# Package 'pipebind'

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<b>Title</b> Flexible Binding for Complex Function Evaluation with the Base R  > Pipe	
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<b>Description</b> Provides a simple function to bind a piped object to a placeholder symbol to enable complex function evaluation with the base R  > pipe.	
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R topics documented:	
	2
Index	5

2 bind

bind

Bind a (piped) object to a symbol for complex function evaluation

#### **Description**

The base R |> pipe lacks some advanced functionality compared to the {magrittr} %>% pipe. For example, the piped object can only appear once on the right-hand side of the pipe (either as the first unnamed argument or elsewhere using the \_ placeholder in R 4.2.0 and later), and the \_ placeholder cannot appear on the left side of sub-setting functions like \$, [, [[, or @.

The bind() function is a way to conveniently circumvent these limitations. Pipe an object into bind(), choose a placeholder symbol to represent it, then use this placeholder to refer the piped object in any way and as many times as desired in an R expression.

The Greek letter  $\lambda$ () is available as an alias for bind().

#### Usage

```
bind(.pipeValue, .pipeBind, ...)
```

# **Arguments**

```
    .pipeValue The object to bind. Typically specified by piping into the bind() function (e.g., x |> bind()).
    .pipeBind The placeholder symbol to use to represent the piped object. Can be any valid R object name.
    ... An R expression. Any valid R code (expression).
```

#### Value

The results of the expression, evaluated using the piped object.

#### **Examples**

```
# Piping to a non-first argument
mtcars |>
    transform(kmL = mpg / 2.35) |>
    bind(d, lm(kmL ~ hp, data = d))

# Using the piped value multiple times
rnorm(10, mean = 10) |>
    bind(x, x - mean(x))

# Using the piped value in multiple arguments
c(a = 1, b = 2, c = 3) |>
    bind(x, paste(names(x), x, sep = " = "))

# Subsetting the piped value
mtcars |>
    bind(d, d$mpg)
```

bracket 3

bracket

Pipe-able aliases

## Description

pipebind provides several aliases for unary/binary operators (e.g., +) and replacement functions (e.g., names<-()) that facilitate using these functions in a |> chain.

Some unary/binary operators cannot currently be used with the |> pipe, such as +, -, or %\*%. These aliases provide a way to use these functions with the |> pipe.

Currently implemented aliases are

## **Extract and replace elements**

bracket	'['
double_bracket	,[[,
assign_bracket	'[<-'
assign_double_bracket	· [<- ·
dollar	<b>'</b> \$'
at_sign	<b>'</b> @ <b>'</b>
Arithmetic operators	
add	·+·
subtract	· _ ·
multiply	<b>'</b> *'
divide	'/'
integer_divide	<b>'</b> %/%'
mod	<b>'%</b> %'
raise_to_power	· ^ ·
matrix_multiply	<b>'</b> %*%'
Logical comparisons	
and	<b>'&amp;'</b>
or	' '
not	'!'
single_and	<b>'&amp;&amp;'</b>
single_or	<b>'</b>    <b>'</b>
equals	·== ·
greater_than	<b>'&gt;'</b>
greater_or_equal	<b>'&gt;='</b>
less_than	<b>'&lt;'</b>
less_or_equal	<b>'</b> <= <b>'</b>
is_in	'%in%'
Assign attributes	
assign_names	'names<-'
assign_colnames	'colnames<-'
assign_rownames	'rownames<-'
assign_dimnames	'dimnames<-'
assign_class	'class<-'
assign_attributes	'attributes<-'

4 bracket

```
assign_attr
                            'attr<-'
assign_levels
                            'levels<-'
assign_contrasts
                            'contrasts<-'
                            'units<-'</pre>
assign_units
assign_comment
                            'comment<-'</pre>
                            'diag<-'
assign_diag
                            'dim<-'
assign_dim
                            'length<-'
assign_length
                            'is.na<-'
assign_as_na
```

## Note

Inspired and some alias names adapted from from *magrittr*. Reused code Copyright (c) 2023 magrittr authors.

## **Examples**

```
mtcars |>
    bracket(, 1:4)

1:10 |>
    add(5) |>
    matrix(dimnames = list(letters[1:10], "x")) |>
    matrix_multiply(seq(10, 100, by = 10))

data.frame(1:10, letters[1:10]) |>
    assign_names(c("numbers", "letters"))
```

# **Index**

```
add (bracket), 3
                                                 matrix_multiply(bracket), 3
and (bracket), 3
                                                 mod (bracket), 3
assign_as_na(bracket), 3
                                                 multiply (bracket), 3
assign_attr(bracket), 3
                                                 not (bracket), 3
assign_attributes (bracket), 3
assign_bracket (bracket), 3
                                                 or (bracket), 3
assign_class(bracket), 3
assign_colnames(bracket), 3
                                                 pipe, 2
assign_comment (bracket), 3
                                                 pipebind (bind), 2
assign_contrasts(bracket), 3
assign_diag(bracket), 3
                                                 raise_to_power (bracket), 3
assign_dim(bracket), 3
assign_dimnames (bracket), 3
                                                 single_and(bracket), 3
assign_double_bracket (bracket), 3
                                                 single_or(bracket), 3
assign_length (bracket), 3
                                                 subtract (bracket), 3
assign_levels(bracket), 3
assign_names(bracket), 3
assign_rownames (bracket), 3
assign_units(bracket), 3
at_sign(bracket), 3
base R, 2
bind, 2
bracket, 3
divide (bracket), 3
dollar (bracket), 3
double_bracket (bracket), 3
equals (bracket), 3
greater_or_equal (bracket), 3
greater_than (bracket), 3
integer_divide (bracket), 3
is_in(bracket), 3
lambda (bind), 2
less_or_equal (bracket), 3
less_than (bracket), 3
```