Abstract

Nowadays, the amount of information such as news article that exist in web keep growing fast. This tremendous sum could make the users find some difficulties in finding the right urgent information. One of *Data Mining* task, *Text Categorization*, is one of the ways to classify the documents into class or certain class. One of *Text Categorization* usage is *Hierarchical Classification* which is a way to give hierarchy class or specific class into a document so that document could be organized well.

One of the algorithms that can be used in hierarchical classification is algorithm of *top down with parent preference, buttom up with parent support, buttom up with threshold*. The documents can will be grouped by observing the relation between each classes in a predefined hierarchy tree.

In this paper,we compare the performance between the three algorithms by using some classification methods, *Centroid Sum* and *Naive Bayes Multinomial*. The Parameter used here is the *hierarchical precision, hierarchical recall,* and *f-measure*. The experiment show that top down with parent preference algorithm is giving a better result than buttom up with threshold, *top down with parent preference* and *bottom up with parent support* have the same performantion.

Keywords : *text categorization, hierarchical classification, top down with parent preference, bottom up with parent support, bottom up with threshold, hierarchy tree, hierarchical precision, hierarchical recall, f- measure.*