Example :
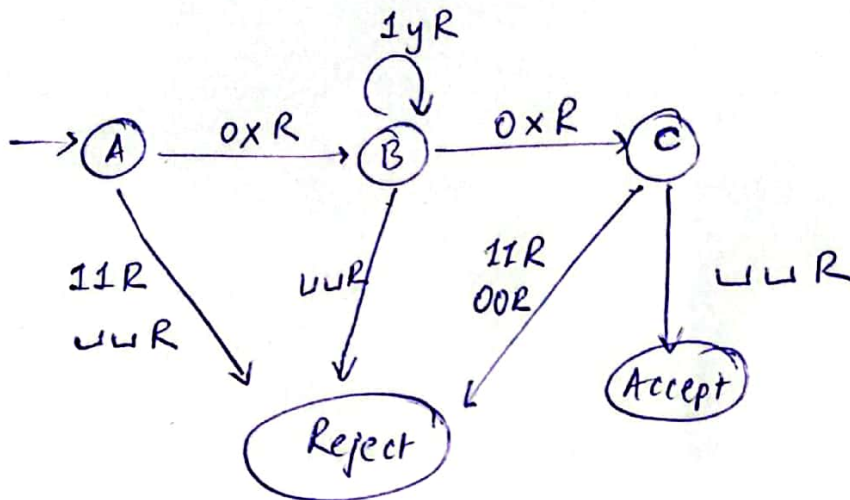
Design TM for $L = 01^*0$

"First comes 0, then any number of 1s & then 0."
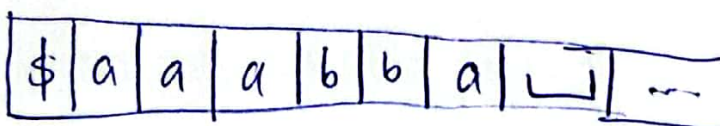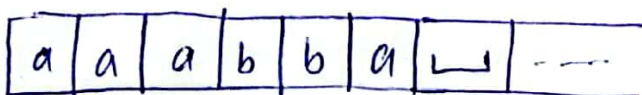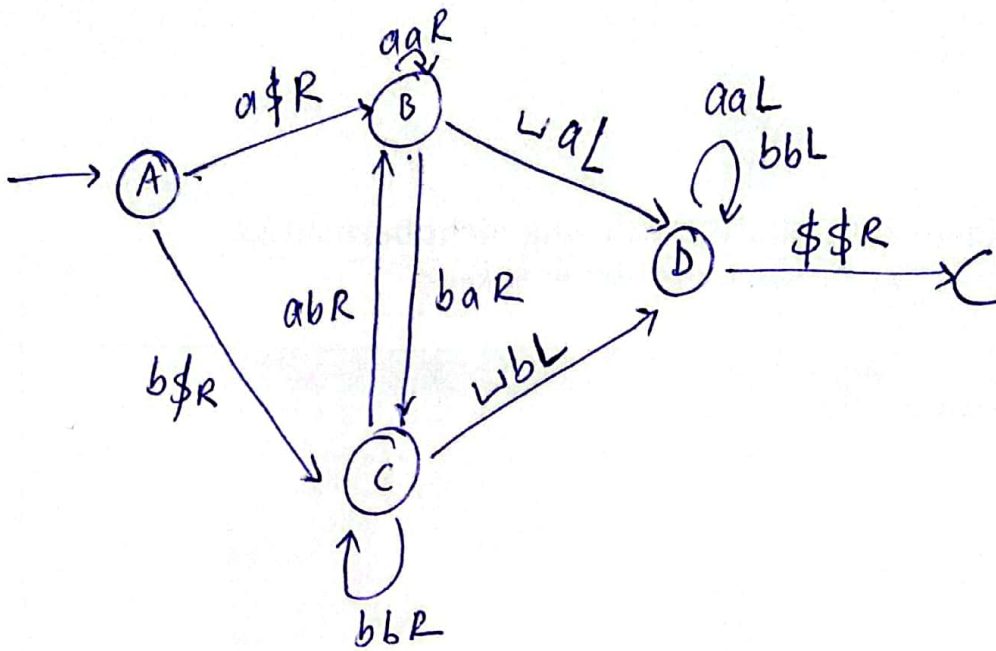

Turing Machines are deterministic - Transition for every state.
When edges are missing, then it goes to "reject" state.

TM Programming Techniques

Problem: How can we recognize left end of the tape of TM?

Solution: Put Symbol $ on the left end of the tape &
shift the input over one cell to the right.

a	a	a	b	b	a	⊔	---

$	a	a	a	b	b	a	⊔	--

Example:

TM for $L = 0^N 1^N 0^N$ not contextfree language.

Use TM of $L = 0^N 1^N$ as subroutine.

i.e.