

DOT PIPE

```
library("wrapr")
5 %>% sin(.)

## [1] -0.9589243

print(.)

## [1] 5
5 %>% {1 + .}

## [1] 6
5 %>% (1 + .)

## [1] 6

library("dplyr")

##
## Attaching package: 'dplyr'
##
## The following object is masked from 'package:wrapr':
##
##      coalesce
##
## The following objects are masked from 'package:stats':
##
##      filter, lag
##
## The following objects are masked from 'package:base':
##
##      intersect, setdiff, setequal, union

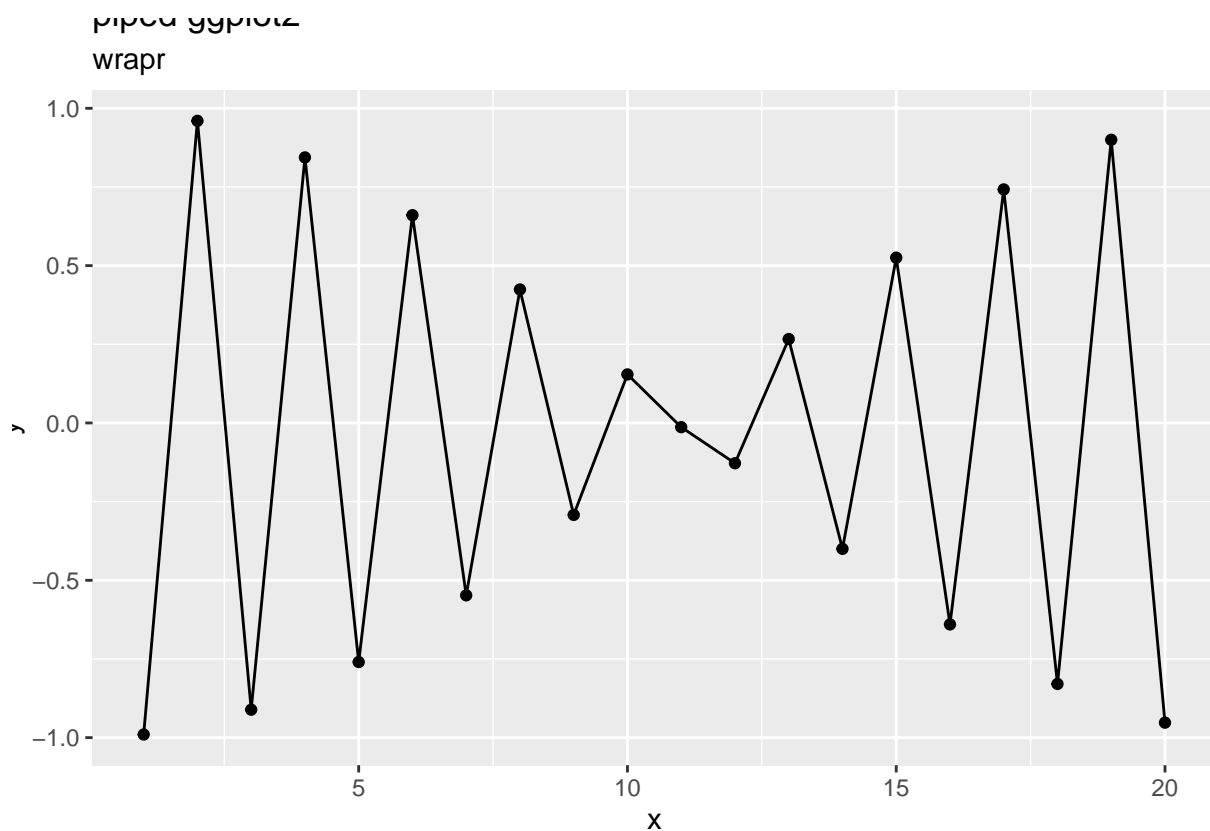
disp <- 4
mtcars %>%
  filter(., .data$cyl == .env$disp) %>%
  nrow(.)

## [1] 11

library("ggplot2")
apply_left.gg <- function(pipe_left_arg,
  pipe_right_arg,
  pipe_environment,
  left_arg_name,
  pipe_string,
  right_arg_name) {
  pipe_right_arg <- eval(pipe_right_arg,
    envir = pipe_environment,
    enclos = pipe_environment)
  pipe_left_arg + pipe_right_arg
}

data.frame(x = 1:20) %>%
  mutate(., y = cos(3*x)) %>%
  ggplot(., aes(x = x, y = y)) %>%
  geom_point() %>%
```

```
geom_line() %>%
ggtitle("piped ggplot2",
subtitle = "wrapr")
```



```
library("rquery")
```

```
##
## Attaching package: 'rquery'
## The following object is masked from 'package:ggplot2':
##
##   arrow
```

```
optree <- mk_td(table_name = "d", columns = "x") %>%
extend_nse(., y = cos(2*x))
```

```
class(optree)
```

```
## [1] "relop_extend" "relop"
```

```
print(optree)
```

```
## [1] "mk_td(\"d\", c( \"x\")) %>% extend(., y := cos(2 * x))"
```

```
column_names(optree)
```

```
## [1] "x" "y"
```

```
columns_used(optree)
```

```
## $d
```

```
## [1] "x"

# get a database connection
db = DBI::dbConnect(RSQLite::SQLite(), ":memory:")
# make our db connection available to rquery package
options(list("rquery.rquery_db_executor" = list(db = db)))
data.frame(x = 1:3) %>% optree # apply optree to d

##      x      y
## 1 1 -0.4161468
## 2 2 -0.6536436
## 3 3  0.9601703

d1 <- data.frame(x = 1)
d2 <- data.frame(x = 2)
tryCatch(
  d1 %>% d2,
  error = function(e) { invisible(cat(format(e))) })

## wrapr::apply_right_S4 default called with classes:
## d1 data.frame
## d2 data.frame
## must have a more specific S4 method defined to dispatch
## NULL

setMethod(
  "apply_right_S4",
  signature = c("data.frame", "data.frame"),
  definition = function(pipe_left_arg,
    pipe_right_arg,
    pipe_environment,
    left_arg_name,
    pipe_string,
    right_arg_name) {
    rbind(pipe_left_arg, pipe_right_arg)
  })
d1 %>% d2

##      x
## 1 1
## 2 2

d1 %>% data.frame(x = 2)

##      x
## 1 2

library("magrittr")
5 %>% sin

## [1] -0.9589243

`%userpipe%` <- magrittr::`%>%`
tryCatch(
  5 %userpipe% sin,
  error = function(e) {e})

## <simpleError in pipes[[i]]: subscript out of bounds>
```

```

`%userpipe%` <- wrapr::`%>%`
5 %userpipe% sin

## [1] -0.9589243

library("magrittr")
5 %>% substitute

## value

tryCatch(
  5 %>% base::sin,
  error = function(e) {e})

## <simpleError in .::base: unused argument (sin)>

library("wrapr")
5 %>% substitute

## [1] 5

5 %>% base::sin

## [1] -0.9589243

d <- data.frame(x = 1:5, y = c(1, 1, 0, 1, 0))
model <- glm(y~x, family = binomial, data = d)
apply_right.glm <-
function(pipe_left_arg,
  pipe_right_arg,
  pipe_environment,
  left_arg_name,
  pipe_string,
  right_arg_name) {
  predict(pipe_right_arg,
    newdata = pipe_left_arg,
    type = 'response')
}
data.frame(x = c(1, 3)) %>% model

##           1           2
## 0.9428669 0.6508301

# get a database connection
db = DBI::dbConnect(RSQLite::SQLite(),
  ":memory:")
apply_right.SQLiteConnection <-
function(pipe_left_arg,
  pipe_right_arg,
  pipe_environment,
  left_arg_name,
  pipe_string,
  right_arg_name) {
  DBI::dbGetQuery(pipe_right_arg, pipe_left_arg)
}
"SELECT * FROM sqlite_temp_master" %>% db

## [1] type      name      tbl_name rootpage sql
## <0 rows> (or 0-length row.names)

```

```

apply_left.character <- function(pipe_left_arg,
  pipe_right_arg,
  pipe_environment,
  left_arg_name,
  pipe_string,
  right_arg_name) {
  pipe_right_arg <- eval(pipe_right_arg,
    envir = pipe_environment,
    enclos = pipe_environment)
  paste0(pipe_left_arg, pipe_right_arg)
}
"a" %>% "b" %>% "c"

```

```
## [1] "abc"
```

```

apply_left.formula <- function(pipe_left_arg,
  pipe_right_arg,
  pipe_environment,
  left_arg_name,
  pipe_string,
  right_arg_name) {
  pipe_right_arg <- eval(pipe_right_arg,
    envir = pipe_environment,
    enclos = pipe_environment)
  pipe_right_arg <- paste(pipe_right_arg, collapse = " + ")
  update(pipe_left_arg, paste(" ~ . +", pipe_right_arg))
}
(y~a) %>% c("b", "c", "d") %>% "e"

```

```
## y ~ a + b + c + d + e
```