

Exo 2 Question 2 Solution 2:

Machine MT Calculant $f = \lambda xy. sg(x+y)$

$$MT = MT_{sg} \circ MT_{\oplus}$$

$$MT_{\oplus} : \overset{I_{\oplus}}{\{ q_0 \vdash q_0 \rightarrow q_0 * \vdash q_1 \rightarrow q_1 \vdash q_1 \rightarrow q_1 \circ G q_2 \rightarrow q_2 \circ D q_4 \leftarrow q_2 \vdash q_3 \leftarrow q_2 \circ D q_3 \leftarrow q_2 \vdash G q_2 \rightarrow q_4 \vdash q_4 \rightarrow q_4 \circ D q_f \}}$$

$$MT_{sg} : \overset{I_{sg}}{\{ r_0 \vdash r_1 \rightarrow r_1 \circ D r_2 \xrightarrow{x=0} r_2 \vdash r_f \leftarrow r_2 \vdash r_3 \xrightarrow{x \neq 0} r_3 \circ D r_4 \rightarrow r_4 \vdash r_5 \rightarrow r_4 \vdash r_3 \rightarrow r_5 \vdash G r_2 \}}$$

$MT_{\oplus}$ ne calcule que la fonction $\oplus$. MT_{sg} ne calcule que la fonction sg . MT ne calcule que f .

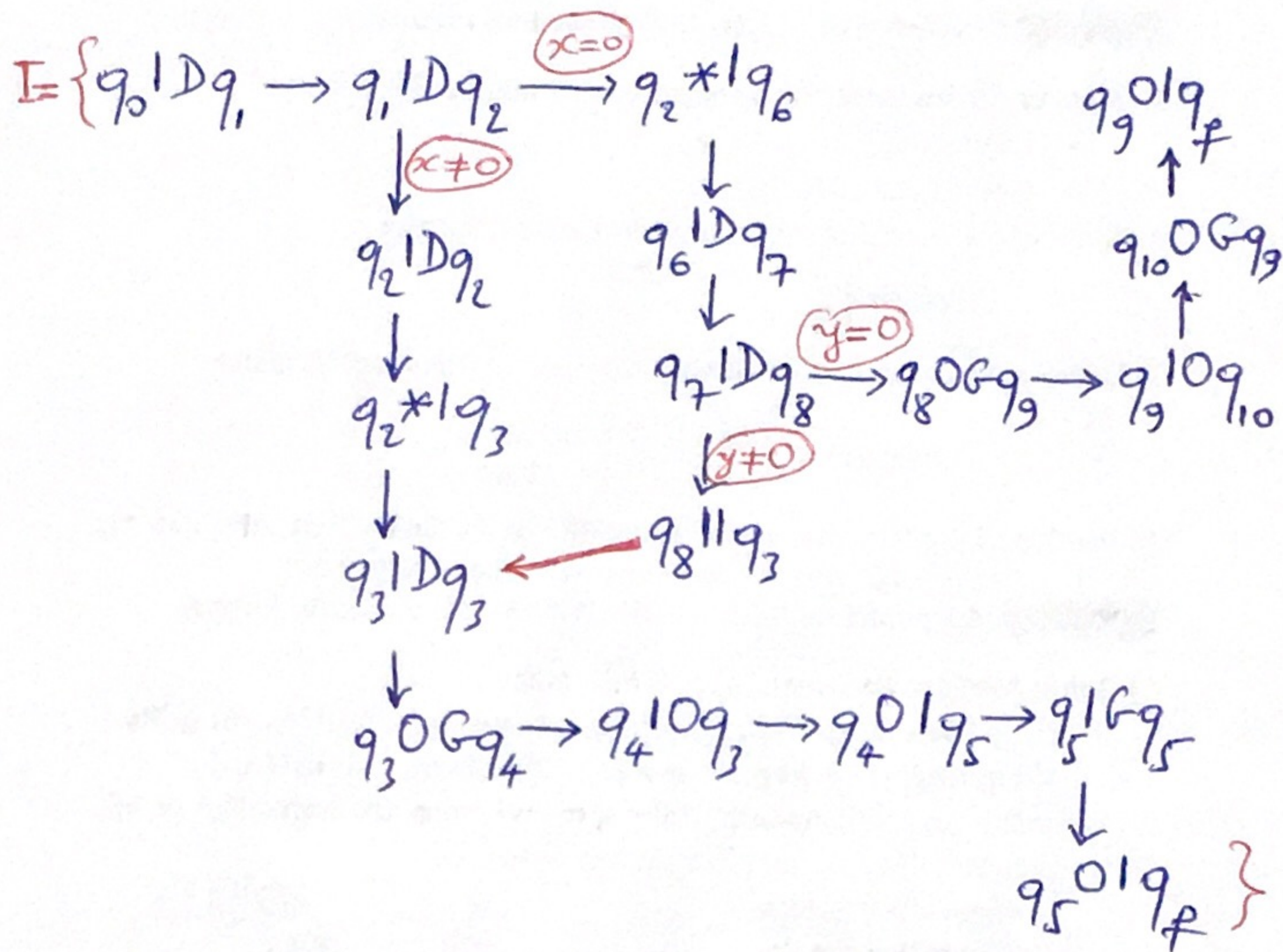
Instructions de MT :

$$I = I_{\oplus} \cup I_{sg} \cup \{ q_f \parallel r_0 \}$$

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Exo 2 Question 2 Solution 3:

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$$\Pi T = \langle S, E, I \rangle$$

$$S = \{0, 1, *\}$$

$$E = \{q_0, q_1, \dots, q_{10}, q_f\}$$

MT ne calcule que la fonction $f = \lambda x y. f_g(x+y)$.