

# WordUtils.java

**Objective:** To create helper utilities that will be used in a future project.

## Background:

We programmed **EveryWord.java** together. **WordUtils.java** implements the same functions as **EveryWord** plus a few more. These methods are utilities that will be used by other classes in a future project. The **main** method provided in **WordUtils** is for testing your code.

## Assignment:

You will write several utility methods to be used by other classes. It includes a method for finding words in a dictionary file that match a list of input letters, a method that calculates the score of each word found, and a method that finds the highest scoring word. Scoring is based on a score table provided as a parameter. For example, if 'A' has a score of 1, 'C' has a score of 3, and 'T' has a score of 1, the score for the word "CAT" would be sum of the values or 5. The table is an array of integers and is provided in the starter code.

Here is a sample run output:

```
% java WordUtils
Please enter a list of letters, from 3 to 12 letters long, without spaces -> goingtobat
```

```
abo          aging        agio         ago          agog
agon         ai           ain          ait          an
ani          ant          anti         at           bag
baggit       bagnio      bait         ban          bang
bant        bat          baton        baton        batt
batting     bi           big          biga         bigg
bigot       bin         bingo        bingo        bint
bio         biog        biont        biota        bit
bito        bitt        boa          boat         boating
bog         bogan      bogong      boing        bong
bongo       bonita     bonito      boo          boon
boong      boot       bot         bota         bott
gab         gabion     gaboon      gag          gain
gait        gang       gant        gat          gating
giant       gib        gig          giga         gigaton
gigot       gin        gio          git          gitano
gnat        go         goa         goat         gob
goban      gobang     gobo        gogo        going
gong       goo        goog        goon        i
igg         in         inga        ingo        ingot
into       ion        iota        it           ita
nab        nag        nagi       nat          ngaio
nib        nit        no         nob          nog
nogg       not        oat         oba         obang
obi        obia      oobit      obo         obtain
oint       on         tab         oon        oont
oot        otto      taig       tain        taboo
tag        tai        tang       taint       taint
tait       tan        tao        tango       tango
tanti      tanto     tat         ti          ti
tig        tigon     ting       tint        tint
tit        titan     toboggan   tog         tog
toga       toit      tong       tonga       tonga
too        toon     toot       tot         tot
```

```
Highest scoring word: toboggan
Score = 12
```