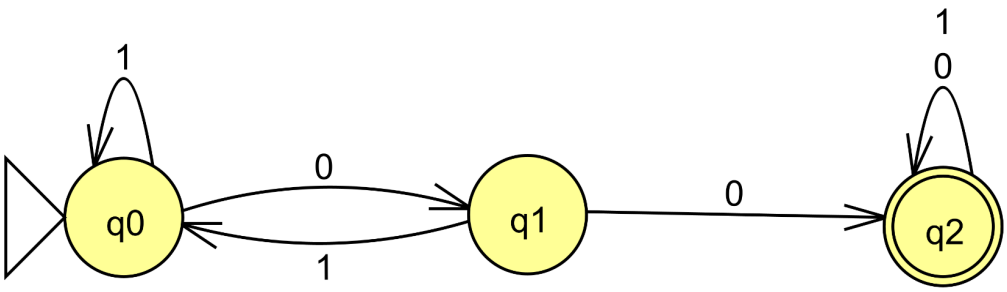
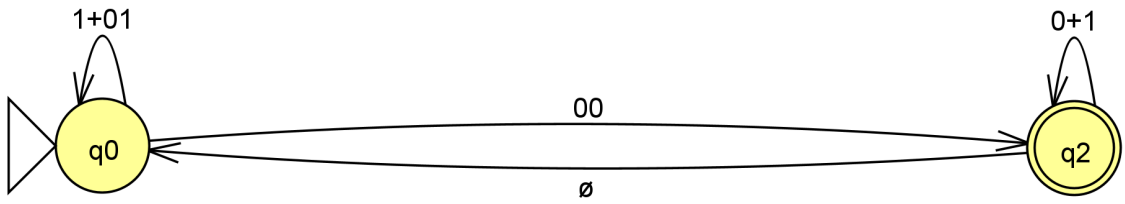
Task 3: Convert a DFA to a regular expression

L = {The language of all strings that have at least one occurrence of 00}



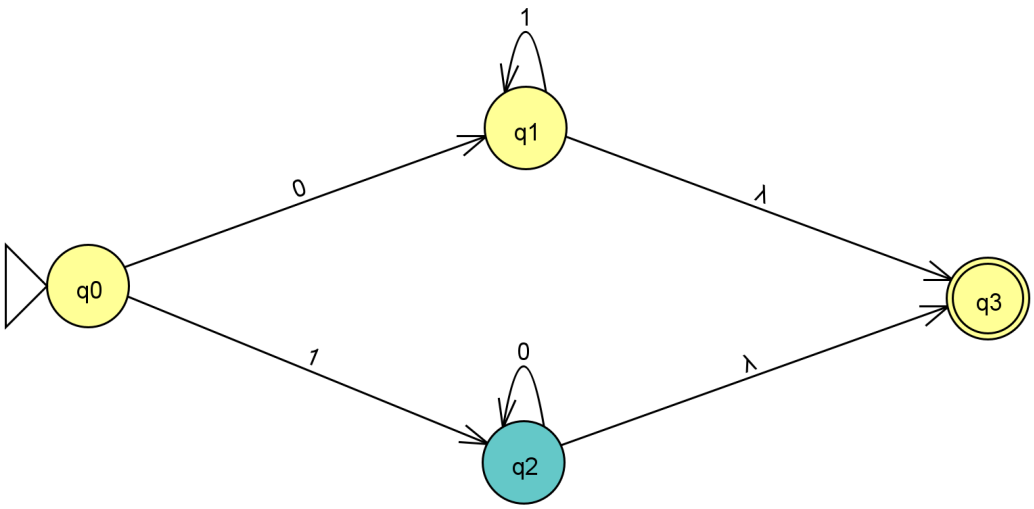
Input	Result
	Reject
0	Reject
1	Reject
00	Accept
01	Reject
10	Reject
11	Reject
000	Accept
001	Accept
010	Reject
011	Reject
100	Accept
101	Reject
110	Reject
111	Reject
0000	Accept
0001	Accept
0010	Accept
0011	Accept
0100	Accept
0101	Reject
0110	Reject
0111	Reject
1000	Accept
1001	Accept
1010	Reject
1011	Reject
1100	Accept
1101	Reject
1110	Reject
1111	Reject
00000	Accept
00001	Accept

Resulting diagram after running JFLAP Convert FA to RE:



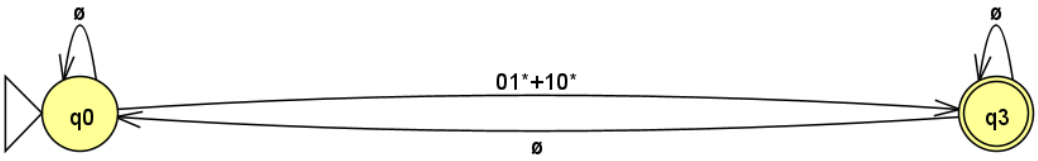
Result Regex: (1+01)*00(0+1)*

L = {The language of all strings that either start with 0 and don't have any more 0s, or start with 1 and don't have any more 1s}
** **Note** that as the first step you would need to create a single final state and connect the old final states to it by empty-string transitions.



Input	Result
	Reject
0	Accept
1	Accept
00	Reject
01	Accept
10	Accept
11	Reject
000	Reject
001	Reject
010	Reject
011	Accept
100	Accept
101	Reject
110	Reject
111	Reject
0000	Reject
0001	Reject
0010	Reject
0011	Reject
0100	Reject
0101	Reject
0110	Reject
0111	Accept
1000	Accept
1001	Reject
1010	Reject
1011	Reject

Resulting diagram after running JFLAP Convert FA to RE:



Result Regex: 01*+10*