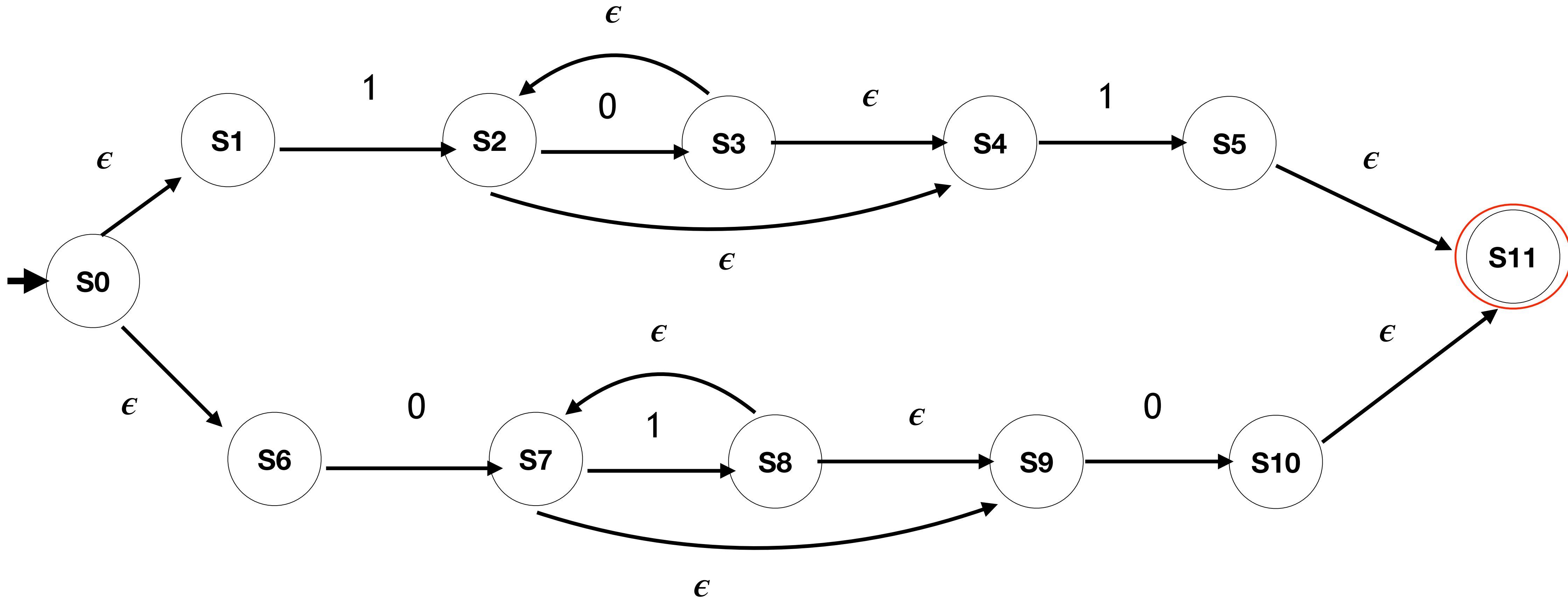
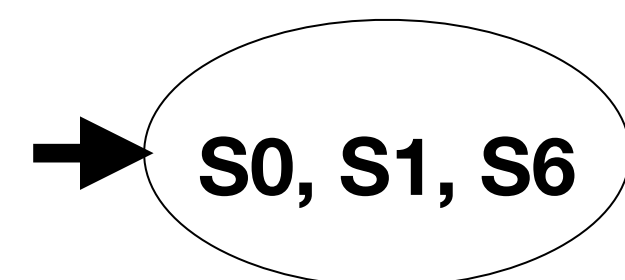


# Quiz 4 Solution

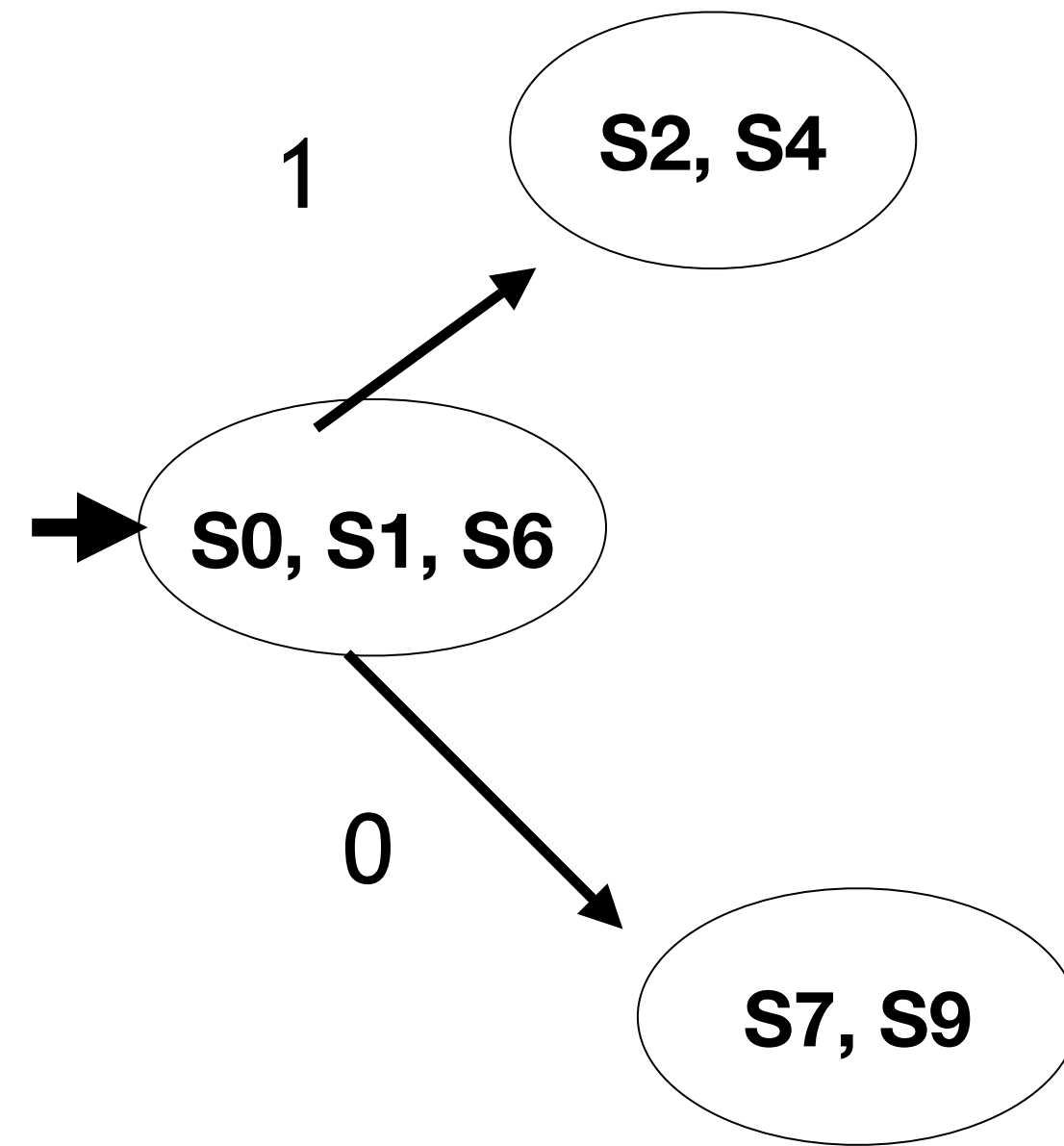
1. Use the NFA to DFA subset algorithm to build a DFA for the NFA shown below. In the DFA leave the state names as the subsets of states from the NFA.



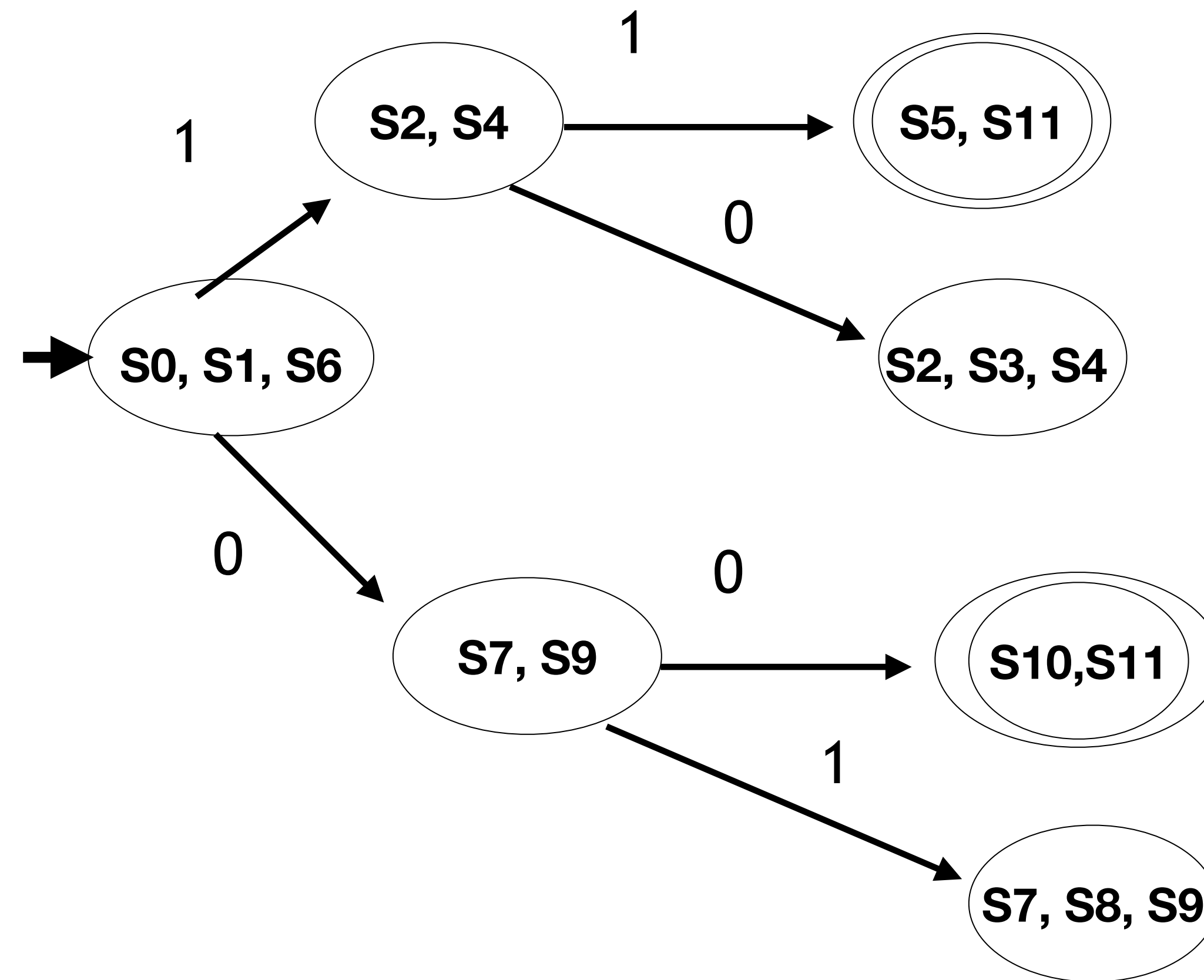
# Question 1 Solution



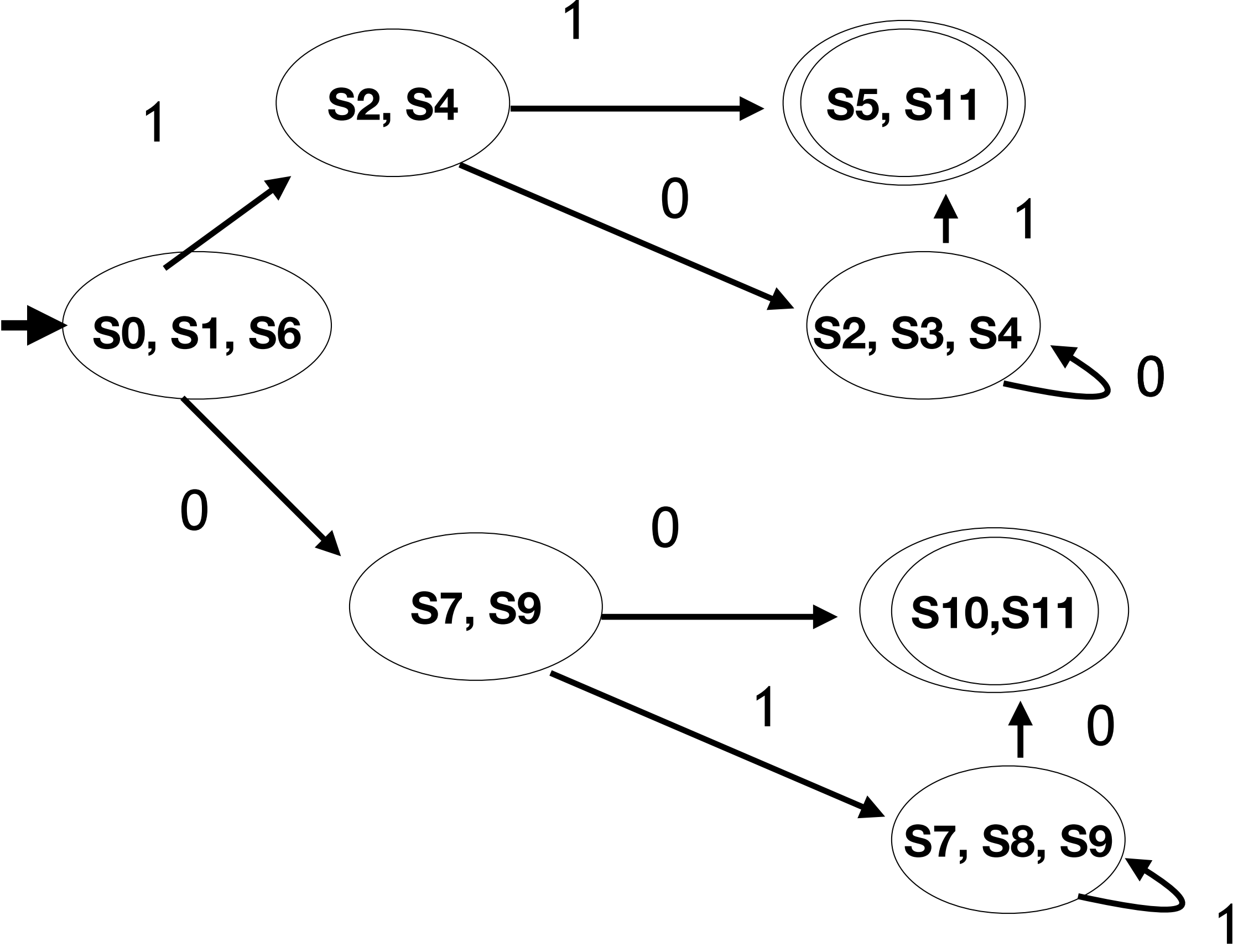
# Question 1 Solution



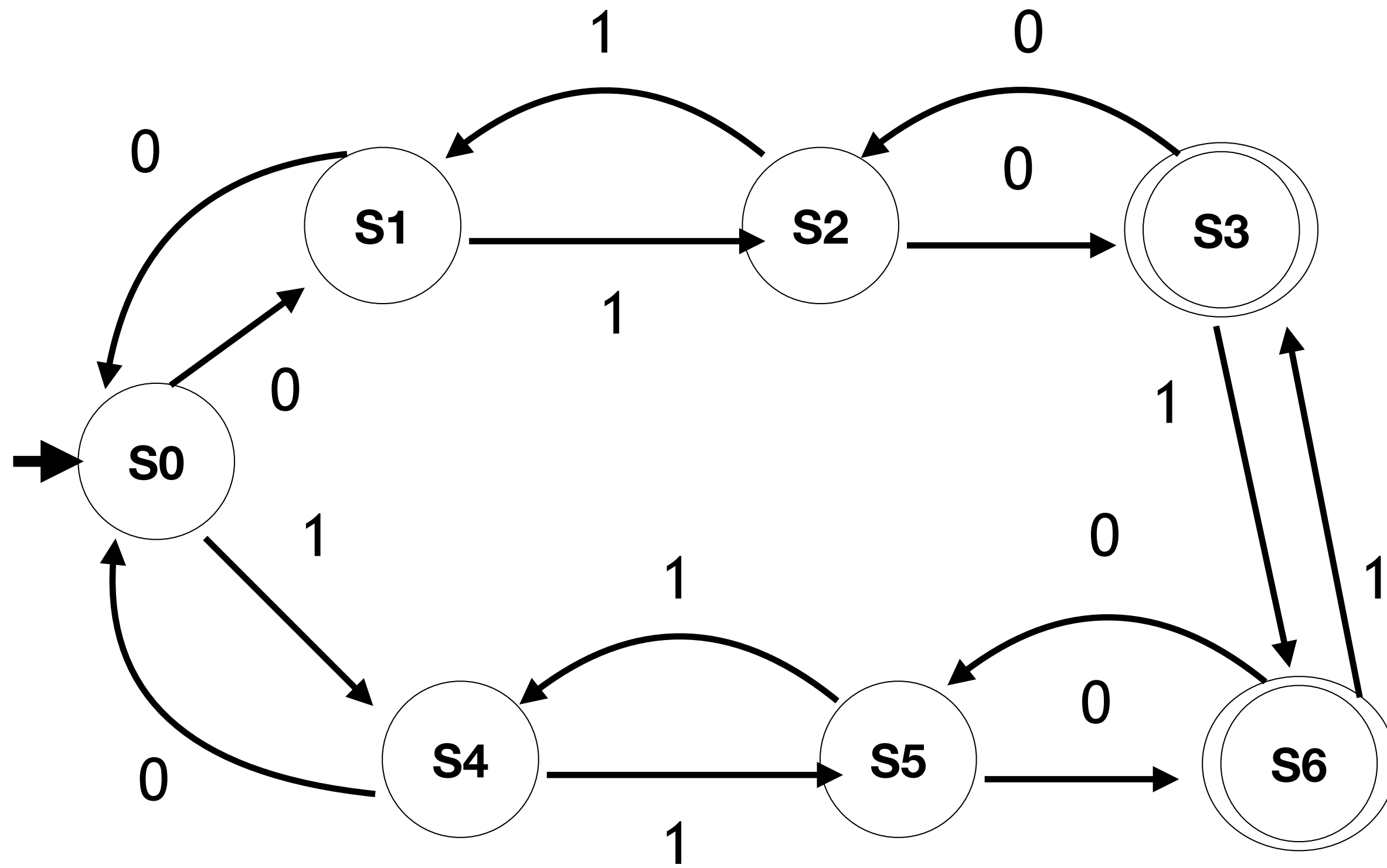
# Question 1 Solution



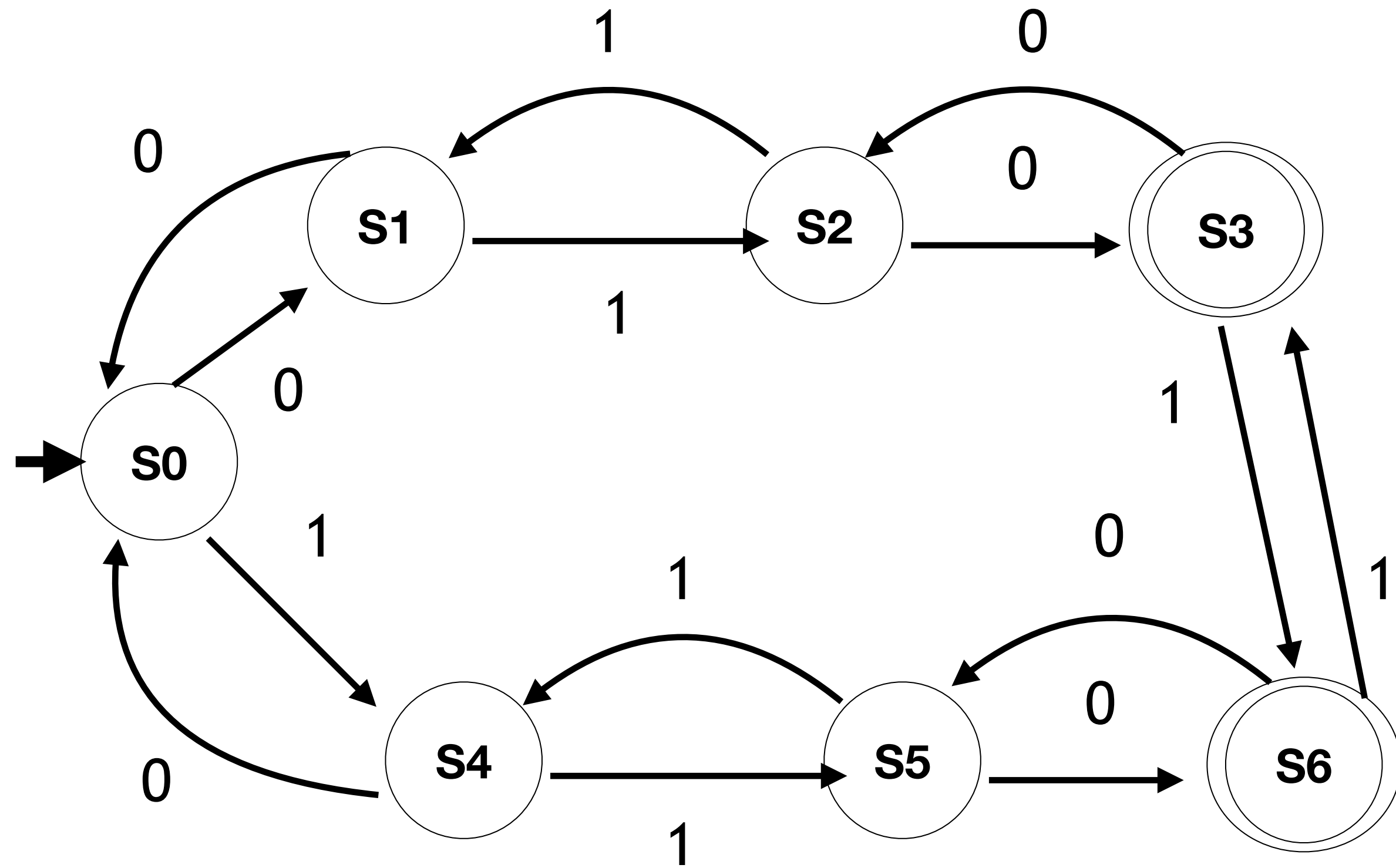
# Question 1 Solution



2. Use the DFA minimization algorithm to build a minimized DFA for the DFA shown below. In the minimized DFA leave the state names as the subsets of states from the original DFA.



2. Use the DFA minimization algorithm to build a minimized DFA for the DFA shown below. In the minimized DFA leave the state names as the subsets of states from the original DFA.



	<b>S0, S1, S2, S4, S5</b>	<b>S3, S6</b>		
0	S1, S0, S3, S0, S6	S2, S5		
	<b>S0, S1, S4,</b>	<b>S2, S5</b>	<b>S3, S6</b>	
0	S1, S0, S0,	S3, S6	S5, S2	
1	S4, S2, S5	S1, S4	S6, S3	
	<b>S0,</b>	<b>S1, S4,</b>	<b>S2, S5</b>	<b>S3, S6</b>
0	S1,	S0, S0,	S3, S6	S5, S2
1	S4,	S2, S5	S1, S4	S6, S3



# Question 2 Solution

	<b>S0,</b>	<b>S1, S4,</b>	<b>S2, S5</b>	<b>S3, S6</b>
0	S1,	S0, S0,	S3, S6	S5, S2
1	S4,	S2, S5	S1, S4	S6, S3

