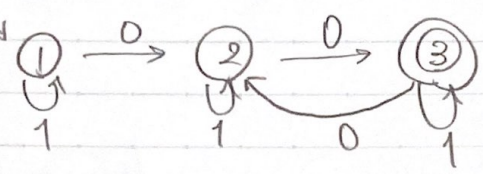
計算理論 第3回 ミニレポート課題 3-2 09B19025 小林亮太



(1) $R_{1,1}^{(0)} = 1$, $R_{1,2}^{(0)} = 0$, $R_{1,3}^{(0)} = \emptyset$,
$R_{2,1}^{(0)} = \emptyset$, $R_{2,2}^{(0)} = 1$, $R_{2,3}^{(0)} = 0$,
$R_{3,1}^{(0)} = \emptyset$, $R_{3,2}^{(0)} = 0$, $R_{3,3}^{(0)} = 1$ //

(2) $R_{1,1}^{(1)} = 1^*$, $R_{1,2}^{(1)} = 0$, $R_{1,3}^{(1)} = \emptyset$,
$R_{2,1}^{(1)} = \emptyset$, $R_{2,2}^{(1)} = 1$, $R_{2,3}^{(1)} = 0$,
$R_{3,1}^{(1)} = \emptyset$, $R_{3,2}^{(1)} = 0$, $R_{3,3}^{(1)} = 1$ //

(3) $R_{1,1}^{(2)} = 1^*$, $R_{1,2}^{(2)} = 0 + 01^+$, $R_{1,3}^{(2)} = 01^*0$,
$R_{2,1}^{(2)} = \emptyset$, $R_{2,2}^{(2)} = 1^+$, $R_{2,3}^{(2)} = 0 + 1^+0$,
$R_{3,1}^{(2)} = \emptyset$, $R_{3,2}^{(2)} = 0 + 01^+$, $R_{3,3}^{(2)} = 1 + 01^*0$ //

(4) $R_{1,3}^{(3)} = R_{1,3}^{(2)} + R_{1,3}^{(2)} \cdot R_{3,3}^{(2)*} \cdot R_{3,3}^{(2)}$
$= 01^*0 + 01^*0 \cdot (1+01^*0)^+ (1+01^*0)$
$= 01^*0 (\varepsilon + (1+01^*0)^+)$
$= 01^*0 (1+01^*0)^*$ //