Package ‘ScrabbleScore’

February 19, 2015

Type Package
Title Calculates Scrabble score for strings
Version 1.0
Date 2013-10-01
Author Will Kurt
Maintainer Will Kurt <wckurt@gmail.com>
Description Given a word will produce that word's scrabble score. Unlike many naive implementations this package takes into consideration the distribution of letter in scrabble. So a word like 'zzz' will be scored '10' rather than '30'.
License MIT License
Suggests testthat (>= 0.7)
Note The name ``Scrabble” is a trademark of Hasbro, Inc. in the United States and Canada; elsewhere, it is a trademark of Mattel.
Depends R (>= 2.10)
NeedsCompilation no
Repository CRAN
Date/Publication 2013-10-09 09:24:47

R topics documented:

ScrabbleScore-package .......................................................... 2
impossible.points ............................................................. 3
is.twl06.word ................................................................. 3
letter.dists ................................................................. 4
sls ................................................................. 5
sws ................................................................. 6
twl06 ................................................................. 7

Index 8
ScrabbleScore-package  Calculates Scrabble score for strings

Description

Given a word will produce that word’s scrabble score. Unlike many naive implementations this package takes into consideration the distribution of letters in scrabble. So a word like ’zzz’ will be scored ’10’ rather than ’30’.

Details

<table>
<thead>
<tr>
<th>Package</th>
<th>ScrabbleScore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Package</td>
</tr>
<tr>
<td>Version</td>
<td>1.0</td>
</tr>
<tr>
<td>Date</td>
<td>2013-09-30</td>
</tr>
<tr>
<td>License</td>
<td>MIT License</td>
</tr>
</tbody>
</table>

The most useful function is ’sws’ which computes the Scrabble word score for a given string. It takes into account the letter distribution so not to count impossible letter combinations, such as ’zzz’ (worth 10 rather than 30 due to necessity of blanks)

Note

The name "Scrabble" is a trademark of Hasbro, Inc. in the United States and Canada; elsewhere, it is a trademark of Mattel.

Author(s)

Will Kurt

Maintainer: Will Kurt <wckurt@gmail.com>

Project at: https://github.com/willkurt/scrabble_score

References

https://github.com/willkurt/scrabble_score

Examples

data(twl06)
sws(head(twl06))
impossible.points

Calculates total of impossible points

Description

Calculates the number of point in access of the maximum possible amount due to the limitations of the letter distribution.

Usage

impossible.points(cl)

Arguments

cl

Word broken down into a list of characters (or a vector of words broken down this way)

Value

Returns a vector of values for the total number of impossible points in each list of characters

Author(s)

Will Kurt <wckurt@gmail.com>

Examples

impossible.points(strsplit("zzzz"))

is.twl06.word

Verifies that word belong to the twl06 list.

Description

Only certain words are officially approved for Scrabble tournament play. They are collected in a dataset revered to as twl06

Usage

is.twl06.word(w)

Arguments

w

Word or vector of words to check for inclusion in the twl06 list
Note

The name "Scrabble" is a trademark of Hasbro, Inc. in the United States and Canada; elsewhere, it is a trademark of Mattel.

Author(s)

Will Kurt <wckurt@gmail.com>

References


Examples

is.twl06.word("zzz")
is.twl06.word(c("zzz","zzzz"))

---

letter.dists  Scrabble letter distribution table

Description

A table specifying the exact distribution of letters in a normal game of Scrabble. Used to calculate impossible.points

Usage

data(letter.dists)

Format

The format is: 'table' int [1:26(1d)] 9 2 2 4 12 2 3 2 9 1 ... - attr(*, "dimnames")=List of 1 ..$ : chr [1:26] "a" "b" "c" "d" ...

Note

The name "Scrabble" is a trademark of Hasbro, Inc. in the United States and Canada; elsewhere, it is a trademark of Mattel.

Source

table compiled from data found here: http://en.wikipedia.org/wiki/Scrabble_letter_distributions

Examples

data(letter.dists)
Description

A simple function giving the standard letter value of each letter in Scrabble.

Usage

`sls(l)`

Arguments

1 A letter or vectors of letters to get the Scrabble letter score for.

Value

Returns a vector of values for the letter score of each letter passed in.

Note

The name "Scrabble" is a trademark of Hasbro, Inc. in the United States and Canada; elsewhere, it is a trademark of Mattel.

Author(s)

Will Kurt <wckurt@gmail.com>

See Also

`sfs`

Examples

`sls("z")`
`sls(c("z","z","z"))`
Scrabble Word Score

Description

Gives the base word score for a string in scrabble.

Usage

`sws(w, only.possible=TRUE, check.valid=FALSE)`

Arguments

- `w`  
  Word or vector of words
- `only.possible`  
  Default=TRUE Only consider scores that are possible based on the distribution of scrabble letters. For example "zzz" would score 30 if it weren’t for the fact that there is only 1 'z' necessitating the use of 2 blanks, for a real score of 10.
- `check.valid`  
  Default=FALSE When TRUE returns a score of 0 for words not in the TWL06 dictionary.

Value

Returns a vector of values for the word score of each word passed in.

Note

The name "Scrabble" is a trademark of Hasbro, Inc. in the United States and Canada; elsewhere, it is a trademark of Mattel.

Author(s)

Will Kurt <wckurt@gmail.com>

See Also

`s1s`

Examples

```
sws("zzz")
sws(c("dog","zzz"))
sws(c("dog","zzz"),only.possible=FALSE)
sws(c("dog","zzzzzz"),only.possible=FALSE,check.valid=TRUE)
```
Description
The Official Tournament and Club Word List

Usage
data(twl06)

Format
A list of official Scrabble Words

Note
The name "Scrabble" is a trademark of Hasbro, Inc. in the United States and Canada; elsewhere, it is a trademark of Mattel.

Source
http://norvig.com/ngrams/TWL06.txt

References

Examples
data(twl06)
sws(head(twl06))
Index

*Topic datasets
  letter.dists, 4
  twl06, 7

impossible.points, 3
is.twl06.word, 3

letter.dists, 4

ScrabbleScore (ScrabbleScore-package), 2
ScrabbleScore-package, 2
sls, 5, 6
sws, 5, 6

twl06, 7