

“ A *recognizer* for a language is a program that takes as input a string  $x$  and answers ‘yes’ if  $x$  is a sentence of the language and ‘no’ otherwise.” Non-deterministic finite automata has more than one transition out of a state on the same symbol. A deterministic finite automata has only one state transition per symbol. Machine accepts a string if and only if it enters a final state (element of  $F$ ) and there are no other items in its input.

## References

- [1] Jeffrey D. Ulman, Ravi Sethi, Alfred V. Aho *Compilers: Principles, Techniques and Tools* copyright 1986 by Bell Telephone Laboratories, Incorporated page 113