

Package ‘apportion’

September 1, 2025

Title Apportion Seats

Version 0.0.2

Description Convert populations into integer number of seats for legislative bodies. Implements apportionment methods used historically and currently in the United States for reapportionment after the Census, as described in https://www.census.gov/history/www/reference/apportionment/methods_of_apportionment.html.

License MIT + file LICENSE

Encoding UTF-8

RoxygenNote 7.2.3

Depends R (>= 2.10)

LazyData true

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

URL <https://github.com/christopherkenny/apportion>,
<http://christophertkenny.com/apportion/>

BugReports <https://github.com/christopherkenny/apportion/issues>

NeedsCompilation no

Author Christopher T. Kenny [aut, cre] (ORCID:
<https://orcid.org/0000-0002-9386-6860>)

Maintainer Christopher T. Kenny <ctkenny@proton.me>

Repository CRAN

Date/Publication 2025-09-01 18:20:02 UTC

Contents

app_adams	2
app_balinski_young	2
app_dean	3

app_dhondt	3
app_hamilton_vinton	4
app_huntington_hill	4
app_jefferson	5
app_webster	5
state_2020	6

Index	7
--------------	----------

app_adams	<i>Apportion by the Adams Method</i>
-----------	--------------------------------------

Description

Apportion by the Adams Method

Usage

app_adams(size, pop)

Arguments

size	number of seats to apportion across units
pop	a vector of population sizes for each unit

Value

integer vector

Examples

```
app_adams(size = 435, pop = state_2020$pop)
```

app_balinski_young	<i>Apportion by the Balinski Young Method</i>
--------------------	---

Description

Apportion by the Balinski Young Method

Usage

app_balinski_young(size, pop)

Arguments

size	number of seats to apportion across units
pop	a vector of population sizes for each unit

Value

integer vector

Examples

```
app_balinski_young(size = 435, pop = state_2020$pop)
```

app_dean	<i>Apportion by the Dean Method</i>
----------	-------------------------------------

Description

Apportion by the Dean Method

Usage

```
app_dean(size, pop)
```

Arguments

size	number of seats to apportion across units
pop	a vector of population sizes for each unit

Value

integer vector

Examples

```
app_dean(size = 435, pop = state_2020$pop)
```

app_dhondt	<i>Apportion by the D'Hondt Method</i>
------------	--

Description

Apportion by the D'Hondt Method

Usage

```
app_dhondt(size, pop)
```

Arguments

size	number of seats to apportion across units
pop	a vector of population sizes for each unit

Value

integer vector

Examples

```
app_dhondt(size = 435, pop = state_2020$pop)
```

app_hamilton_vinton *Apportion by the Hamilton-Vinton Method*

Description

Apportion by the Hamilton-Vinton Method

Usage

```
app_hamilton_vinton(size, pop)
```

Arguments

size	number of seats to apportion across units
pop	a vector of population sizes for each unit

Value

integer vector

Examples

```
app_hamilton_vinton(size = 435, pop = state_2020$pop)
```

app_huntington_hill *Apportion by the Huntington-Hill Method*

Description

Apportion by the Huntington-Hill Method

Usage

```
app_huntington_hill(size, pop)
```

Arguments

size	number of seats to apportion across units
pop	a vector of population sizes for each unit

Value

integer vector

Examples

```
app_huntington_hill(size = 435, pop = state_2020$pop)
```

app_jefferson *Apportion by the Jefferson Method*

Description

Apportion by the Jefferson Method

Usage

```
app_jefferson(size, pop)
```

Arguments

size number of seats to apportion across units
pop a vector of population sizes for each unit

Value

integer vector

Examples

```
app_jefferson(size = 435, pop = state_2020$pop)
```

app_webster *Apportion by the Webster Method*

Description

Apportion by the Webster Method

Usage

```
app_webster(size, pop)
```

Arguments

size number of seats to apportion across units
pop a vector of population sizes for each unit

Value

integer vector

Examples

```
app_webster(size = 435, pop = state_2020$pop)
```

state_2020	<i>state_2020 (2020 State Data)</i>
------------	-------------------------------------

Description

tibble with columns:

- GEOID: Federal Information Processing Standards codes
- name: title case state name
- pop: 2020 population
- abb: two letter postal abbreviations

Usage

```
data('state_2020')
```

Value

tibble with state identifying information

Examples

```
data('state_2020')
```

Index

*** data**

state_2020, 6

app_adams, 2

app_balinski_young, 2

app_dean, 3

app_dhondt, 3

app_hamilton_vinton, 4

app_huntington_hill, 4

app_jefferson, 5

app_webster, 5

state_2020, 6