2 Languages & DFAs

- λ represents empty string.
- $(ab)^2 = abab$
  - $(ab)^0 = \lambda$

$$\sum = \{a, b\} \tag{1}$$

$$\sum * = \{\lambda, a, b, aa, bb, \ldots\} \tag{2}$$

$$\sum + = \sum * - \{\lambda\} \tag{3}$$

- δ can be described by: `state delta(state q, char ch);`
  - δ^* acts on the a string, calling delta
  - `state deltaStar(state q, string s);`
- These functions are **one-to-one**.
  - However there can be states in Q that no one uses.
- For the transition graph in the PDF, here is the table.

	0	1
q_0	q_0	q_1
q_1	q_2	q_1
q_2	q_2	q_2

-