Package 'go2bigq'

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Type Package

Title Convert Large Numbers to Bigq Format

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Description This function converts mfpr, numeric, or character strings representing numbers to bigq format without loss of precision.

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Imports Rmpfr, gmp, methods

NeedsCompilation no

Repository CRAN

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R topics documented:

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cgwtools-package	*A collection of tools that the author finds handy*

Description

Most of these tools are small functions to do simple tasks or provide filtered views of the current environment. In addition the function splatnd is provided primarily as a piece of example code to show how to write zero-argument operators. It's based on the code in the package sos , and avoids the need to use makeActiveBinding (as in ,e.g., pracma::ans)

Details

Package:	cgwtools
Type:	Package
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Author(s)

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go2bigq	*Function to convert various numerics to* bigq*with full precision.*

Description

Convert a numeric, a character string representing a numeric, or various mpfr classes to a bigq fraction. The output has the same precision as the input.

Usage

```
go2bigq(x,  ...)
```

Arguments

x	A value of class numeric, mpfr, mpfr1, or character. A list containing any one of these classes is allowed. See Details for various limitations
...	Parameters which could be used to modify the default behavior of formatMpfr. See Details for more information.

Details

The input x , if a list, must contain only one of the allowed classes. Character strings which represent numbers must be of the form [+,-]X[.]Y[e,E][+,-]Z , where X, Y, and Z are strictly limited to the numerals [0:9]. None of the other character options listed are required (except of course "[+,-]Z" is disallowed unless "[e,E]" exists.) The function formatMpfr accepts several arguments to adjust the output character string (number of digits precision, e.g.). go2bigq passes the ... objects to formatMpfr.

Value

A list containing bigq fractions .

Author(s)

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See Also

.bigq2mpfr, .bigz2mpfr, as.bigq

Examples

```
library(Rmpfr)
(go2bigq(0.17 + 1:5))
(go2bigq(as.character(0.17 + 1:5)))
(go2bigq(mpfr(0.17 + 1:5,100)))
as.numeric(go2bigq('017.3200e-10')[[1]] - go2bigq(0017.3200e-10)[[1]])
```

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