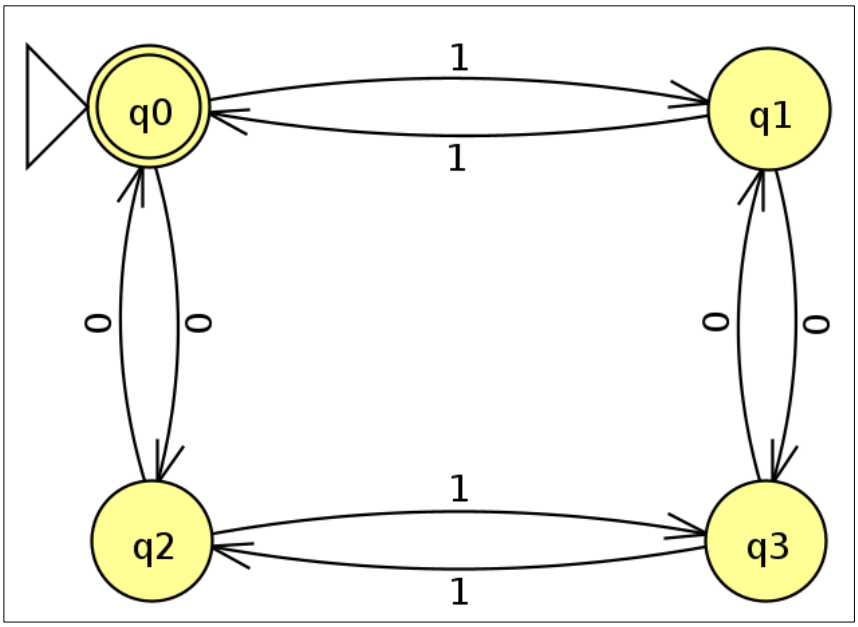
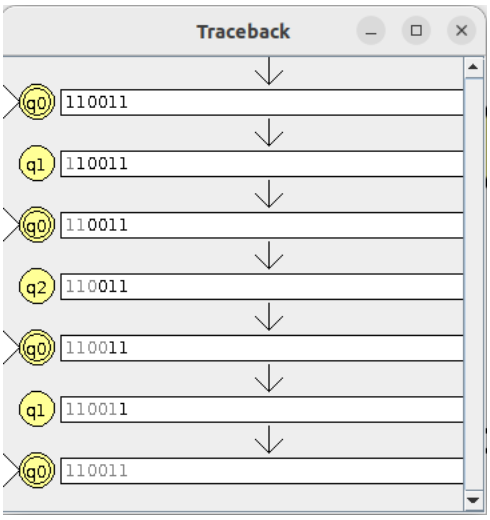
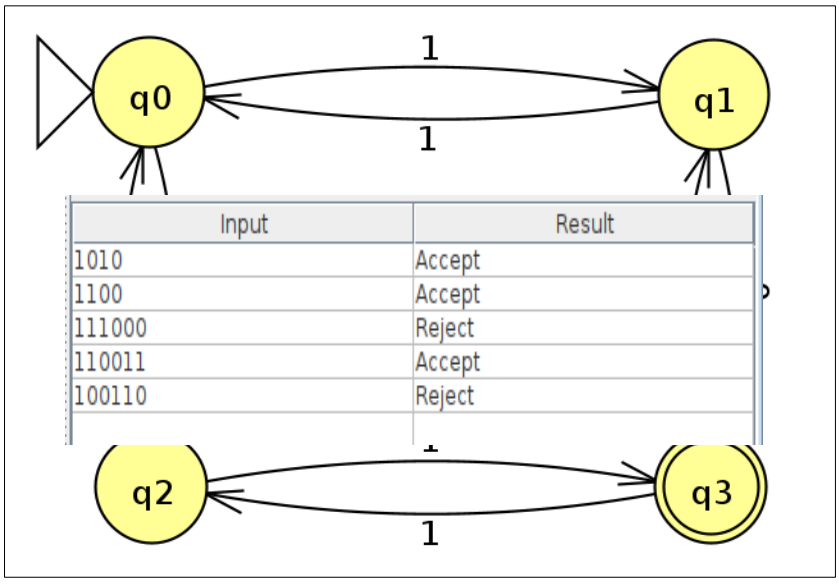
Question 1: Design a DFA which accepts even number of 0s and even number of 1s
Diagram:

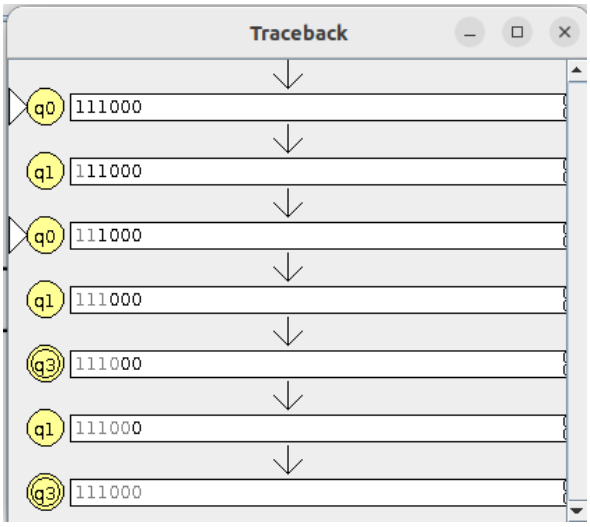




Question 2: Design a DFA which accepts odd number of 0s and odd number of 1s
Diagram:



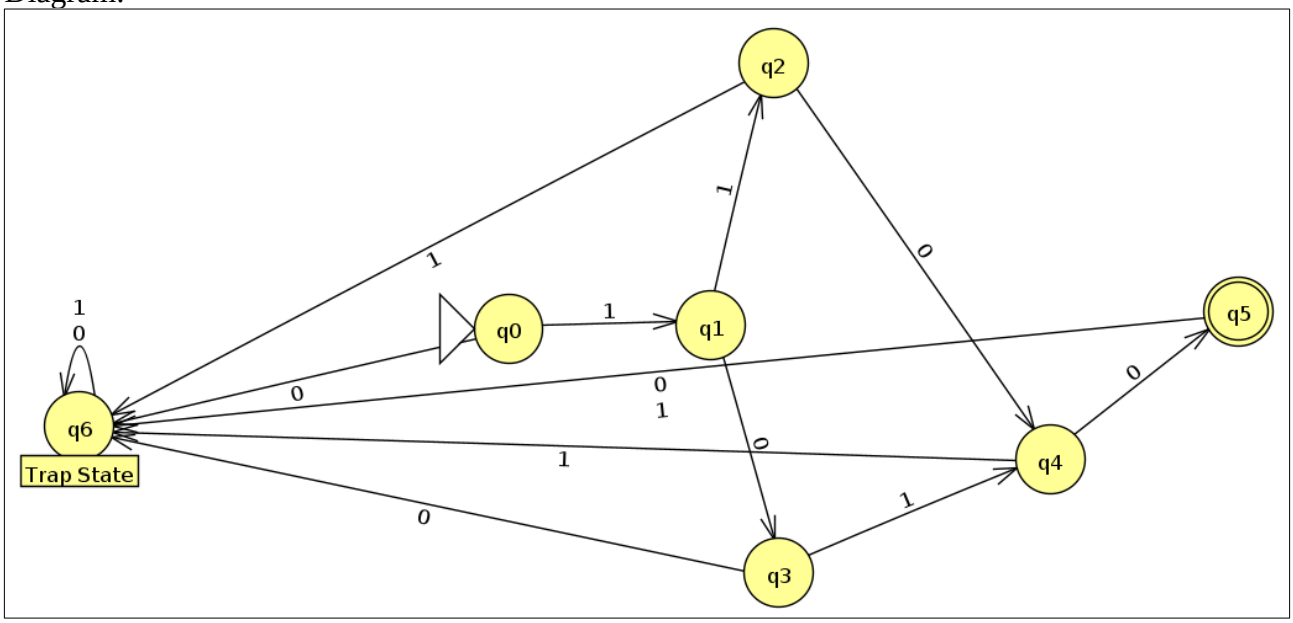
Input	Result
1010	Accept
1100	Accept
111000	Reject
110011	Accept
100110	Reject



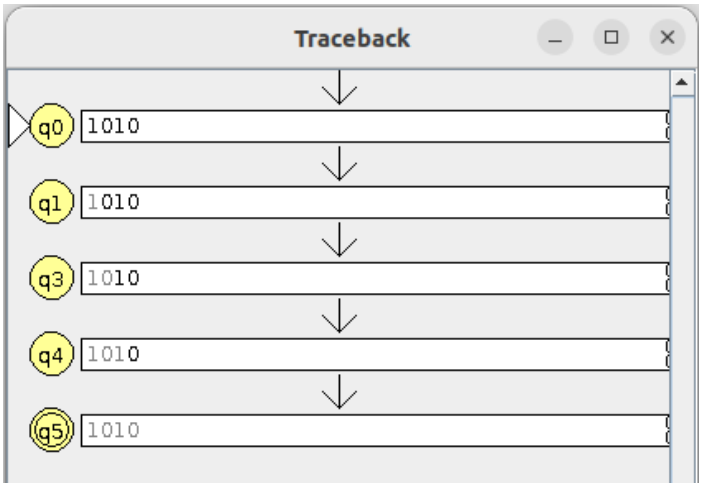
Input	Result
1100	Reject
10	Accept
111000	Accept
11110000	Reject

Question 3: Design a DFA which accepts string 1100 or 1010 only

Diagram:

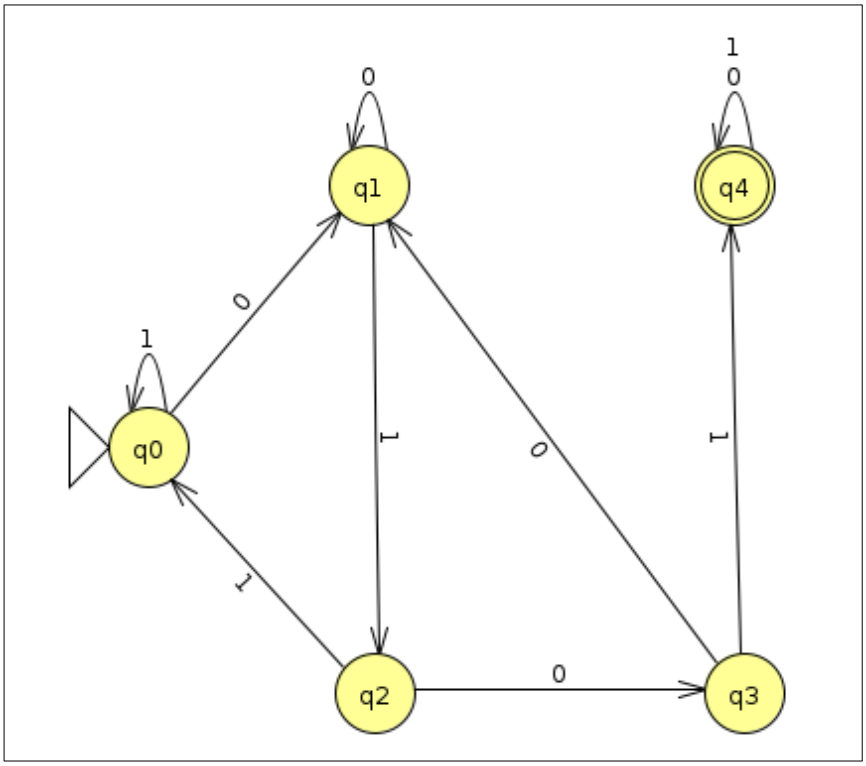


Input	Result
1010	Accept
1100	Accept
0011	Reject
0101	Reject

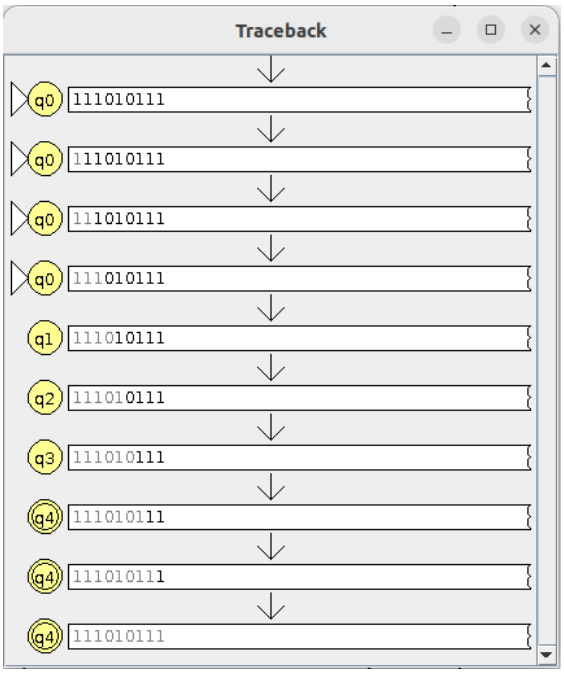


Question 4: Design a DFA which accepts which accepts set of all strings that containing 0101 as substring

Diagram:

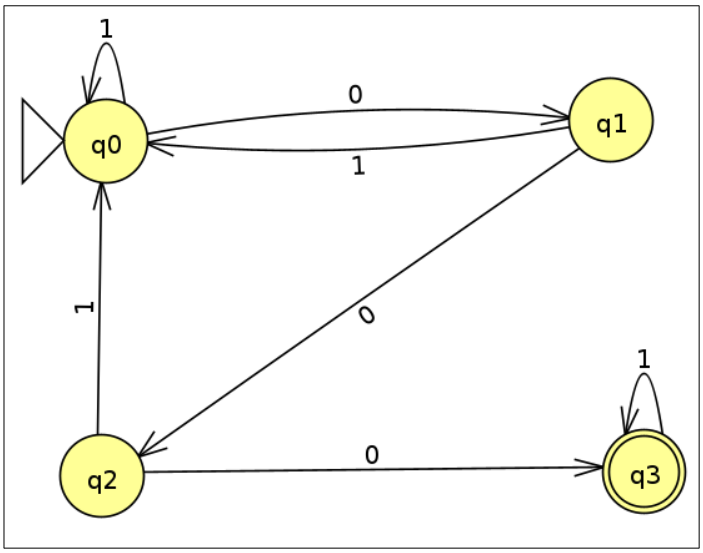


Input	Result
0010100	Accept
1001001001	Reject
111010111	Accept
0101	Accept
11111111111111	Reject

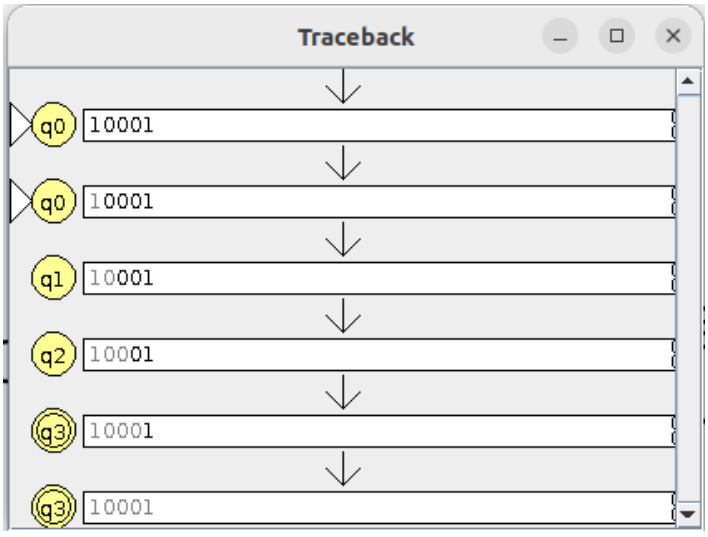


Question 5: Design a DFA which accepts set of all strings containg 3 consecutive zeros

Diagram:

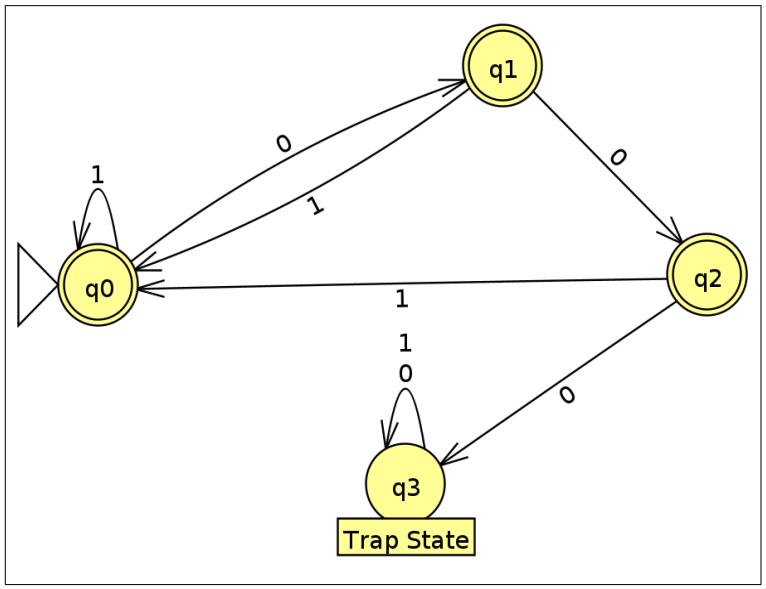


Input	Result
000	Accept
10010	Reject
10001	Accept
00000	Reject
0111000	Accept

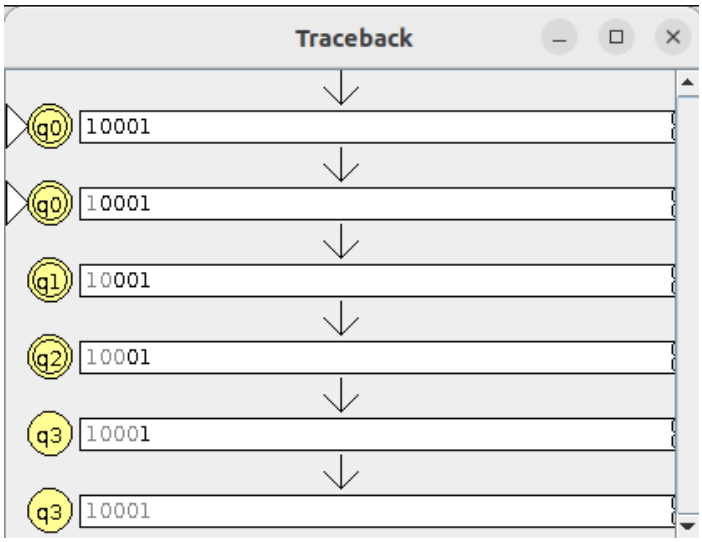


Question 6: Design a DFA which does not accept set of all strings containing 3 consecutive zeros

Diagram:

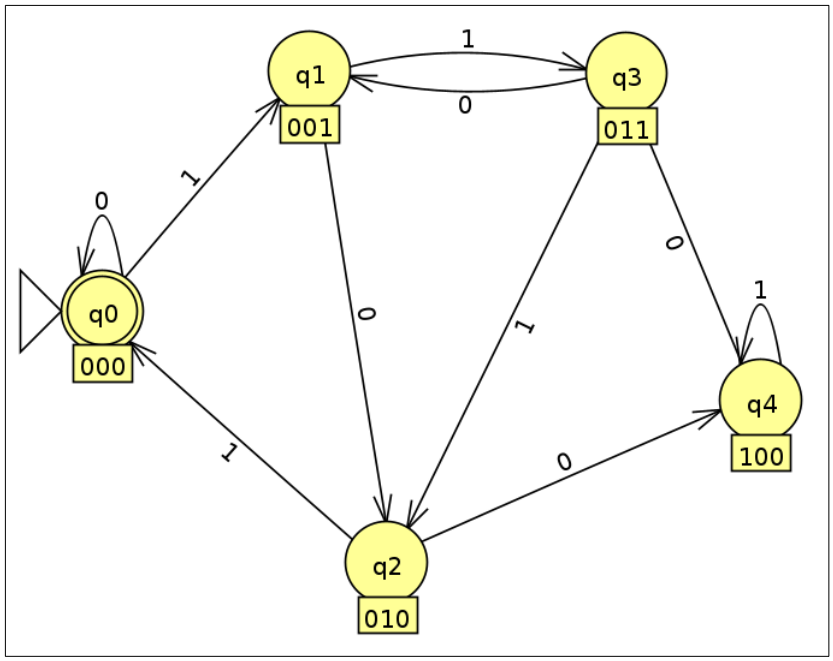


Input	Result
000	Reject
10010	Accept
10001	Reject
00000	Reject
0111000	Reject



Question 7: Design a DFA which accepts set of all strings which are divisible by 5 for binary alphabets

Diagram:



Input	Result
000	Accept
10010	Reject
10001	Reject
100011	Accept
0111000	Reject