Abstract

Segmentation and labeling of a spech signal is an early tasks in the speech processing. The automatic and blind segmentation process made to divide the speech signal into several parts (segments) regardless of the linguistics of the speech information. This process includes the search for optimal number of segments the speech signal and then, locate optimal segment boundaries and make labeling of the formed segments.

In this final project is implemented Level Building Dynamic Programming (LBDP) method to complete the process of automatic and blind segmentation and labeling, to the sound signal in Indonesian. Dynamic programming problems have the property divided into several smaller subproblems and look for solutions of the subproblems, the subproblems (local solution) and then used to find the solution of larger problems (global solutions). Given the nature of it, LBDP expected to be able to segment armed with acoustic information without having such information linguistik or orthographic transcriptions.

Testing of this method using a database speech signals that have .wav type which is a set of sentences that have 8000Hz sampling frequency and mono-type. The analysis result is 7% insertion and 3% deletion of the segment. For the elapsed time, the fastest is 14.5 second and the slowest 1948,7 second.

***Keywords**: Segmentation, labeling, speech signal processing, Level Building Dynamic Programming.*