To show the Turing machine with left reset, recognize the class of Turing recognizable class of language.

• It must be shown that it can simulate ordinary Turing machine.

• Let M be an ordinary Turing machine and M_L be the Turing machine with left reset.

• M_L simulates M in the following way.

• When M makes a right transition then M_L follows it in the same way as M do.

• When M makes a left transition with symbol a, b in M, M_L replaces it with A or B respectively. So, the alphabet set $\sum M_L = \sum M U\{A, B\}$ and does a left RESET.

• Shifts all content of the tape by one position to the right for all symbols other than $\{A, B\}$.

The above process is repeated until all content of the tape are shifted to the right and does the following.

• M_L does a RESET again.

• All right transitions are checked.

• Whenever it reaches to some $\{A, B\}$, it works in the same way as M does.