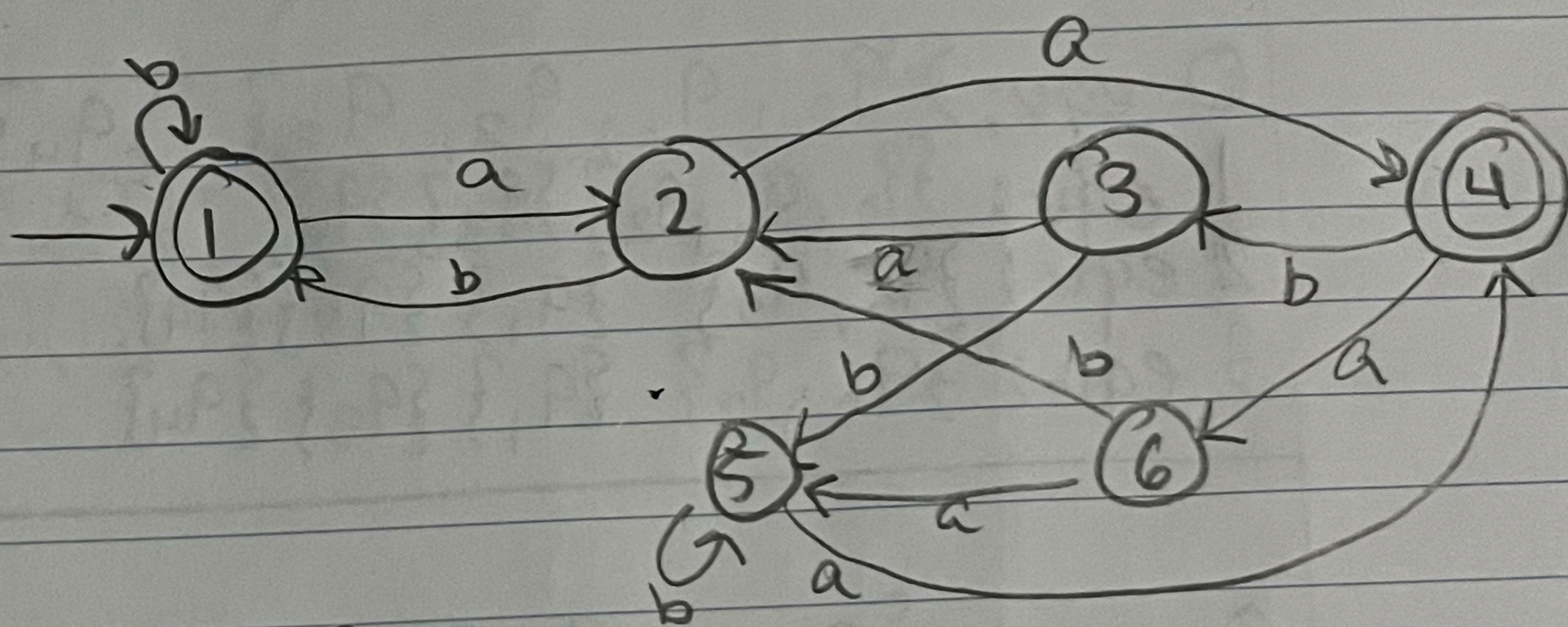


0 eqv:  $\{q_0, q_1, q_2, q_5, q_6, q_7\} \{q_3, q_4\}$   
 1 eqv:  $\{q_0, q_6\} \{q_1, q_2\} \{q_3, q_4\} \{q_5, q_7\}$   
 2 eqv:  $\{q_0\} \{q_6\} \{q_1, q_2\} \{q_3, q_4\} \{q_5, q_7\}$

## Quiz 7 Liam Maher

	a	b
→ ①	2	1
2	4	1
3	2	5
④	6	3
5	4	5
6	5	2

NOTE: used Myhill-Nerode to check because I did not think the answer was right, still used state reduction as you can see below.



① eqv:  $\{2, 3, 5, 6\} \{1, 4\}$   
 1 eqv:  $\{2\} \{3, 6\} \{5\} \{1\} \{4\}$   
 2 eqv:  $\{2\} \{1\} \{4\} \{5\} \{3\} \{6\}$

CHECK

1					
2	✓				
3	✓	X			
4	X	✓	✓		
5	✓	X	X	✓	
6	✓	X	X	✓	X
	1	2	3	4	5

$(5,6): d(5,a): 4$   
 $d(6,a): 5$

$(3,6): d(3,a): 2$   
 $(6,a): 5$

$(3,5): d(3,a): 2$   
 $d(5,a): 4$

$(1,4) - d(1,a): 2$   
 $d(4,a): 6$

$(1,b): 1$   
 $(4,b): 3$

$(2,5) - d(2,a): 4$   
 $(5,a): 4$

$(2,b): 1$   
 $(5,b): 5$

$(2,3) - d(2,a): 4$   
 $d(3,a): 2$

$(2,b): 1$   
 $(3,b): 5$

$(2,6) - d(2,a): 4$   
 $d(6,a): 5$