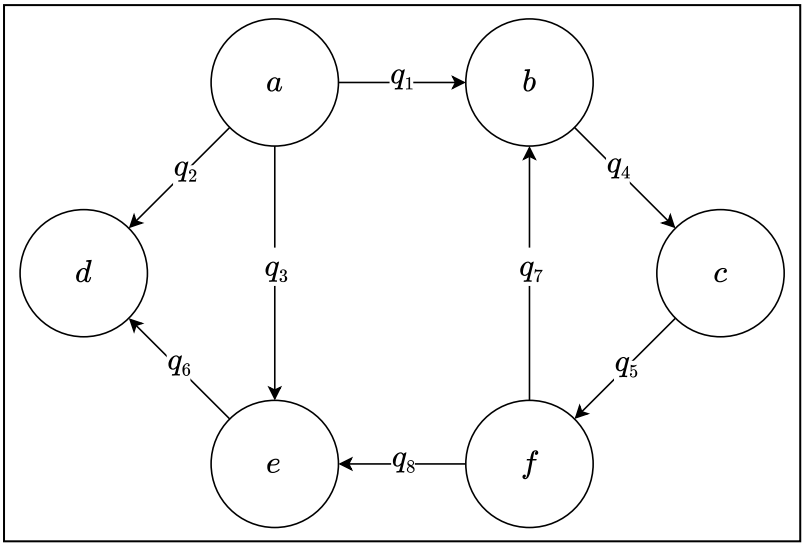
Diskrētās struktūras datorzinātnē
Praktiskā nodarbība. 24.11.25

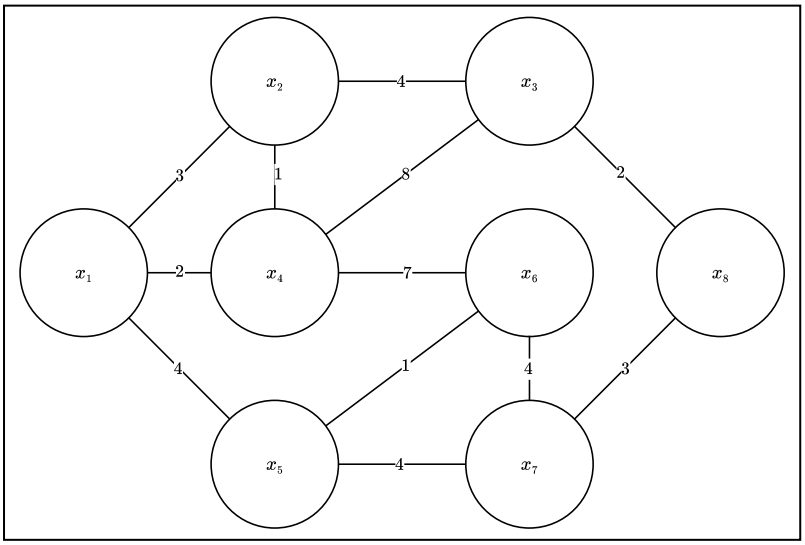


$R =$

	a	b	c	d	e	f
a	0	1	0	1	1	0
b	0	0	1	0	0	0
c	0	0	0	0	0	1
d	0	0	0	0	0	0
e	0	0	0	1	0	0
f	0	1	0	0	1	0

$B =$

	q_1	q_2	q_3	q_4	q_5	q_6	q_7	q_8
a	+	+	+	0	0	0	0	0
b	−	0	0	+	0	0	−	0
c	0	0	0	−	+	0	0	0
d	0	−	0	0	0	−	0	0
e	0	0	−	0	0	+	0	−
f	0	0	0	0	−	0	+	+



$l(x_1) = 0$
$l(x_2) = l(x_3) = l(x_4) = l(x_5) = l(x_6) = l(x_7) = l(x_8) = \infty$
$p = x_1$ ¶1
$V_i = \Gamma(p) = \Gamma^+(x_1) = x_2, x_4, x_5$
$l(V_i) = \min(l(V_i), l(p) + \omega(p_i v_i))$
$l(x_2) = \min(\infty, 0 + 3) = 3$
$l(x_4) = \min(\infty, 0 + 2) = 2$
$l(x_5) = \min(\infty, 0 + 4) = 4$

x_1^*	x_2	x_3	x_4	x_5	x_6	x_7	x_8
0^*	3	∞	2	4	∞	∞	∞

$p = x_4$ ¶2
$V_i = \Gamma^+(x_4) = x_1^*, x_2, x_3, x_6$
$l(x_2) = \min(3, 2 + 1) = 3$
$l(x_3) = \min(\infty, 2 + 8) = 10$
$l(x_6) = \min(\infty, 2 + 7) = 9$

x_1^*	x_2^*	x_3	x_4^*	x_5	x_6	x_7	x_8
0^*	3^*	10	2^*	4	9	∞	∞

$p = x_2$ ¶3
$\Gamma^+(x_2) = x_1^*, x_3, x_4^*$
$l(x_3) = \min(10, 3 + 4) = 7$

x_1^*	x_2^*	x_3	x_4^*	x_5	x_6	x_7	x_8
0^*	3^*	7	2^*	4	9	∞	∞

$p = x_5$ ¶4
$\Gamma^+(x_5) = x_1^*, x_6, x_7$
$l(x_6) = \min(9, 4 + 1) = 5$
$l(x_7) = \min(\infty, 4 + 4) = 8$

x_1^*	x_2^*	x_3	x_4^*	x_5^*	x_6	x_7	x_8
0^*	3^*	7	2^*	4^*	5	8	∞

$p = x_6$ ¶5
$\Gamma^+(x_6) = x_3, x_4^*, x_5^*, x_7$
$l(x_3) = \min(7, 5 + 1) = 6$
$l(x_7) = \min()$