CSCC63 TUT 0002

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Tutorial: Wednesdays 2-3pm
Office Hours: Wednesdays 3-4pm

https://utoronto.zoom.us/j/89433115567
Meeting ID: 894 3311 5567
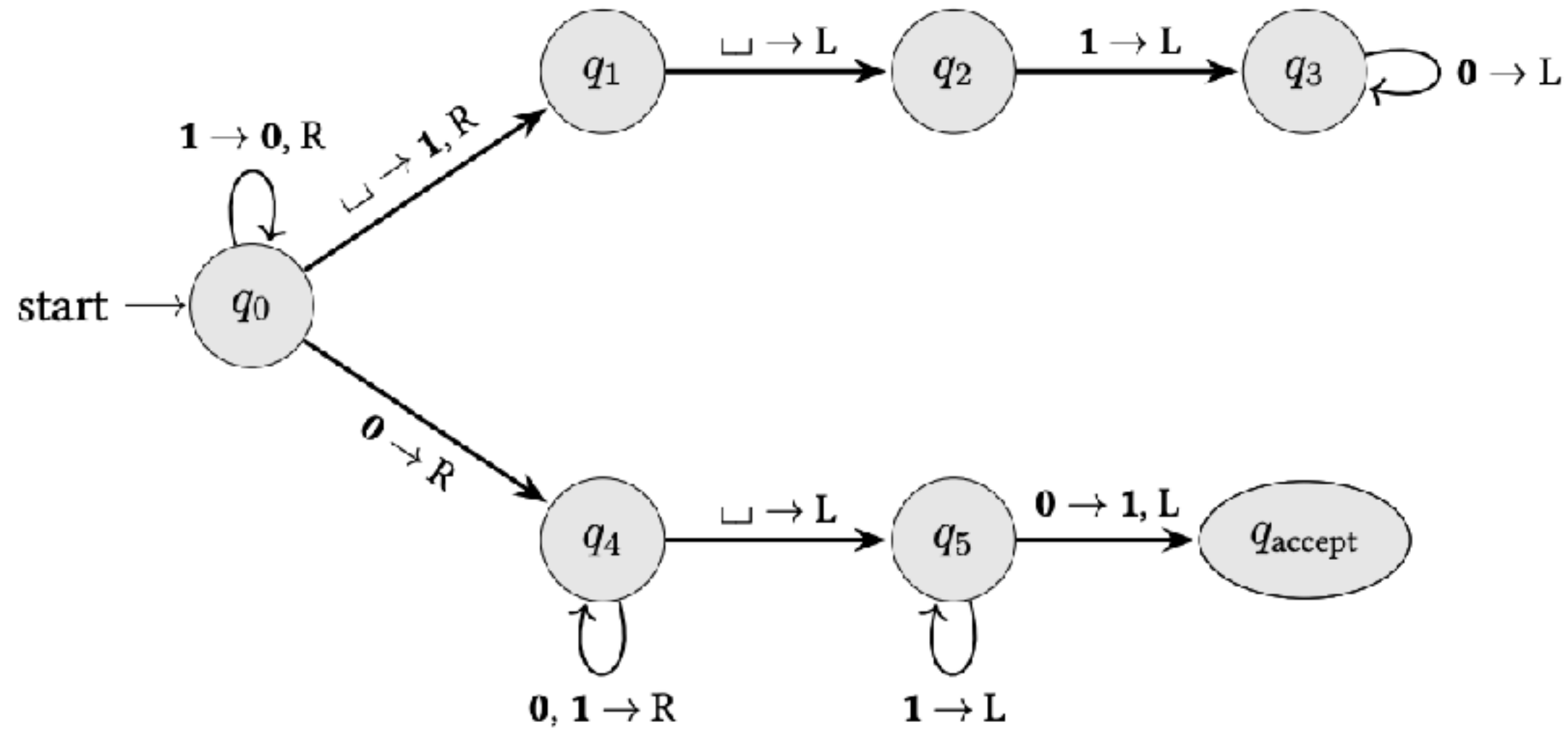Passcode: 242845

Advice

Mindset
Work with partner
Study assignment solutions
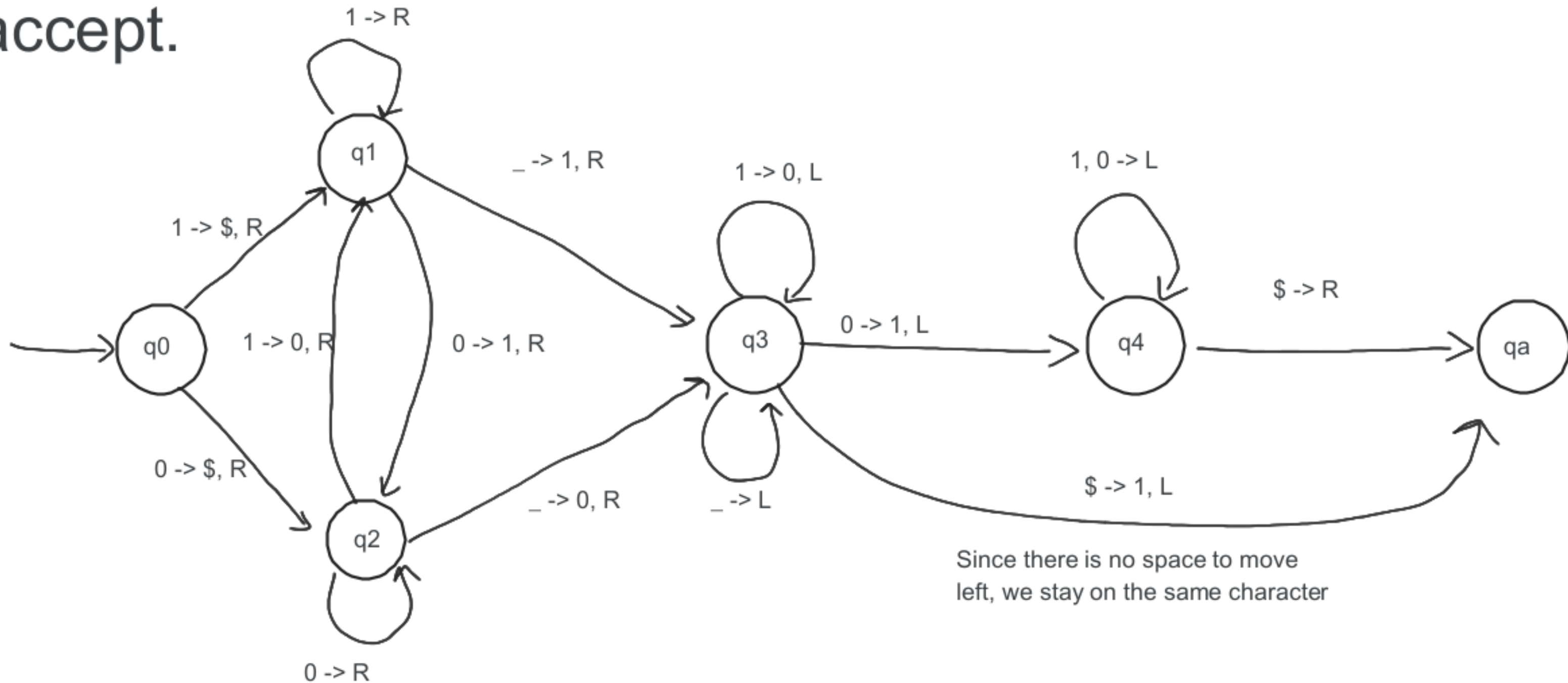
Question 1

Accepted Strings: 0, 00, 010, 001, 1110
Looping Strings: 1, 11, 11111, 111
Rejected Strings: epsilon

Question 2

Build a TM that adds 1 to the input, then accepts with the head at its first tape cell

First turn 101 -> $101, then add 1, go back until we hit $ and accept.

Since there is no space to move left, we stay on the same character

Question 3: PCP

AB + CA + A + AB + C = "ABCAAABC"
A + B + CA + A + ABC = "ABCAAABC"

Graph: G = (V, E) V: {s, a, b, c, t}
given node s, t   E: {(s, a), (a, b), (b, c), (c, a), (b, t)}

pcp solution

#s a b t #

s a b t#

a c

c b