ESTABLISHMENT APPLICATION AUTOMATA TO DETERMINISTIC (AHD) FROM USING REGULAR EXPRESSION RULES NULLABLE, FIRSTPOS AND FOLLOWPOS.

RATIH PURI WIJAYANTI, SINGGIH JATMIKO,SSI,MSC

Undergraduate Program, Faculty of Industrial Engineering, 2006

Gunadarma University

http://www.gunadarma.ac.id

Key Word : automata to deterministic, regular expression, nullable, firstpos, followpos

ABSTRACT:

Early stage of the compilation is lexical analysis. At this stage, the lexical analyzer which funnetias to read the source program which combines the terminal each character into a single syntax form, called token. A lexical analyzer generator using an identifier is called Automata Up to specify any token that will be accepted or rejected. Automata that is certainly closely related to the regular grammar due to the recognition automata from a regular grammar. Form of public presentation of the grammar itself uses a regular expression called regular expressions. Regular expression that will be formed into AHD first described in the form of syntax tree. In this presentation, each non-leaf nodes, representing the operator, while the left subtrees and right root is Operands. Regular expressions which have syntax tree is labeled on each leaf to be searched nullable, firstpos, lastpos and followpos it. Next to get to automata deterministic was formed Dstates (set state of the D) and Dtran (table transition to D) by using the procedure AHD existing establishment.