

ABSTRACT

THE DEVELOPMENT OF APPLICATION FOR TO CHOMSKY NORMAL FORM USING PHP

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In this research we develop an application to simplify context-free grammar into a Chomsky normal form. This software was made to complete the process of simplification of the context-free grammar (CFG) so that user can identify the stages of a process of simplification, easy to understand the simplification at any stages as well as speed up the process. This software is created using the PHP programming language and use context-free grammar (CFG) as the input. The process order is carried out starting from removing epsilon, unit, and useless production so that the result is in Chomsky Normal Form. Black Box testing results with the method of partitioning software equivalence suggests that simplification of software context-free grammar into a Chomsky normal form using PHP was successful and suitable with the user needs.

Key words : Chomsky Normal Form (CNF), Context-Free Grammar (CFG), PHP, simplification of the Context-Free Grammar (CFG).