**SUMARGO, JAKE P.**

**PROBLEM:**

L = { W Є {a,b}\* | w contains at most 5 occurences of b.

**DIAGRAM**

a a a a a a

b b b b b

b

a,b

**TRANSISTION TABLE**

ᴕ1 a b **FORMAL DEFINITION:**

L = { W Є {a,b}\* = {q0,q1,q2,q3,q4,q5,q6},{a,b}, ᴕ1,{0},{6}}

q0 q0 q1

q1 q1 q2

q2 q2 q3

q3 q3 q4

q4 q4 q5

q5 q5 q6

q6 q6 q6