获得的答案

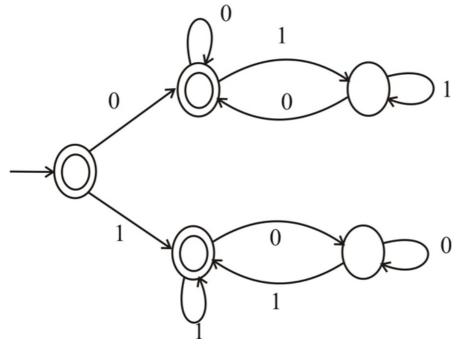
Given language is

 $D = \{w \mid w \text{ contains an equal number of occurrences of the substring } 01 \text{ and } 10\}$ over the alphabet $\Sigma = \{0,1\}$

We have to prove that ${\it D}$ is a regular language.

A language is regular if some DFA recognizes it.

The following DFA recognizes the language D.



This DFA recognize the language D.

Thus D is regular