This paper proposes a new model of machine translation system in which rule-based and example-based approaches are applied for English-to-Thai sentence translation. The proposed method has 4 steps: 1) analyze an English sentence into a string of grammatical nodes, based on Phrase Structure Grammar, 2) map the input pattern with a table of English-Thai sentence patterns, 3) look up the bilingual dictionary for the equivalent Thai words, reorder and then generate output sentences and 4) rank the possible combinations and eliminate the ambiguous output sentences by using a statistical method. The translated sentence will then be stored in a bilingual corpus to serve as a guide or template for imitating the translation, i.e., the example-based approach. The future work will focus on disambiguation by using semantic features to make a more precise translation.