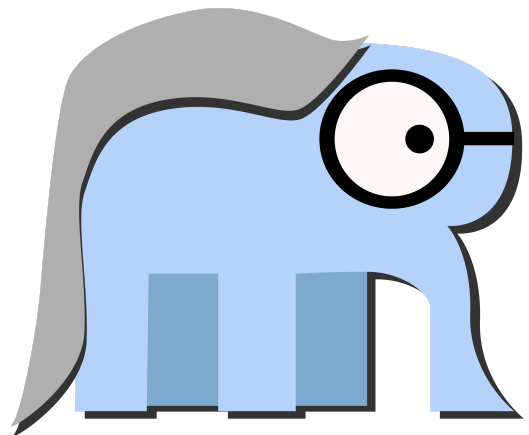


Plyrmr

Antonio Piccolboni, Revolution Analytics



```
mtcars
```

```
mpg cyl  disp  hp vs gear carb
Mazda RX4          21.0   6 160.0 110  0    4    4
Mazda RX4 Wag      21.0   6 160.0 110  0    4    4
Datsun 710          22.8   4 108.0  93  1    4    1
Hornet 4 Drive      21.4   6 258.0 110  1    3    1
Hornet Sportabout  18.7   8 360.0 175  0    3    2
Valiant             18.1   6 225.0 105  1    3    1
Duster 360          14.3   8 360.0 245  0    3    4
....
```

```
bind.cols(mtcars, carb.per.cyl = carb/cyl)
```

```
mpg cyl  disp  hp vs gear carb carb.per.cyl
Mazda RX4          21.0   6 160.0 110  0   4   4   0.6667
Mazda RX4 Wag      21.0   6 160.0 110  0   4   4   0.6667
Datsun 710          22.8   4 108.0  93  1   4   1   0.2500
Hornet 4 Drive      21.4   6 258.0 110  1   3   1   0.1667
Hornet Sportabout  18.7   8 360.0 175  0   3   2   0.2500
Valiant             18.1   6 225.0 105  1   3   1   0.1667
Duster 360          14.3   8 360.0 245  0   3   4   0.5000
....
```

```
bind.cols(input("/tmp/mtcars"), carb.per.cyl = carb/cyl)
```

```
mpg cyl  disp  hp vs gear carb carb.per.cyl
Mazda RX4          21.0   6 160.0 110  0   4     4     0.6667
Mazda RX4 Wag      21.0   6 160.0 110  0   4     4     0.6667
Datsun 710         22.8   4 108.0  93  1   4     1     0.2500
Hornet 4 Drive     21.4   6 258.0 110  1   3     1     0.1667
Hornet Sportabout  18.7   8 360.0 175  0   3     2     0.2500
Valiant            18.1   6 225.0 105  1   3     1     0.1667
Duster 360         14.3   8 360.0 245  0   3     4     0.5000
....
```

```
as.data.frame(bind.cols(input("/tmp/mtcars"), carb.per.cyl = carb/cyl))
```

```
mpg cyl  disp  hp vs gear carb carb.per.cyl
Mazda RX4          21.0   6 160.0 110  0   4     4     0.6667
Mazda RX4 Wag      21.0   6 160.0 110  0   4     4     0.6667
Datsun 710          22.8   4 108.0  93  1   4     1     0.2500
Hornet 4 Drive      21.4   6 258.0 110  1   3     1     0.1667
Hornet Sportabout   18.7   8 360.0 175  0   3     2     0.2500
Valiant             18.1   6 225.0 105  1   3     1     0.1667
Duster 360          14.3   8 360.0 245  0   3     4     0.5000
....
```

```
output(
  bind.cols(
    input("/tmp/mtcars"),
    carb.per.cyl = carb/cyl),
  "/tmp/mtcars.out")
```

```
mpg cyl  disp  hp vs gear carb carb.per.cyl
Mazda RX4          21.0   6 160.0 110   0    4    4    0.6667
Mazda RX4 Wag      21.0   6 160.0 110   0    4    4    0.6667
Datsun 710          22.8   4 108.0  93   1    4    1    0.2500
Hornet 4 Drive      21.4   6 258.0 110   1    3    1    0.1667
Hornet Sportabout  18.7   8 360.0 175   0    3    2    0.2500
Valiant             18.1   6 225.0 105   1    3    1    0.1667
Duster 360          14.3   8 360.0 245   0    3    4    0.5000
....
```

- plyr
 - bind.cols, transmute, where, count.cols, quantile.cols, top.k, bottom.k
- dplyr
 - select
- base
 - sample, union, intersect, rbind, unique, merge
- reshape2
 - melt, dcast


```
where(  
  bind.cols(  
    input("/tmp/mtcars"),  
    carb.per.cyl = carb/cyl),  
  carb.per.cyl >= 1)
```

```
mpg cyl disp  hp vs gear carb carb.per.cyl  
Ferrari Dino  19.7   6  145 175   0     5     6     1  
Maserati Bora  15.0   8  301 335   0     5     8     1
```

```
x = bind.cols(mtcars, carb.per.cyl = carb/cyl)
where(x, carb.per.cyl >= 1)
```

```
mtcars %|%
  bind.cols(carb.per.cyl = carb/cyl) %|%
  where(carb.per.cyl >= 1)
```

```
last.col = function(x) x[, ncol(x), drop = FALSE]
```

```
gapply(input("/tmp/mtcars"), last.col)
```

carb

Mazda RX4	4
-----------	---

Mazda RX4 Wag	4
---------------	---

Datsun 710	1
------------	---

Hornet 4 Drive	1
----------------	---

Hornet Sportabout	2
-------------------	---

Valiant	1
---------	---

Duster 360	4
------------	---

....

```
input("/tmp/mtcars") %>%  
  group(cyl) %>%  
  transmute(mean.mpg = mean(mpg))
```

cyl	mean.mpg	
1	6	19.74
1.1	4	26.66
1.2	8	15.10

```
input("/tmp/mtcars") %|%  
  group(carb) %|%  
  quantile.cols()
```

carb	mpg	cyl	disp	hp	vs	gear	
0%	4	10.40	6	160.00	110.0	0.0	3.0
25%	4	13.55	6	167.60	123.0	0.0	3.0
50%	4	15.25	8	350.50	210.0	0.0	3.5
75%	4	18.85	8	420.00	241.2	0.0	4.0
100%	4	21.00	8	472.00	264.0	1.0	5.0
0%.1	1	18.10	4	71.10	65.0	1.0	3.0
25%.1	1	21.45	4	78.85	66.0	1.0	3.0
....							

```
models =  
  input("/tmp/mtcars") %| %  
  group(carb) %| %  
  transmute(model = list(lm(mpg~cyl+disp))) %| %  
  as.data.frame()  
models
```

carb	model
1	4 c(22.693....
1.1	1 c(9.2859....
1.2	2 c(32.723....
1.3	3 c(16.3,
1.4	6 c(19.7,
1.5	8 c(15, NA....

```
models[1,2]
```

```
[[1]]
```

```
Call:
```

```
lm(formula = mpg ~ cyl + disp)
```

```
Coefficients:
```

(Intercept)	cyl	disp
22.694	0.329	-0.030

```
....
```

Come meet us at our booth

