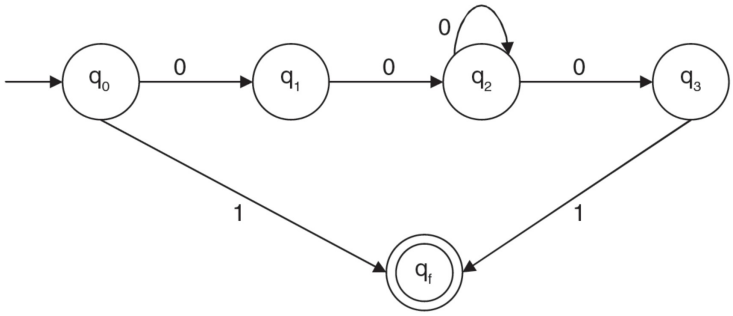
iii) The finite automata obtained from the expression in step II is



iv) The constructed right linear grammar is

$A \rightarrow 0B,$
$A \rightarrow 1E/1$
$B \rightarrow 0C$
$C \rightarrow 0D/0C$
$D \rightarrow 1E/1$

Here, E is a useless symbol. Eliminate all productions of E. The new productions are

$A \rightarrow 0B$
$A \rightarrow 1$
$B \rightarrow 0C$
$C \rightarrow 0D/0C$
$D \rightarrow 1$

v) Reversing the right side of each production of the right linear grammar,

$A \rightarrow B0/1$
$B \rightarrow C0$
$C \rightarrow D0/C0$
$D \rightarrow 1$

This is the equivalent left linear grammar to the right linear grammar.

Example 6.36

Convert the following left linear grammar to right linear grammar.

$S \rightarrow S10/A1$
$A \rightarrow A00/00$

Solution:

i) Reversing the right side of every production, we get

$S \rightarrow 01S/1A$
$A \rightarrow 00A/00$