Homework # 6

Handed out: 10/12/06
Due: 10/17/06

Whenever you write software (e.g. the project to implement suffix trees) you are faced with the problem of testing the code to make sure that it produces the output you expect. Here are several problems that will help you along with this process.

1. Have you implemented code to print the tree you've generated yet? If not, implement the code that generates the .dot file, print the tree for a small data-set (~ 10 characters) and mark on it any errors introduced by your program. If there are none, just give me a printout of the tree.
2. Build two relatively short strings that would result in trees with significantly different structures:
    a. A "fat" tree, where the first few levels of the tree are pretty much a complete tree
    b. A "skinny" tree, where the tree is more deep than wide.
3. List several types of "query" sequences you will use in testing whether your code correctly identifies the longest common substring of the query and the text. You don't need to give me the actual sequence, just tell me what types of alignments you'll try to find.