CS 6301: Implementation of advanced DS&A Short Project SP0str

This project is optional. No excellence credits.

Deadline: 11:59 PM, Thu, Apr 28 (was 1:00 PM)

- 1, Implement and compare the performances of any of the following algorithms for string matching:
  - a. Naive
  - b. Rabin-Karp
  - c. Knuth-Morris-Pratt
  - d. Boyer-Moore: http://www.cs.utexas.edu/~moore/publications/fstrpos.pdf
    (BM algorithm is also discussed in Cormen et al's book, 1st ed, Sec 34.5).
- 2. Write a Trie class for English words (converted to lower case), with functions:
   void add(String word) -- add a word to the dictionary,
   void remove(String word) -- remove a word from the dictionary,
   void import(String file) -- open a file and import all words in it,
   boolean contains(String word) -- search for a word in the dictionary,
   int prefix(String word) -- how many words in the dictionary start with this prefix?
   Add any additional functions that you think are needed.