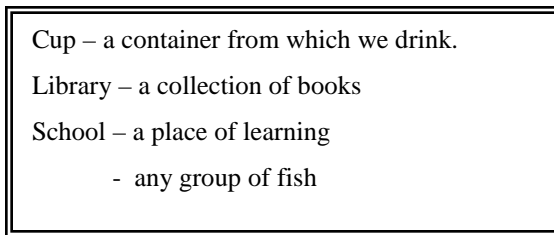


Write a menu driven program that either accepts words and their meanings, or displays the list of words in lexicographical order (i.e. as in a dictionary). When an entry is to be added to the dictionary you must first enter the word as one string, and then enter the meaning as separate string. A word may have more than one meaning, and may be entered at separate times. When this occurs, place each successive meaning on a separate line. This new meaning must be preceded by a dash. For example, if you enter the following words and with their meanings in the following order: **Library**, **School**, **Cup**, and **School**, then your output should be a display as shown in the **Figure 1**.



```
Cup – a container from which we drink.  
Library – a collection of books  
School – a place of learning  
    - any group of fish
```

Figure 1.

Another requirement - from time to time words become obsolete. When this happens, such word must be removed from the dictionary.

Use the JOptionPane class to enter the information.

Use the concept of linked list to carryout this exercise. You will need at minimum the following classes:

- A WordMeaning class that hold the name of a word and its meaning.
- A WordMeaningNode class that creates the node of information and its link field.
- A WordList class that creates and maintain a linked list of words and their meanings.
- A Dictionary class that test your classes.

For the output, the program should produce two scrollable lists:

- The current list of words and their meanings, and
- The list of the deleted words. You need not list the meanings, just the words.

NB. The linked list must be designed from first principle. Do not use the pre-defined class LinkedList found in java.util; nor array; nor ArrayList class.