DO NOT use Java API containers!!!

To create and array of 26 MyLinkedLists.

MyLinkedList [] dictionay = new MyLinkedList[26];

Once the array is instantiated, all elements are null. We need to instantiate 26 MyLinkedLists to store data.

for (int i = 0; i < dictionary.length; i++)

       dictionary[i] = new MyLinkedList<String>();

To insert a word in to a specific MyLinkedList

Assume that the word you want to insert is in a String type variable called wordstr.

dictionary [(int)wordstr.charAt(0) - 97].addFront(wordstr) ;

would allow you to jump to the correct linked list. I think addFront is better since it doesn't need to traverse the list.

To search a word in a specific MyLinkedList

Assume that the word you want to search is in a String type variable called wordstr.

dictionary [(int)wordstr.charAt(0) - 97].contains(wordstr) ;

would allow you to jump to the correct linked list, and the contains will return true/false depending if the word is in the list or not.

Sample output

                                            Unaltered Dictionary            letters 'a' & 'i' added to front       letters 'a' & 'i' added to end

Ave. comps (found)                3254.287703516023           3131.5190488161506               3412.6989713464845

Ave. comp (not found)            7416.628860759493           7346.24100762989                   7346.24100762989

Time                                          2 min 46 seconds                  2 min 11 seconds                   2 min 28 seconds