

# Solutions of the practice lessons of Theory of automata and Formal languages

Computer Science and Computer Language Department  
University of Málaga

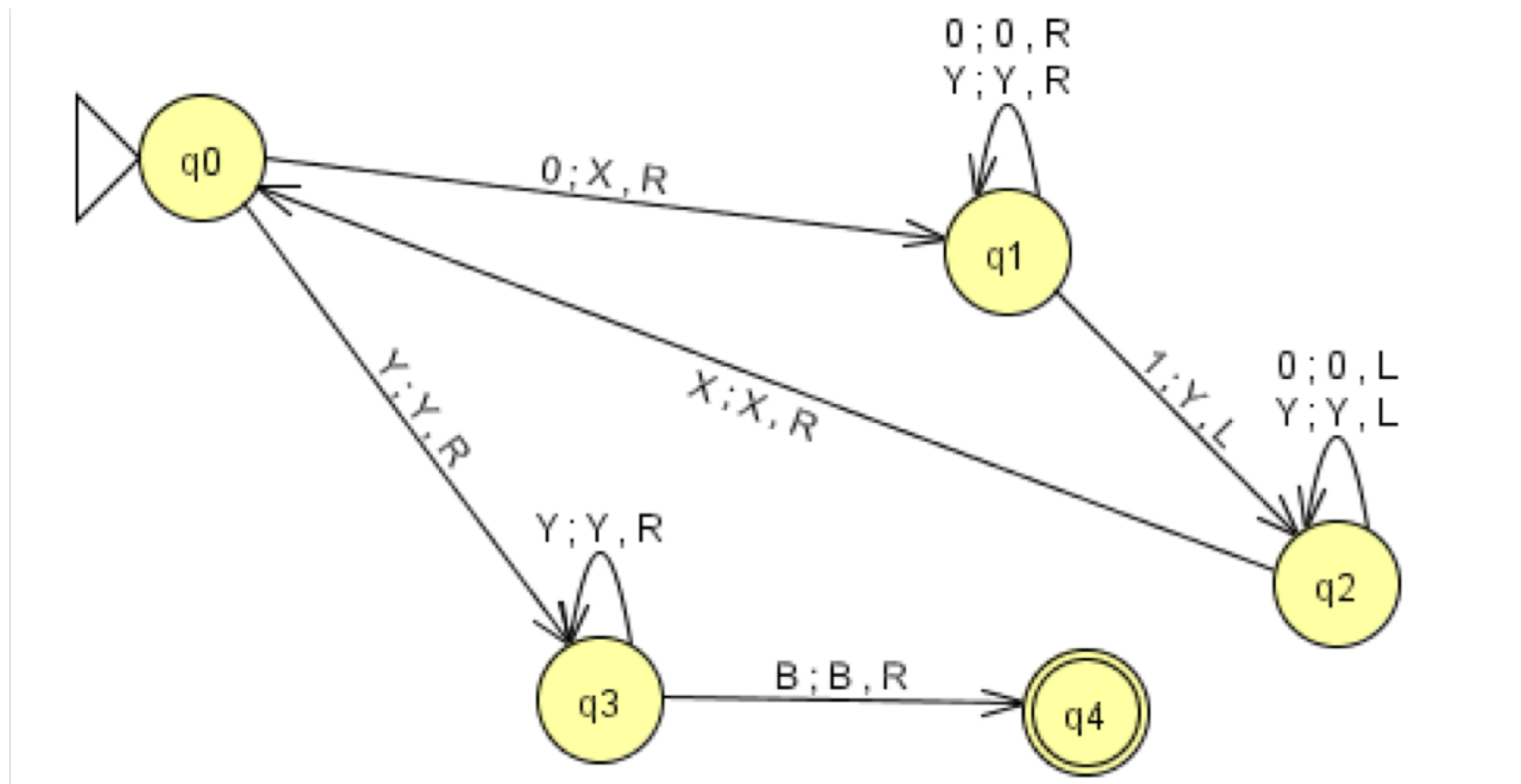
Carlos Gálvez Bravo

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# Practice 3

# Activities

1. Define the TM solution of exercise 3.4 of the problem list and test its correct behaviour.



2. Define a recursive function for the sum of three values.

$$add3 = \langle \langle \pi_1^1 | \sigma(\pi_3^3) \rangle | \sigma(\pi_4^4) \rangle$$

3. Implement a WHILE program that computes the sum of three values. You must use an auxiliary variable that accumulates the result of the sum.

X1:= 0

X2:=X1+ 1

X3:=X2+ 1

X4:=X2+X3

X1:=X1+X4