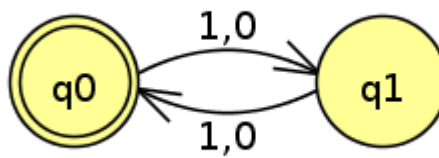


1:



2:

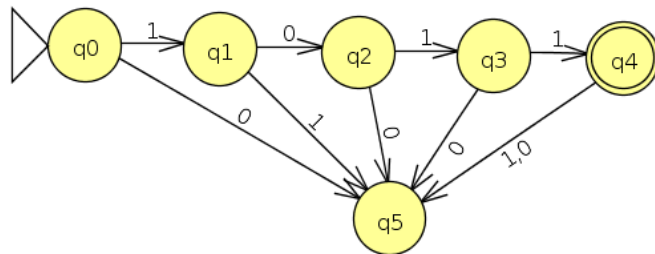


Table Text Size	
Input	Result
1011	Accept
10111	Reject
10110	Reject
01011	Reject
11011	Reject

3:

Such a machine would not be more powerful, since even when using a larger alphabet, each letter could still be represented by binary. For example, for the alphabet {a,b,c,d}:

a = 0
 b = 1
 c = 10
 d = 11

A machine that accepts {a,b,c,d} and a machine that accepts {0,1} would be equally powerful (but the machine with a larger alphabet would be more complex to make).

6:

0^*10^*