)^*e \cup e = ab(bb)^* \cup e$$

$$\delta'(q_2, q_2) = ab(bb)^*(ba \cup a) \cup (aa \cup b)$$

$$\delta'(q_{\text{start}}, q_{\text{end}}) = b(bb)^*e \cup \phi = b(bb)^*$$



Apparatuur en configuratie 2

$$Q = \{q_{\text{start}}, q_{\text{end}}\}$$

$$\delta'(q_{\text{start}}, q_{\text{end}}) = \underbrace{(b(bb)^*(ba \cup b) \cup a)}_{R_1} \cdot \underbrace{(ab(bb)^*(ba \cup a) \cup (aa \cup b))^*}_{R_2} \\ \cdot \underbrace{(ab(bb)^* \cup e)}_{R_3} \cup \underbrace{(b(bb)^*)}_{R_4}$$

