Package ‘farsi’

Type Package
Title Translate integers into persian
Version 1.0
Date 2013-03-08
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Description Allow numbers to be presented in an persian language version
License GPL-2
NeedsCompilation no
Repository CRAN
Date/Publication 2013-03-27 18:26:06

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Description

A simple facility to provide an persian language representation of integer vectors.

Details

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In answer to a question on R-help Sadegh Rasoulinejad provided an elegant R function to translate integers into persian numbers. The present package extends this code to an S3 class, with constructor functions and methods to make this original idea more conveniently available.

The function `as.farsi` is intended to provide a parallel facility to the function `as.roman` in the `utils` package.

The main purpose of the package is to present an interesting programming example rather than to solve a likely real problem, though there could well be some applications in unusual contexts.

**Author(s)**

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**References**

See original note by Sadegh Rasoulinejad at

**See Also**

`as.roman`.

**Examples**

```r
farsi(1:10)
```

---

`as.character.farsi`  
*Integers into persian*

**Description**

Translates integer vectors into character strings representing their expression in the persian language.

**Usage**

```r
## S3 method for class 'farsi'
as.character(x, ...)
```
**Arguments**

- **x**: A numeric vector of class `farsi`.
- **...**: Currently unused.

**Details**

Uses a recursive algorithm to translate numbers into their expression in farsi.

**Value**

A character string vector

**Author(s)**

Sadegh Rasoulinejad, MSc Student of Biostatistics Mashhad University of Medical Sciences (MUMS)

**References**

See original note by Sadegh Rasoulinejad at

**See Also**

`farsi, as.farsi, print.farsi`

**Examples**

```r
as.character(farsi(10001001 + 1:10))
```

---

**Description**

The functions `as.farsi` and `farsi` are fully equivalent generic constructor functions for the S3 class `farsi`, which allows numeric objects to be represented in the form of their customary persian expression.

**Usage**

```r
as.farsi(x, ...)  
farsi(x, ...)  
## S3 method for class 'numeric'  
farsi(x, ...)  
## S3 method for class 'farsi'  
farsi(x, ...)  
## Default S3 method:  
farsi(x, ...)
```
Arguments

x Any numeric object. If the components are not integers, they are rounded. In the case of farsi.default this may be an object of any class, but will always result in an error.

... Currently unused.

Details

The function farsi is a generic constructor function for objects of class farsi. The methods either mark the object as having the appropriate class, or, in the case of farsi.default, result in an error message. The function as.farsi is provided as a corresponding function to as.roman in the utils package. The method farsi.farsi simply allows the constructor function to act as a coercion and to have no effect on objects already of the class.

Value

An object of class farsi, if possible, or an error message if not.

Author(s)

Sadegh Rasoulinejad, MSc Student of Biostatistics Mashhad University of Medical Sciences (MUMS)

References

See original note by Sadegh Rasoulinejad at

See Also

as.character.farsi, print.farsi.

Examples

as.farsi(10001001) + (-5):5
**Ops.farsi**

Arguments

- `x` An object of class `farsi`.
- `...` Currently unused.

Value

An object of class numeric.

Author(s)

Sadegh Rasoulinejad MSc Student of Biostatistics Mashhad University of Medical Sciences (MUMS).

See Also

`farsi, as.farsi`.

Examples

```r
(x <- farsi(1:10))
as.numeric(x)
```

---

**Description**

Allows arithmetic with objects of class `farsi`.

Usage

```r
## S3 method for class 'farsi'
Ops(e1, e2)
```

Arguments

- `e1, e2` Numeric vectors, of which at least one must be of class `farsi`.

Details

A standard group generic function that strips off the `farsi` class from its arguments, invokes the next arithmetic operation method and reinstates the class `farsi` on the result.

Value

A numeric vector of class `farsi`.
Author(s)

Bill Venables

References

See original note by Sadegh Rasoulinejad at

See Also

farsi, as.farsi.

Examples

farsi(1:10)^2 + 1

Description

Provides a print method for objects of class farsi.

Usage

## S3 method for class 'farsi'
print(x, ...)

Arguments

x An object of class farsi
...

Additional arguments to be passed to the print generic function.

Details

Coerces the object to character and prints it.

Value

The original object, invisibly.

Author(s)

Sadegh Rasoulinejad MSc Student of Biostatistics Mashhad University of Medical Sciences (MUMS)

References

See original note by Sadegh Rasoulinejad at
sort.farsi

See Also

as.character.farsi.

Examples

print(farsi(1:10))

sort.farsi

A sorting method for objects of class persian

Description

A method for the generic function sort which allows numeric objects of class farsi to be sorted.

Usage

## S3 method for class 'farsi'
sort(x, decreasing = FALSE, ...)

Arguments

x An object of class farsi.

decreasing logical: should the object be sorted in decreasing order?

... Not currently used.

Details

The method temporarily removes the farsi class, sorts the object components and reinstates the farsi class to the result.

Value

An object of class farsi with its components in numerically sorted order.

Author(s)

Sadegh Rasoulinejad MSc Student of Biostatistics Mashhad University of Medical Sciences (MUMS)

References

See original note by Sadegh Rasoulinejad at

See Also

farsi.
Examples

(x <- farsi(sample(1:100, 5)))
sort(x)
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