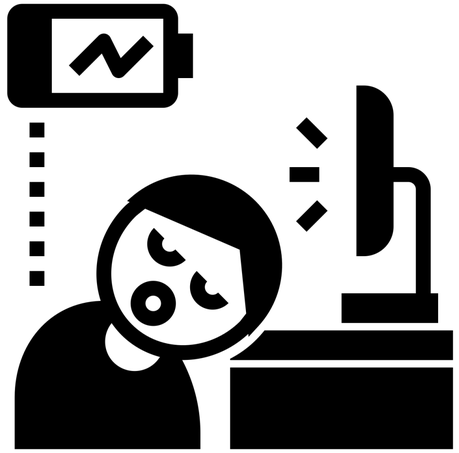
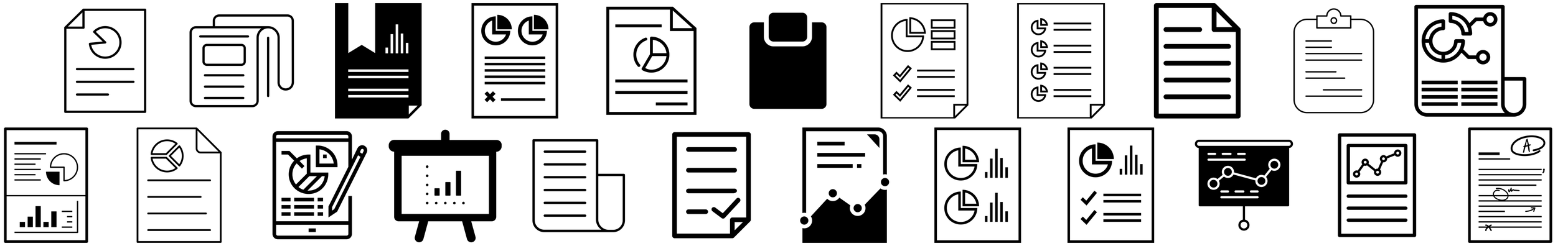
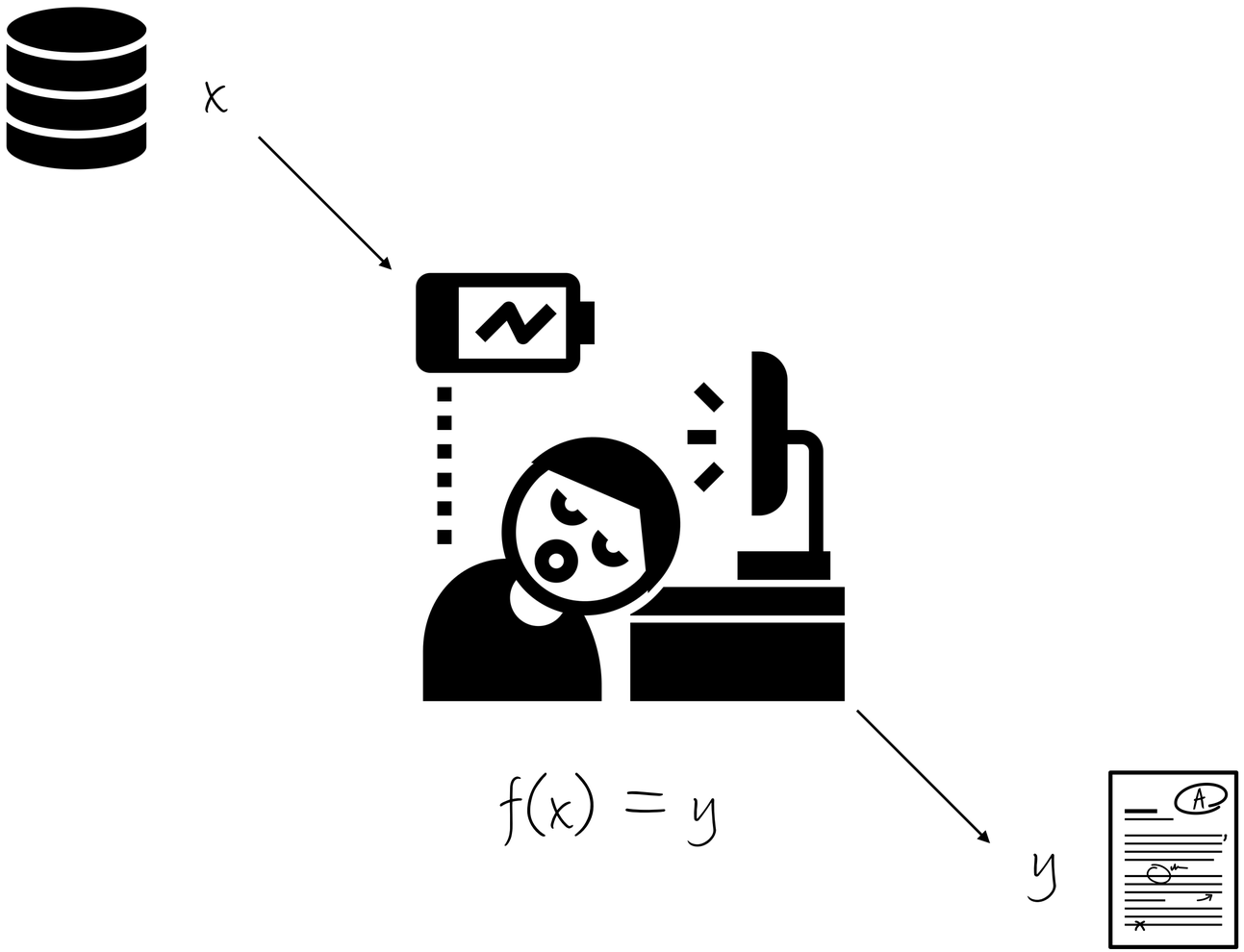
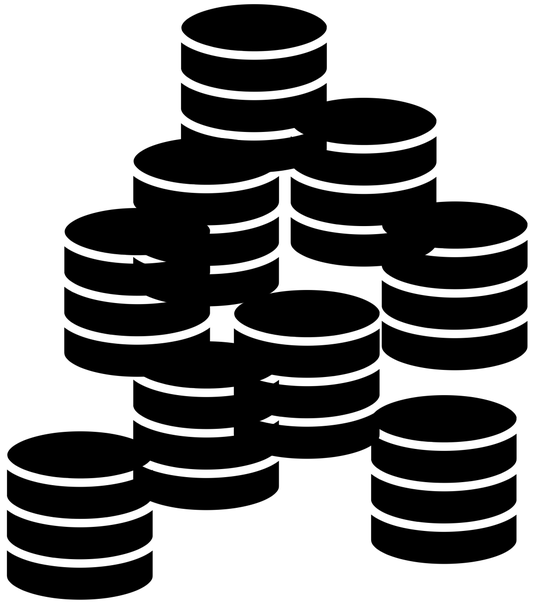
Before

After

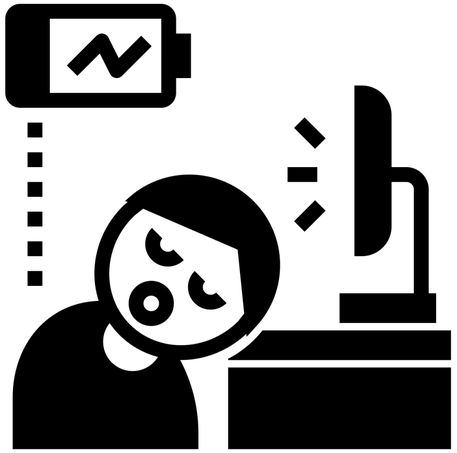





x
f(x) = y
y

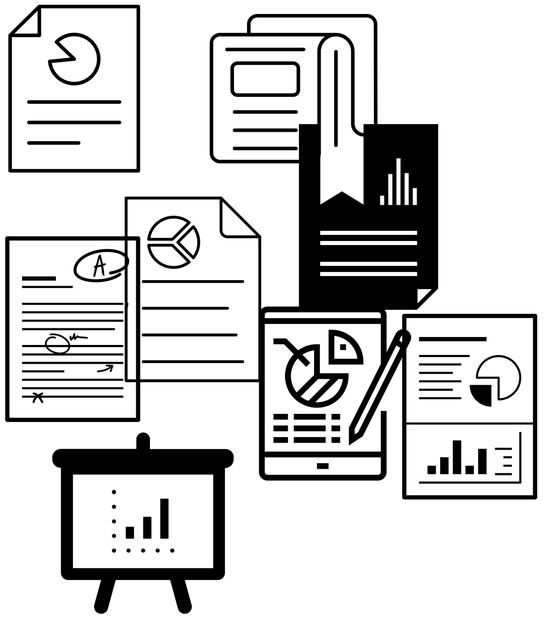


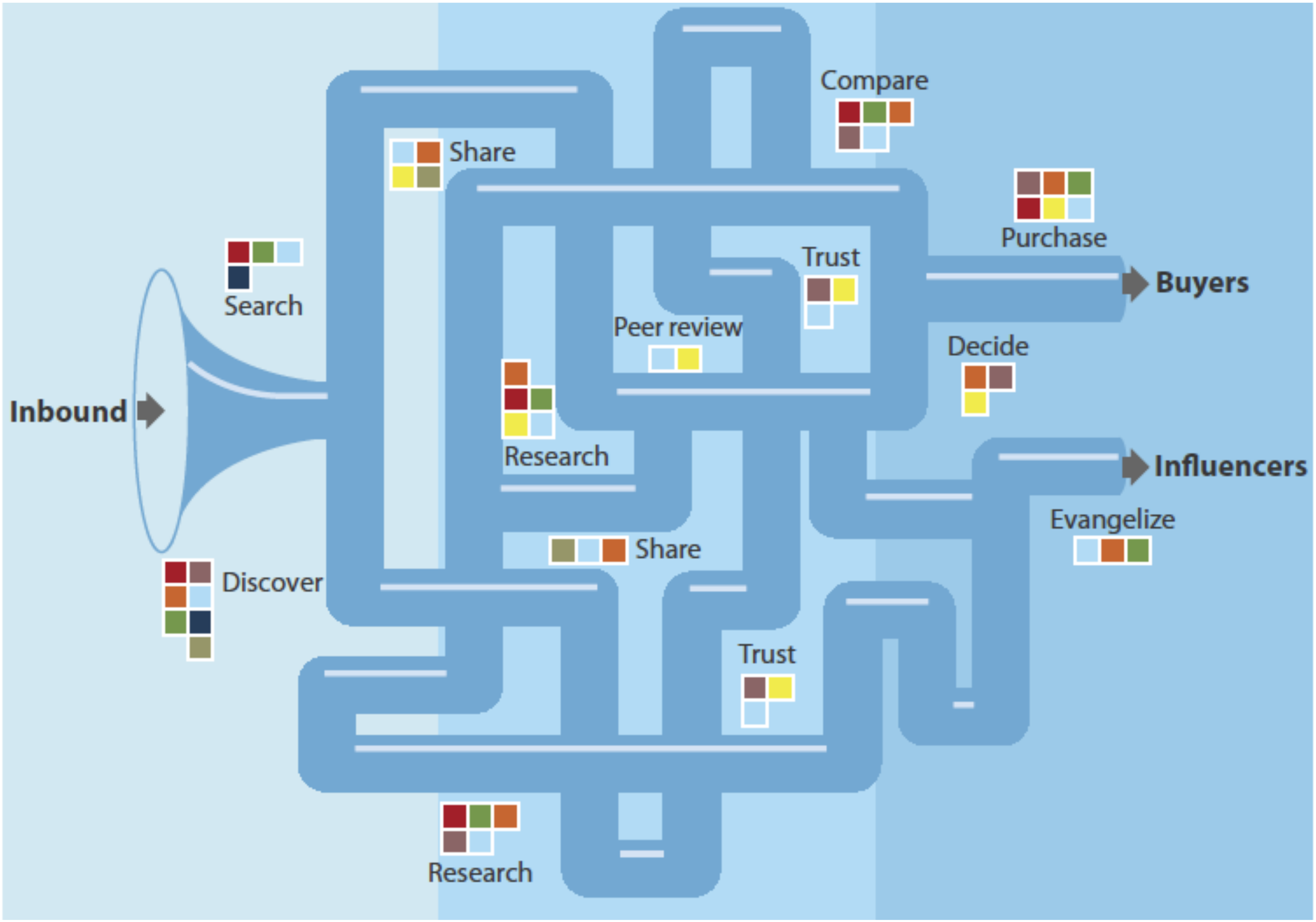
$$\lim_{n\to\infty}\sum_{i=1}^{n} x_i$$

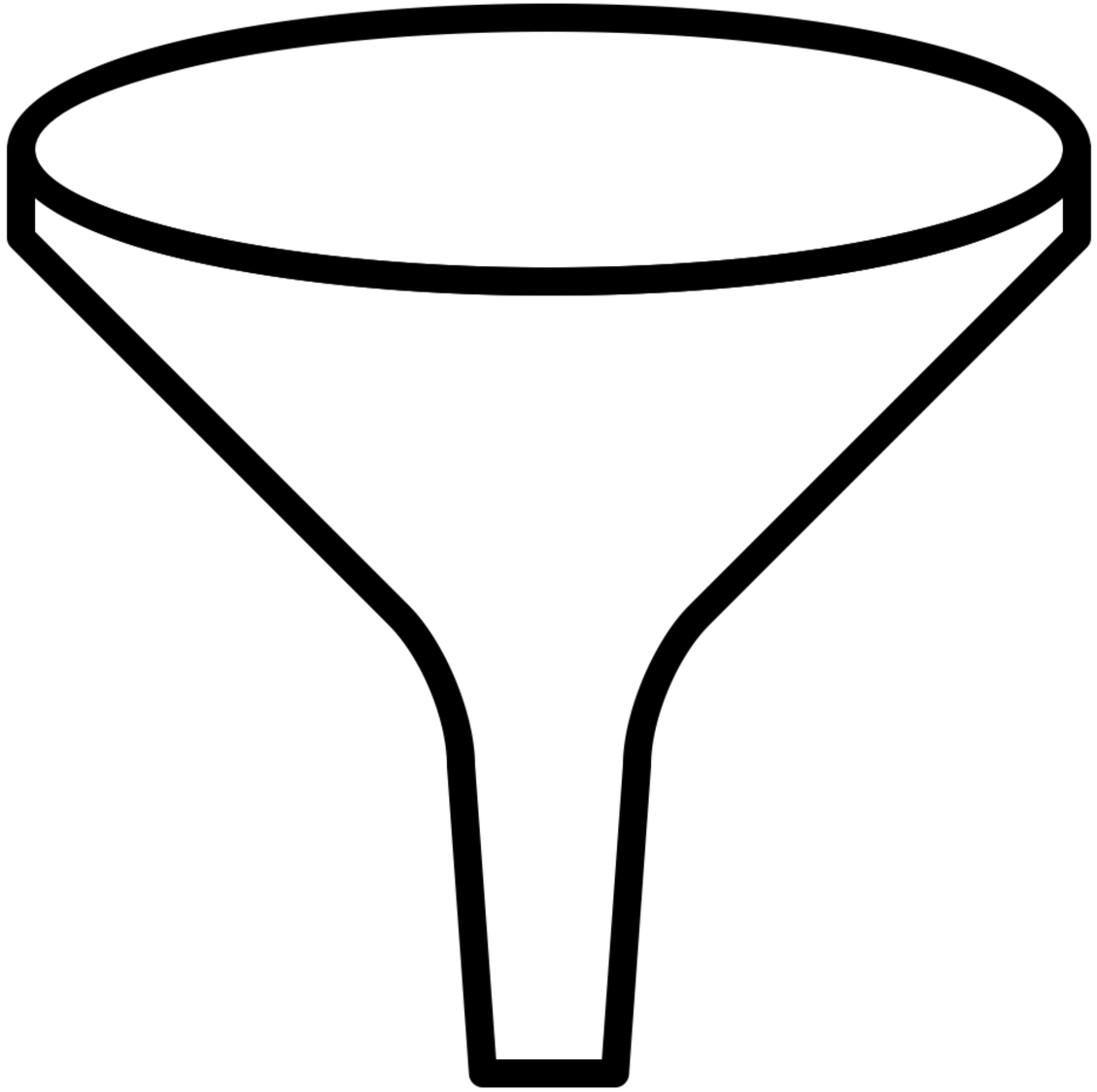


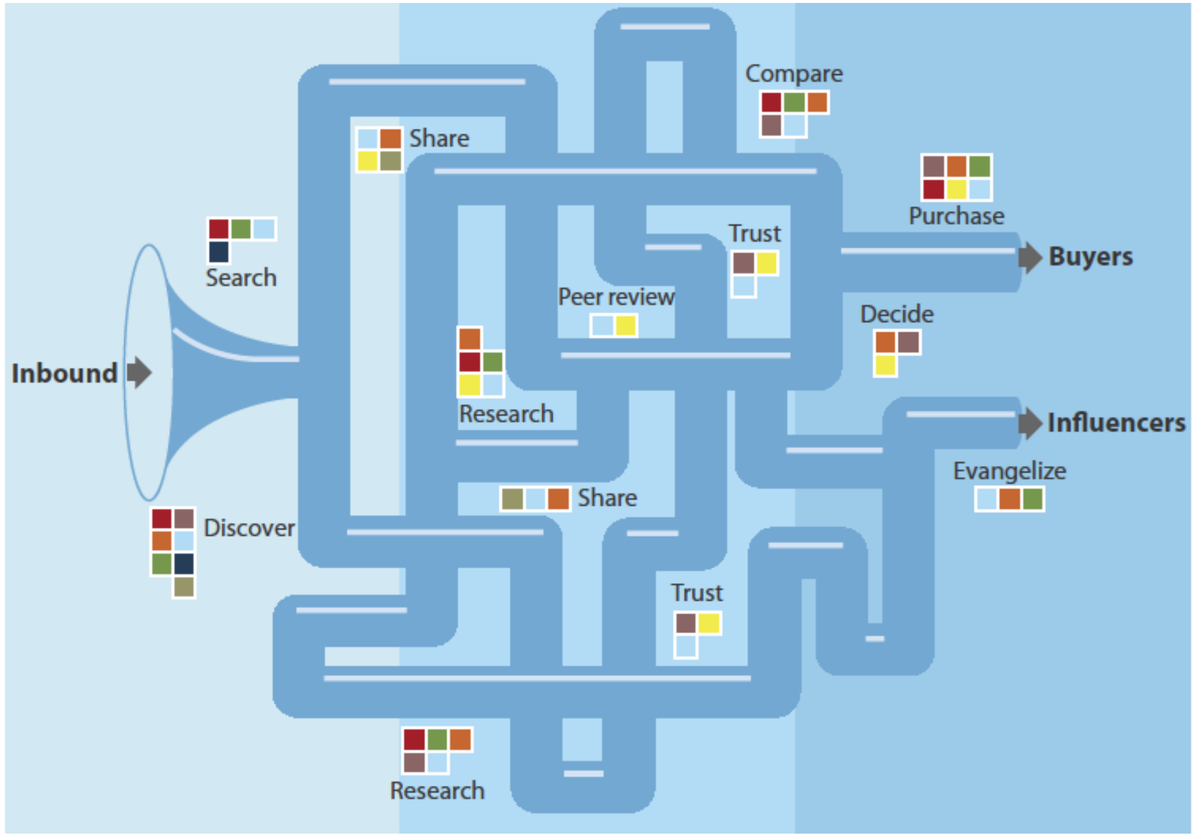
$$f(x_i) = y_i$$

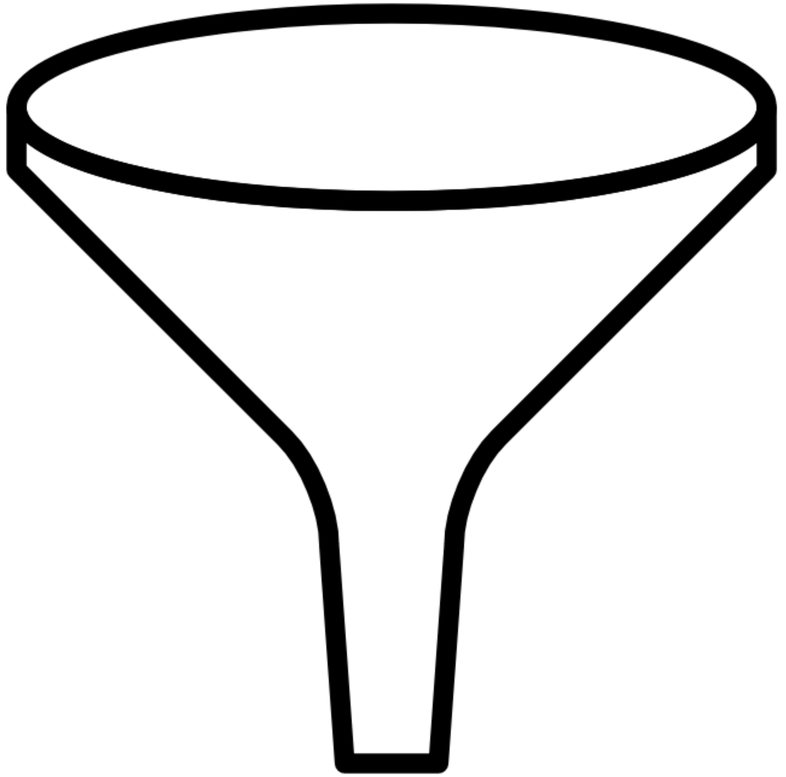
$$\lim_{n\to\infty}\sum_{i=1}^{n} y_i$$




Compare
Share
Purchase
Search
Trust
Buyers
Peer review
Decide
Inbound
Research
Influencers
Evangelize
Share
Discover
Trust
Research




Compare
Share
Purchase
Search
Trust
Buyers
Peer review
Decide
Inbound
Research
Influencers
Evangelize
Share
Discover
Trust
Research

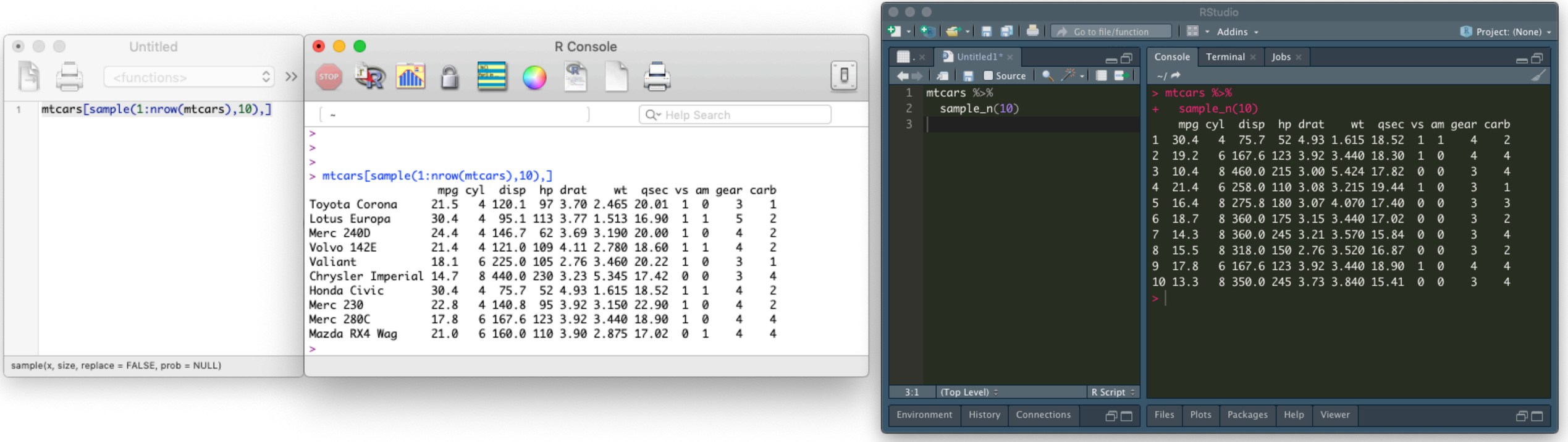


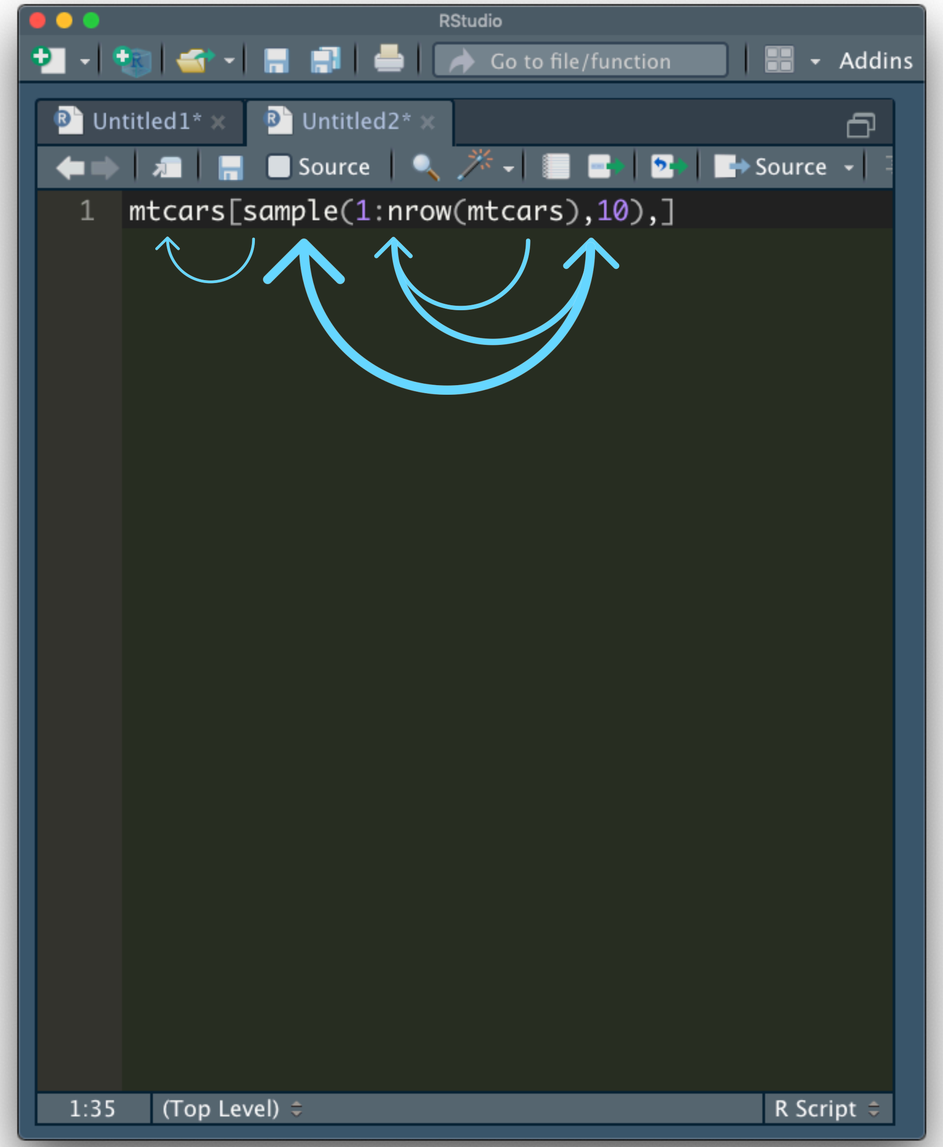
제목 없음 - 메모장

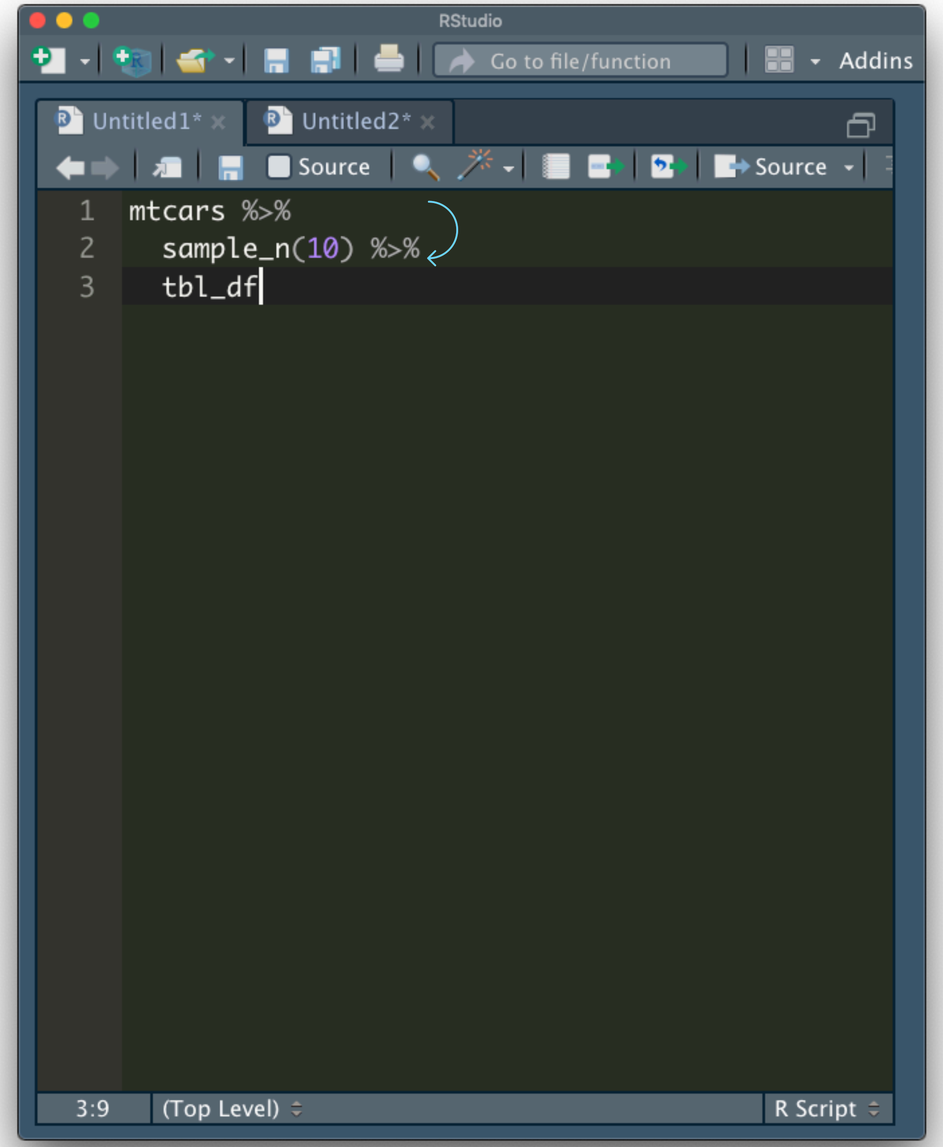
파일(F) 편집(E) 서식(O) 보기(V) 도움말(H)

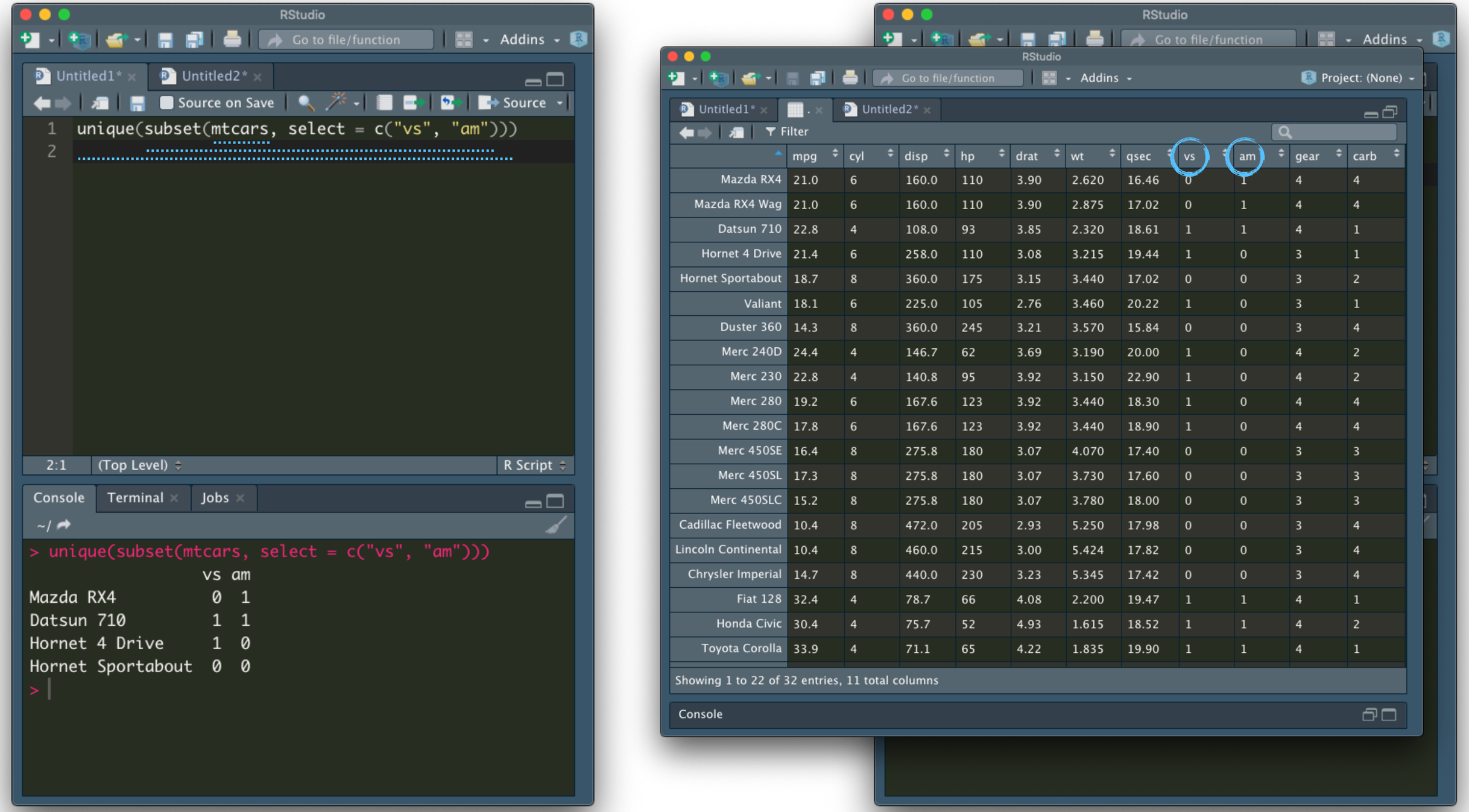
```
select t1.*, t2.amt amt0515,
        case
                when t2.amt is null then '00. non'
                when t2.amt > 0 and t2.amt <= 10000 then '01. 1~10000'
                when t2.amt > 10000 and t2.amt <= 30000 then '02. 10000~30000'
                when t2.amt > 30000 and t2.amt <= 100000 then '03. 30000~100000'
                when t2.amt > 100000 then '04. 100000~'
        end user_group
into [temp].[lovetoken_kr_daily_predset]
from [dbmart03].[kr_daily] t1
left join [metainfo].[prop_rate] t2
        on t1.key_id = t2.key_id
        and t1.sn = t2.sn
where t1.dt >= timestamp '2018-01-01 00:00 UTC' and t1.dt < timestamp '2018-05-16 00:00 UTC'
```

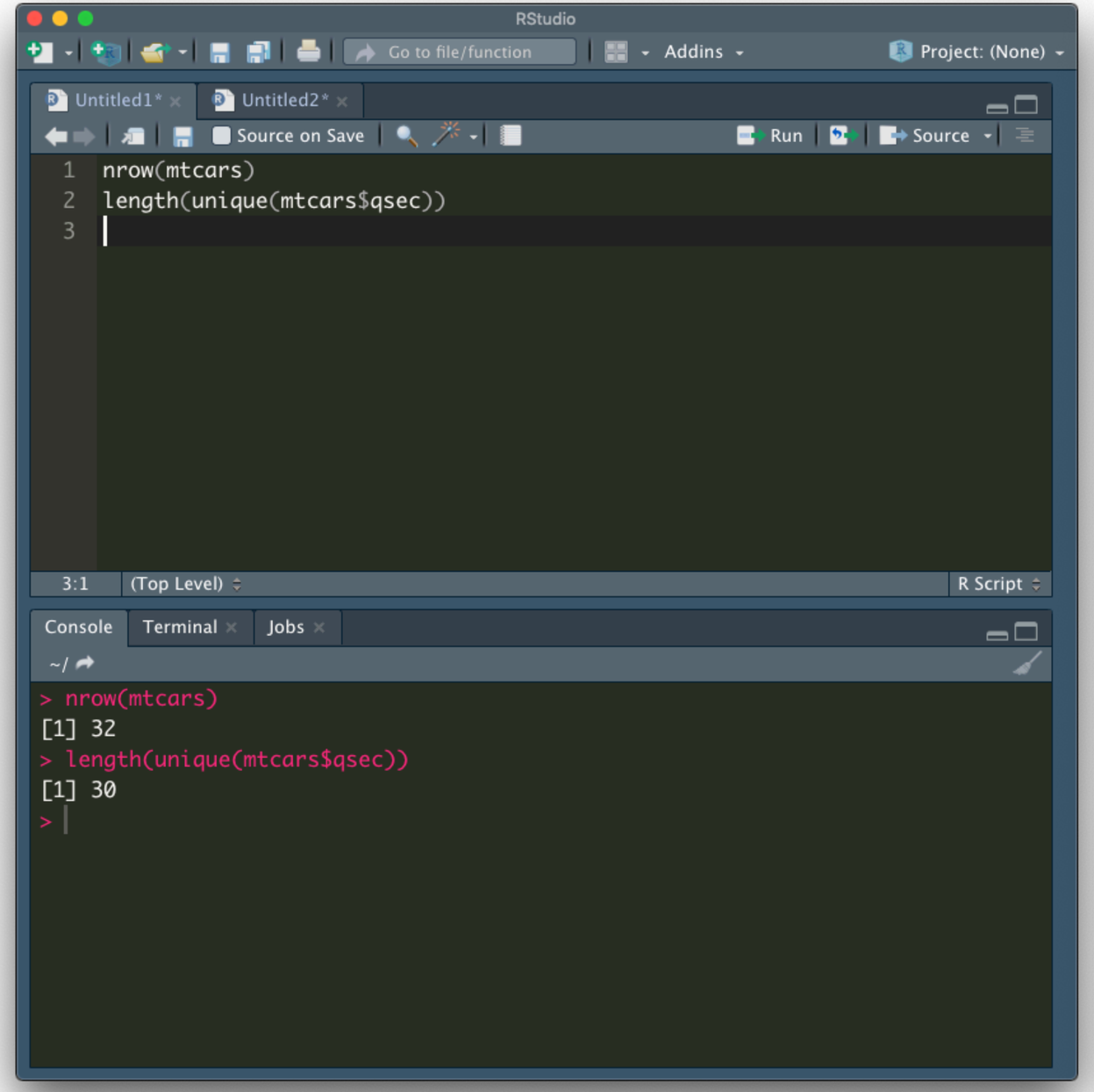
```sql
SELECT    t1.*, t2.amt amt0515,
          CASE
            WHEN t2.amt IS NULL THEN '00. Non'
            WHEN t2.amt > 0 AND t2.amt <= 10000 THEN '01. 1~10000'
            WHEN t2.amt > 10000 AND t2.amt <= 30000 THEN '02. 10000~30000'
            WHEN t2.amt > 30000 AND t2.amt <= 100000 THEN '03. 30000~100000'
            WHEN t2.amt > 100000 THEN '04. 100000~'
          END user_group
INTO      [TEMP].[lovetoken_kr_daily_predset]
FROM      [dbmart03].[kr_daily] t1
LEFT JOIN [metainfo].[prop_rate] t2
  ON      t1.key_id = t2.key_id
  AND     t1.sn = t2.sn
WHERE     t1.dt >= timestamp '2018-01-01 00:00 UTC' AND t1.dt < timestamp '2018-05-16 00:00 UTC'
```

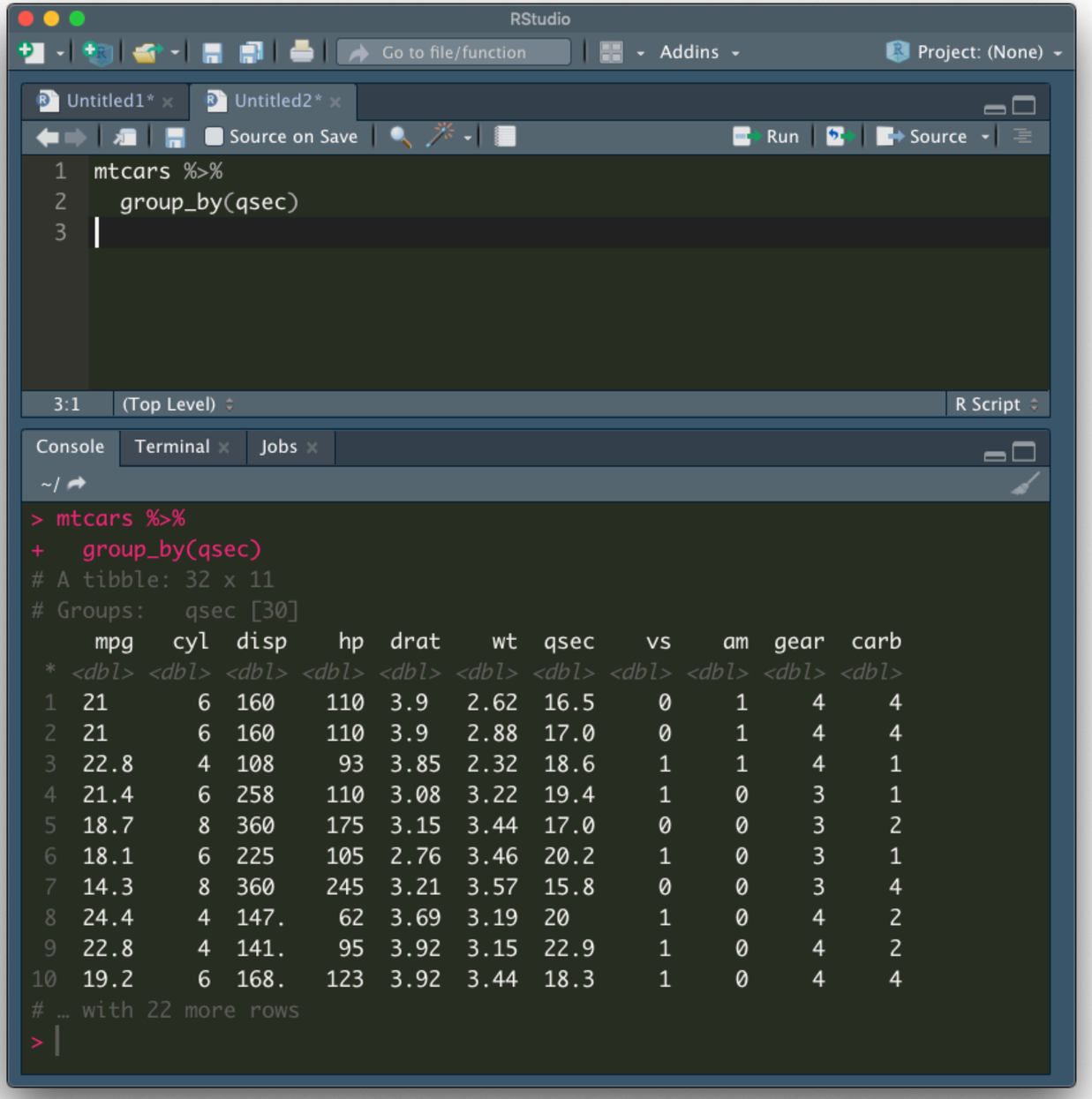

Untitled
<functions>
1 mtcars[sample(1:nrow(mtcars),10),]
sample(x, size, replace = FALSE, prob = NULL)
R Console
~
Help Search
> mtcars[sample(1:nrow(mtcars),10),]
mpg cyl disp hp drat wt qsec vs am gear carb
Toyota Corona 21.5 4 120.1 97 3.70 2.465 20.01 1 0 3 1
Lotus Europa 30.4 4 95.1 113 3.77 1.513 16.90 1 1 5 2
Merc 240D 24.4 4 146.7 62 3.69 3.190 20.00 1 0 4 2
Volvo 142E 21.4 4 121.0 109 4.11 2.780 18.60 1 1 4 2
Valiant 18.1 6 225.0 105 2.76 3.460 20.22 1 0 3 1
Chrysler Imperial 14.7 8 440.0 230 3.23 5.345 17.42 0 0 3 4
Honda Civic 30.4 4 75.7 52 4.93 1.615 18.52 1 1 4 2
Merc 230 22.8 4 140.8 95 3.92 3.150 22.90 1 0 4 2
Merc 280C 17.8 6 167.6 123 3.92 3.440 18.90 1 0 4 4
Mazda RX4 Wag 21.0 6 160.0 110 3.90 2.875 17.02 0 1 4 4
RStudio
Go to file/function
Addins
Project: (None)
Untitled1*
Source
1 mtcars %>%
2 sample_n(10)
3
3:1
(Top Level)
R Script
Console
Terminal
Jobs
~/
> mtcars %>%
+ sample_n(10)
mpg cyl disp hp drat wt qsec vs am gear carb
1 30.4 4 75.7 52 4.93 1.615 18.52 1 1 4 2
2 19.2 6 167.6 123 3.92 3.440 18.30 1 0 4 4
3 10.4 8 460.0 215 3.00 5.424 17.82 0 0 3 4
4 21.4 6 258.0 110 3.08 3.215 19.44 1 0 3 1
5 16.4 8 275.8 180 3.07 4.070 17.40 0 0 3 3
6 18.7 8 360.0 175 3.15 3.440 17.02 0 0 3 2
7 14.3 8 360.0 245 3.21 3.570 15.84 0 0 3 4
8 15.5 8 318.0 150 2.76 3.520 16.87 0 0 3 2
9 17.8 6 167.6 123 3.92 3.440 18.90 1 0 4 4
10 13.3 8 350.0 245 3.73 3.840 15.41 0 0 3 4
Environment
History
Connections
Files
Plots
Packages
Help
Viewer

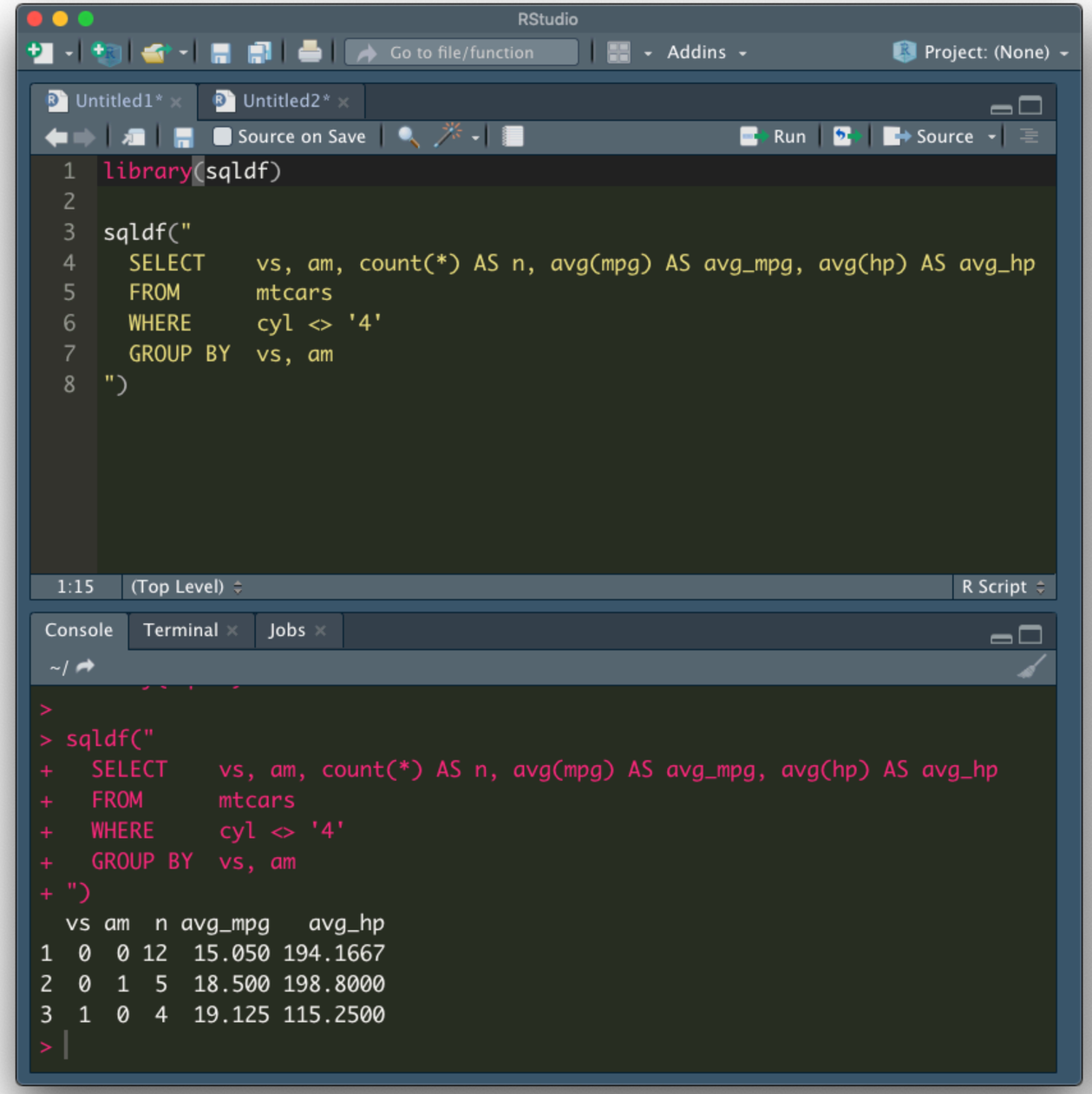

RStudio
Go to file/function
Addins
Untitled1*
Untitled2*
Source
Source
1 mtcars[sample(1:nrow(mtcars),10),]
1:35
(Top Level)
R Script

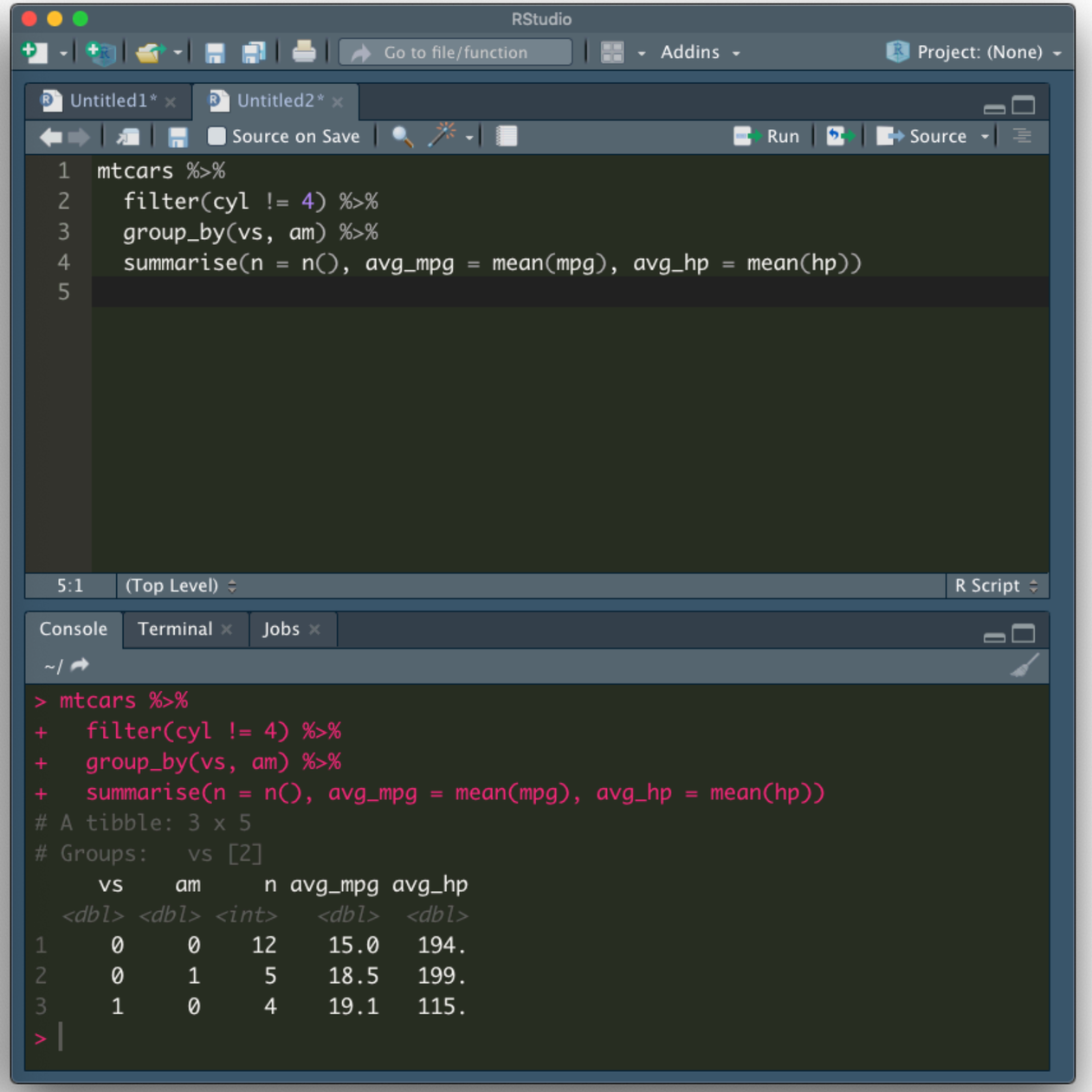

RStudio
Go to file/function
Addins
Untitled1*
Untitled2*
Source
Source
1 mtcars %>%
2 sample_n(10) %>%
3 tbl_df
3:9
(Top Level)
R Script

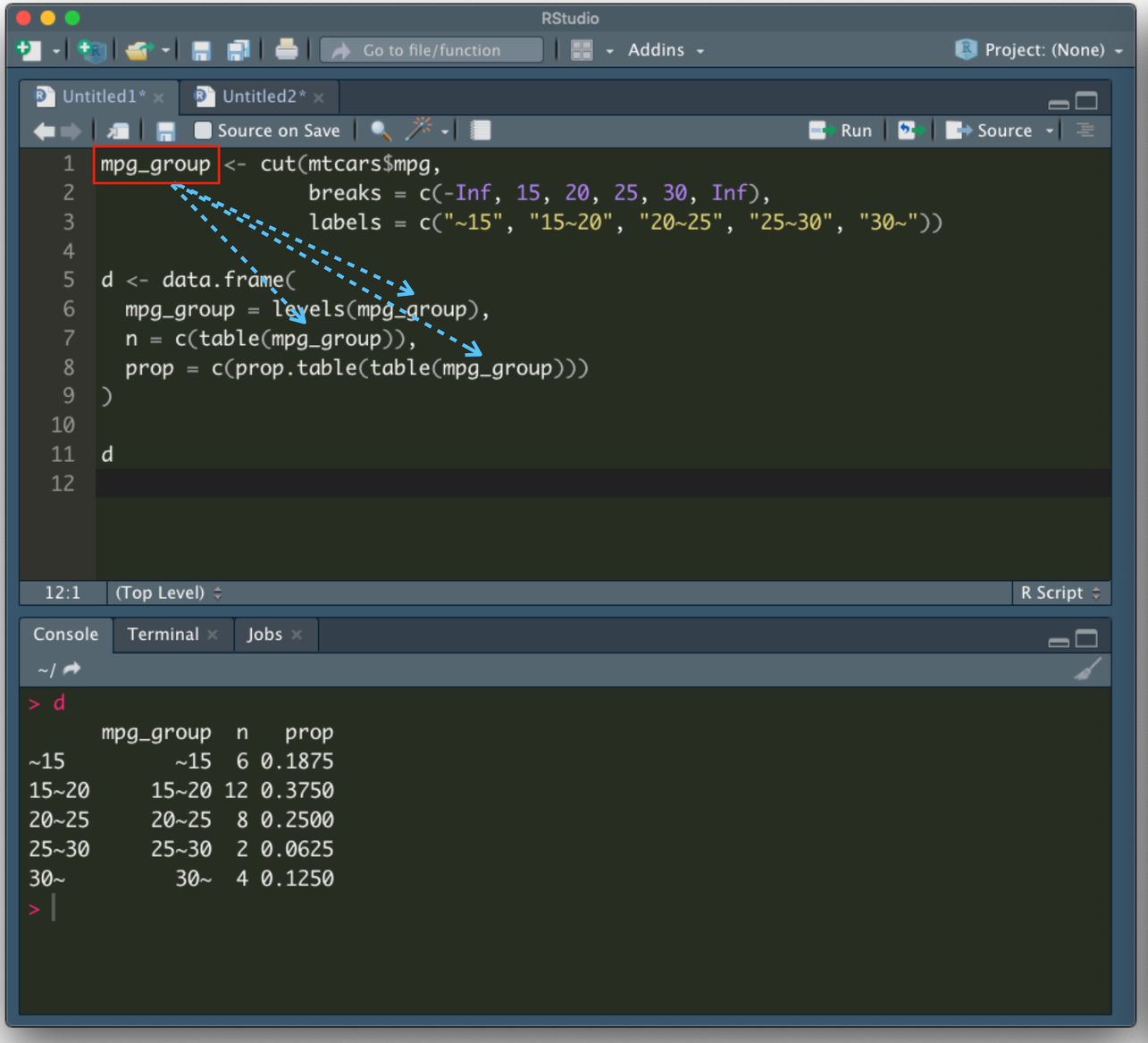

RStudio
Go to file/function
Addins
Untitled1*
Untitled2*
Source on Save
Source
1 unique(subset(mtcars, select = c("vs", "am")))
2
2:1
(Top Level)
R Script
Console
Terminal
Jobs
~/
> unique(subset(mtcars, select = c("vs", "am")))
vs am
Mazda RX4 0 1
Datsun 710 1 1
Hornet 4 Drive 1 0
Hornet Sportabout 0 0
>
RStudio
Go to file/function
Addins
Project: (None)
Untitled1*
Untitled2*
Filter
mpg cyl disp hp drat wt qsec vs am gear carb
Mazda RX4 21.0 6 160.0 110 3.90 2.620 16.46 0 1 4 4
Mazda RX4 Wag 21.0 6 160.0 110 3.90 2.875 17.02 0 1 4 4
Datsun 710 22.8 4 108.0 93 3.85 2.320 18.61 1 1 4 1
Hornet 4 Drive 21.4 6 258.0 110 3.08 3.215 19.44 1 0 3 1
Hornet Sportabout 18.7 8 360.0 175 3.15 3.440 17.02 0 0 3 2
Valiant 18.1 6 225.0 105 2.76 3.460 20.22 1 0 3 1
Duster 360 14.3 8 360.0 245 3.21 3.570 15.84 0 0 3 4
Merc 240D 24.4 4 146.7 62 3.69 3.190 20.00 1 0 4 2
Merc 230 22.8 4 140.8 95 3.92 3.150 22.90 1 0 4 2
Merc 280 19.2 6 167.6 123 3.92 3.440 18.30 1 0 4 4
Merc 280C 17.8 6 167.6 123 3.92 3.440 18.90 1 0 4 4
Merc 450SE 16.4 8 275.8 180 3.07 4.070 17.40 0 0 3 3
Merc 450SL 17.3 8 275.8 180 3.07 3.730 17.60 0 0 3 3
Merc 450SLC 15.2 8 275.8 180 3.07 3.780 18.00 0 0 3 3
Cadillac Fleetwood 10.4 8 472.0 205 2.93 5.250 17.98 0 0 3 4
Lincoln Continental 10.4 8 460.0 215 3.00 5.424 17.82 0 0 3 4
Chrysler Imperial 14.7 8 440.0 230 3.23 5.345 17.42 0 0 3 4
Fiat 128 32.4 4 78.7 66 4.08 2.200 19.47 1 1 4 1
Honda Civic 30.4 4 75.7 52 4.93 1.615 18.52 1 1 4 2
Toyota Corolla 33.9 4 71.1 65 4.22 1.835 19.90 1 1 4 1
Showing 1 to 22 of 32 entries, 11 total columns
Console

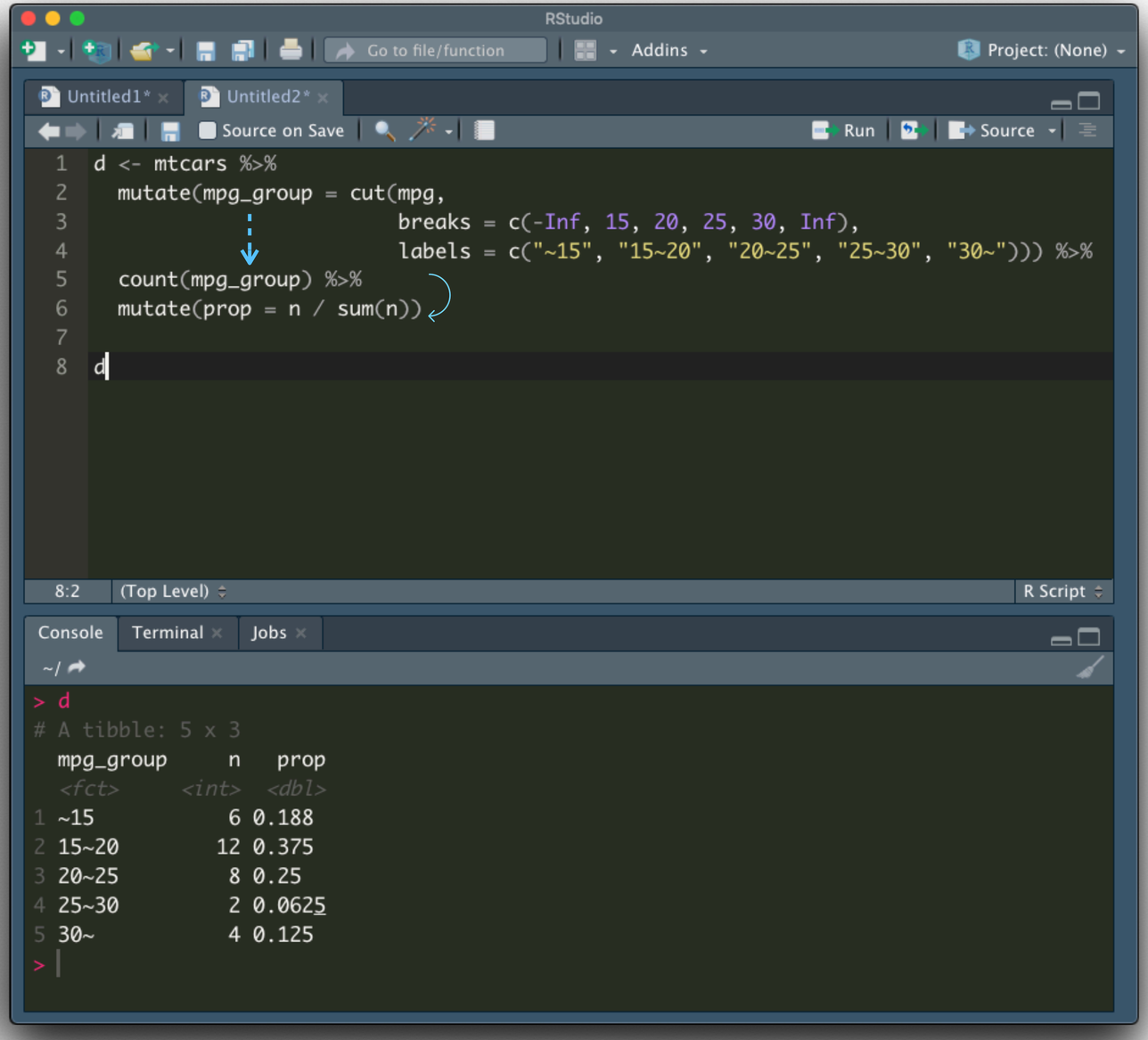

RStudio
Go to file/function
Addins
Project: (None)
Untitled1*
Untitled2*
Source on Save
Run
Source
1 nrow(mtcars)
2 length(unique(mtcars$qsec))
3
3:1
(Top Level)
R Script
Console
Terminal
Jobs
~/
> nrow(mtcars)
[1] 32
> length(unique(mtcars$qsec))
[1] 30
>

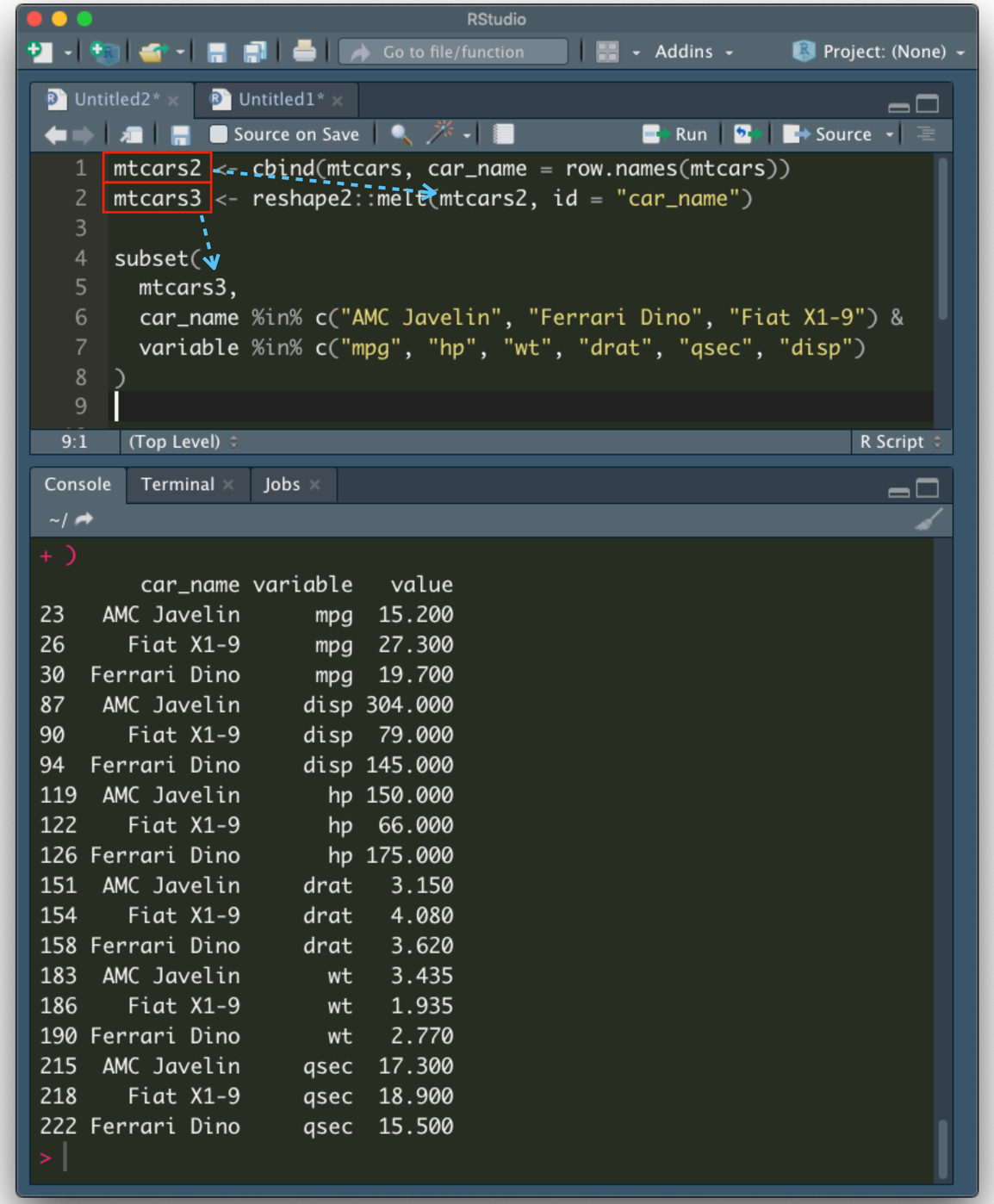

RStudio
Go to file/function
Addins
Project: (None)
Untitled1*
Untitled2*
Source on Save
Run
Source
1 mtcars %>%
2 group_by(qsec)
3
3:1
(Top Level)
R Script
Console
Terminal
Jobs
~/
> mtcars %>%
+ group_by(qsec)
# A tibble: 32 x 11
# Groups: qsec [30]
mpg cyl disp hp drat wt qsec vs am gear carb
* <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl>
1 21 6 160 110 3.9 2.62 16.5 0 1 4 4
2 21 6 160 110 3.9 2.88 17.0 0 1 4 4
3 22.8 4 108 93 3.85 2.32 18.6 1 1 4 1
4 21.4 6 258 110 3.08 3.22 19.4 1 0 3 1
5 18.7 8 360 175 3.15 3.44 17.0 0 0 3 2
6 18.1 6 225 105 2.76 3.46 20.2 1 0 3 1
7 14.3 8 360 245 3.21 3.57 15.8 0 0 3 4
8 24.4 4 147. 62 3.69 3.19 20 1 0 4 2
9 22.8 4 141. 95 3.92 3.15 22.9 1 0 4 2
10 19.2 6 168. 123 3.92 3.44 18.3 1 0 4 4
… with 22 more rows
>

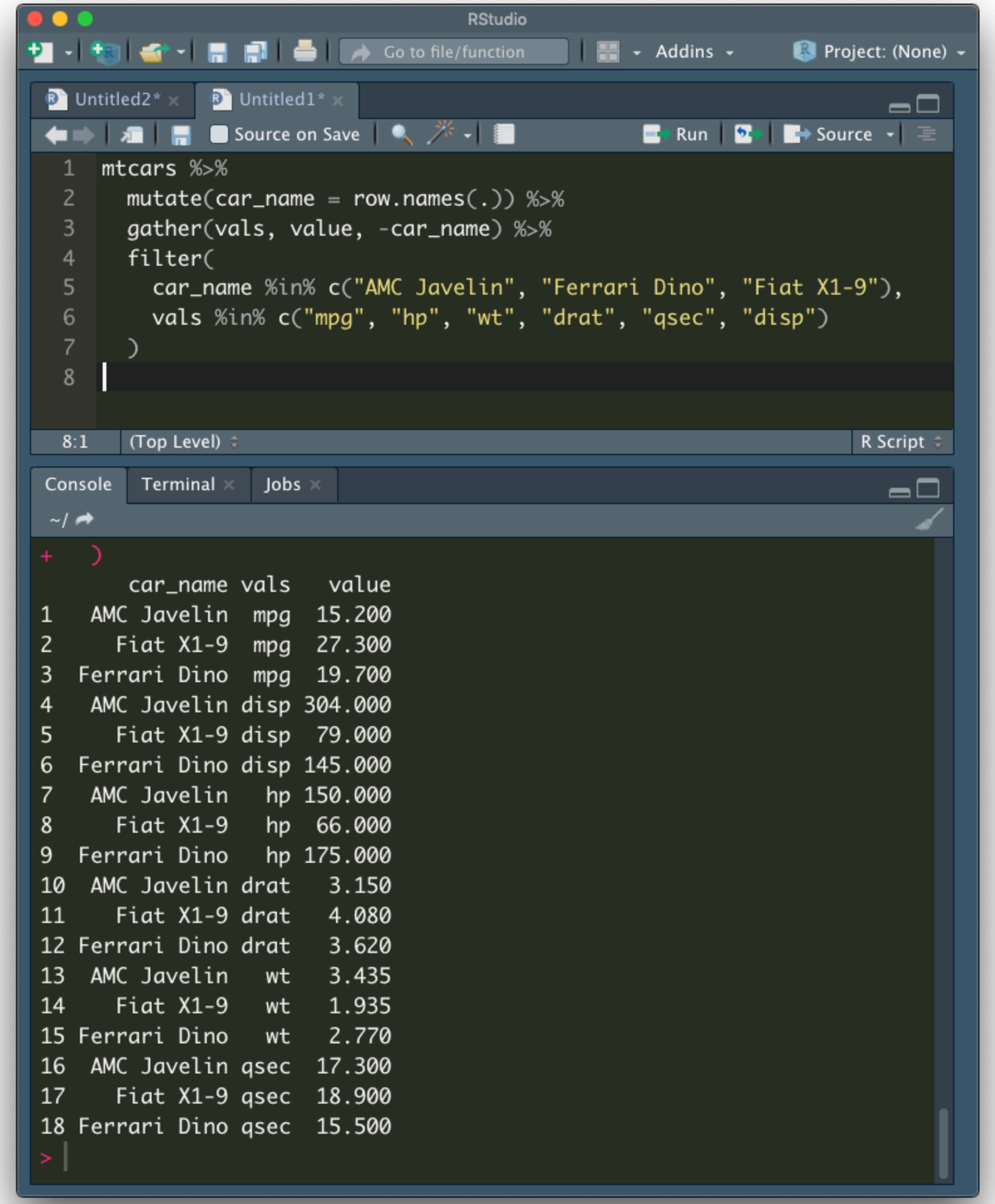

RStudio
Go to file/function
Addins
Project: (None)
Untitled1*
Untitled2*
Source on Save
Run
Source
1 library(sqldf)
2
3 sqldf("
4 SELECT vs, am, count(*) AS n, avg(mpg) AS avg_mpg, avg(hp) AS avg_hp
5 FROM mtcars
6 WHERE cyl <> '4'
7 GROUP BY vs, am
8 ")
1:15
(Top Level)
R Script
Console
Terminal
Jobs
~/
> sqldf("
+ SELECT vs, am, count(*) AS n, avg(mpg) AS avg_mpg, avg(hp) AS avg_hp
+ FROM mtcars
+ WHERE cyl <> '4'
+ GROUP BY vs, am
+ ")
vs am n avg_mpg avg_hp
1 0 0 12 15.050 194.1667
2 0 1 5 18.500 198.8000
3 1 0 4 19.125 115.2500
>


RStudio
Go to file/function
Addins
Project: (None)
Untitled1*
Untitled2*
Source on Save
Run
Source
1 mtcars %>%
2 filter(cyl != 4) %>%
3 group_by(vs, am) %>%
4 summarise(n = n(), avg_mpg = mean(mpg), avg_hp = mean(hp))
5
5:1
(Top Level)
R Script
Console
Terminal
Jobs
~/
> mtcars %>%
+ filter(cyl != 4) %>%
+ group_by(vs, am) %>%
+ summarise(n = n(), avg_mpg = mean(mpg), avg_hp = mean(hp))
# A tibble: 3 x 5
# Groups: vs [2]
vs am n avg_mpg avg_hp
<dbl> <dbl> <int> <dbl> <dbl>
1 0 0 12 15.0 194.
2 0 1 5 18.5 199.
3 1 0 4 19.1 115.
>


RStudio
Go to file/function
Addins
Project: (None)
Untitled1*
Untitled2*
Source on Save
Run
Source
1 mpg_group <- cut(mtcars$mpg,
2 breaks = c(-Inf, 15, 20, 25, 30, Inf),
3 labels = c("~15", "15~20", "20~25", "25~30", "30~"))
4
5 d <- data.frame(
6 mpg_group = levels(mpg_group),
7 n = c(table(mpg_group)),
8 prop = c(prop.table(table(mpg_group)))
9)
10
11 d
12
12:1
(Top Level)
R Script
Console
Terminal
Jobs
~/
> d
mpg_group n prop
~15 ~15 6 0.1875
15~20 15~20 12 0.3750
20~25 20~25 8 0.2500
25~30 25~30 2 0.0625
30~ 30~ 4 0.1250
>


RStudio
Go to file/function
Addins
Project: (None)
Untitled1*
Untitled2*
Source on Save
Run
Source
1 d <- mtcars %>%
2 mutate(mpg_group = cut(mpg,
3 breaks = c(-Inf, 15, 20, 25, 30, Inf),
4 labels = c("~15", "15~20", "20~25", "25~30", "30~"))) %>%
5 count(mpg_group) %>%
6 mutate(prop = n / sum(n))
7
8 d
8:2
(Top Level)
R Script
Console
Terminal
Jobs
~/
> d
A tibble: 5 x 3
mpg_group n prop
<fct> <int> <dbl>
1 ~15 6 0.188
2 15~20 12 0.375
3 20~25 8 0.25
4 25~30 2 0.0625
5 30~ 4 0.125
>


RStudio
Go to file/function
Addins
Project: (None)
Untitled2*
Untitled1*
Source on Save
Run
Source
1 mtcars2 <- cbind(mtcars, car_name = row.names(mtcars))
2 mtcars3 <- reshape2::melt(mtcars2, id = "car_name")
3
4 subset(
5 mtcars3,
6 car_name %in% c("AMC Javelin", "Ferrari Dino", "Fiat X1-9") &
7 variable %in% c("mpg", "hp", "wt", "drat", "qsec", "disp")
8)
9
9:1
(Top Level)
R Script
Console
Terminal
Jobs
~/
+)
car_name variable value
23 AMC Javelin mpg 15.200
26 Fiat X1-9 mpg 27.300
30 Ferrari Dino mpg 19.700
87 AMC Javelin disp 304.000
90 Fiat X1-9 disp 79.000
94 Ferrari Dino disp 145.000
119 AMC Javelin hp 150.000
122 Fiat X1-9 hp 66.000
126 Ferrari Dino hp 175.000
151 AMC Javelin drat 3.150
154 Fiat X1-9 drat 4.080
158 Ferrari Dino drat 3.620
183 AMC Javelin wt 3.435
186 Fiat X1-9 wt 1.935
190 Ferrari Dino wt 2.770
215 AMC Javelin qsec 17.300
218 Fiat X1-9 qsec 18.900
222 Ferrari Dino qsec 15.500
>


RStudio
Go to file/function
Addins
Project: (None)
Untitled2*
Untitled1*
Source on Save
Run
Source
1 mtcars %>%
2 mutate(car_name = row.names(.)) %>%
3 gather(vals, value, -car_name) %>%
4 filter(
5 car_name %in% c("AMC Javelin", "Ferrari Dino", "Fiat X1-9"),
6 vals %in% c("mpg", "hp", "wt", "drat", "qsec", "disp")
7)
8
8:1
(Top Level)
R Script
Console
Terminal
Jobs
~/
+)
car_name vals value
1 AMC Javelin mpg 15.200
2 Fiat X1-9 mpg 27.300
3 Ferrari Dino mpg 19.700
4 AMC Javelin disp 304.000
5 Fiat X1-9 disp 79.000
6 Ferrari Dino disp 145.000
7 AMC Javelin hp 150.000
8 Fiat X1-9 hp 66.000
9 Ferrari Dino hp 175.000
10 AMC Javelin drat 3.150
11 Fiat X1-9 drat 4.080
12 Ferrari Dino drat 3.620
13 AMC Javelin wt 3.435
14 Fiat X1-9 wt 1.935
15 Ferrari Dino wt 2.770
16 AMC Javelin qsec 17.300
17 Fiat X1-9 qsec 18.900
18 Ferrari Dino qsec 15.500
>

RStudio

Go to file/function | Addins | Project: (None)

Untitled2* | Untitled1*

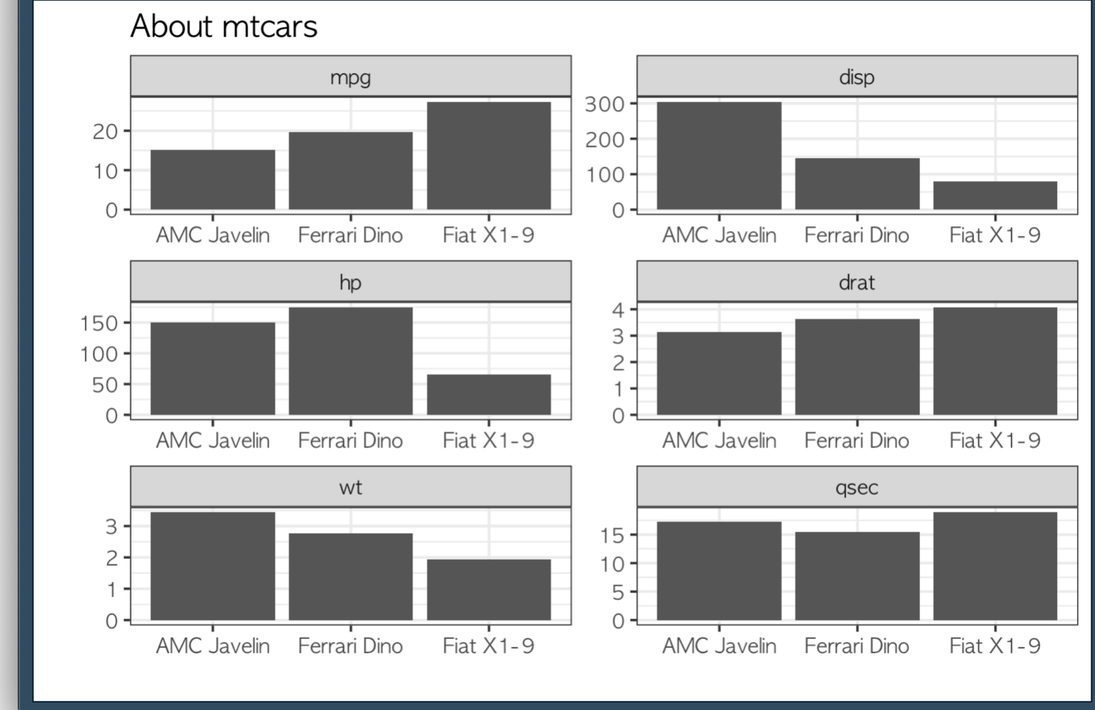
Source on Save | Run | Source

```
1  mtcars2 <- cbind(mtcars, car_name = row.names(mtcars))
2  mtcars3 <- reshape2::melt(mtcars2, id = "car_name")
3  mtcars4 <- subset(
4    mtcars3,
5    car_name %in% c("AMC Javelin", "Ferrari Dino", "Fiat X1-9") &
6      variable %in% c("mpg", "hp", "wt", "drat", "qsec", "disp")
7  )
8
9  ggplot(mtcars4, aes(car_name, value)) +
10   geom_bar(stat = "identity") +
11   facet_wrap(~variable, scales = "free", ncol = 2) +
12   labs(x = "", y = "") + ggtitle("About mtcars")
```

10:32 | (Top Level) | R Script

Files | Plots | Packages | Help | Viewer

Zoom | Export | Publish



RStudio

Go to file/function | Addins | Project: (None)

Untitled2* | Untitled1*

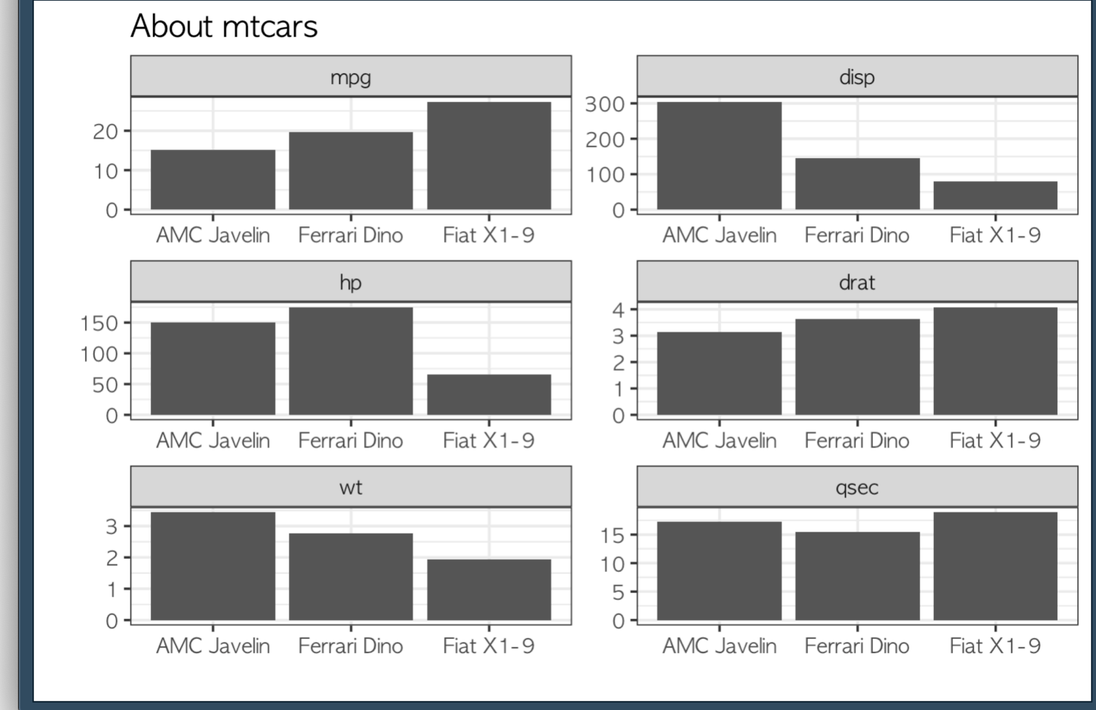
Source on Save | Run | Source

```
1  mtcars %>%
2    mutate(car_name = row.names(.)) %>%
3    gather(vals, value, -car_name) %>%
4    filter(
5      car_name %in% c("AMC Javelin", "Ferrari Dino", "Fiat X1-9"),
6      vals %in% c("mpg", "hp", "wt", "drat", "qsec", "disp")
7    ) %>%
8    ggplot(aes(car_name, value)) +
9    geom_bar(stat = "identity") +
10   facet_wrap(~vals, scales = "free", ncol = 2) +
11   labs(x = "", y = "") +
12   ggtitle("About mtcars")
13
```

13:1 | (Top Level) | R Script

Files | Plots | Packages | Help | Viewer

Zoom | Export | Publish



RStudio

Go to file/function | Addins | Project: (None)

Untitled2* | Untitled1*

Source on Save | Run | Source

```
1  mtcars2 <- cbind(mtcars, car_name = row.names(mtcars))
2  mtcars3 <- reshape2::melt(mtcars2, id = "car_name")
3
4
5
6
7
8
9  ggplot(mtcars4, aes(car_name, value)) +
10   geom_bar(stat = "identity") +
11   facet_wrap(~variable, scales = "free", ncol = 2) +
12   labs(x = "", y = "") + ggtitle("About mtcars")
13
```

13:1 (Top Level) R Script

Files | Plots | Packages | Help | Viewer

Zoom | Export

RStudio

Go to file/function | Addins | Project: (None)

Untitled2* | Untitled1*

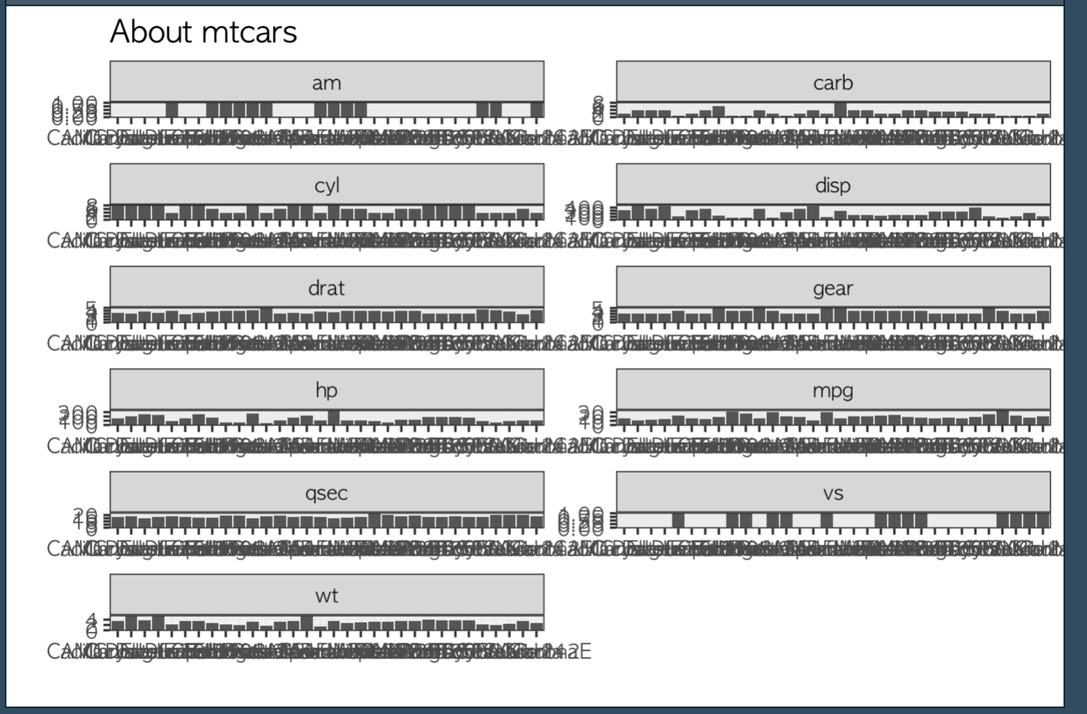
Source on Save | Run | Source

```
1  mtcars %>%
2    mutate(car_name = row.names(.)) %>%
3    gather(vals, value, -car_name) %>%
4
5
6
7
8    ggplot(aes(car_name, value)) +
9    geom_bar(stat = "identity") +
10   facet_wrap(~vals, scales = "free", ncol = 2) +
11   labs(x = "", y = "") +
12   ggtitle("About mtcars")
13
```

13:1 (Top Level) R Script

Files | Plots | Packages | Help | Viewer

Zoom | Export | Publish



RStudio

Untitled2* | Untitled1*

Source on Save | Run | Source

```
1  res <- list()
2
3  for(i in unique(mtcars$cyl)){
4    mtcars2 <- subset(mtcars, cyl == i, select = c("mpg", "disp", "hp", "drat"))
5    lmfit <- lm(disp ~ ., data = mtcars2)
6    res[[paste0("cyl = ", i)]] <- summary(lmfit)$coefficients
7  }
8
9  res
10
```

10:1 (Top Level) R Script

Console | Terminal | Jobs

~/

```
> res
$`cyl = 6`
             Estimate  Std. Error    t value   Pr(>|t|)
(Intercept) 409.7810370 157.6040990  2.6000659 0.08037125
mpg           4.3156170   6.9553459  0.6204748 0.57889061
hp           -0.5577404   0.4240994 -1.3151171 0.27995856
drat        -67.8987957  21.5800161 -3.1463737 0.05140931

$`cyl = 4`
             Estimate Std. Error    t value   Pr(>|t|)
(Intercept) 291.95739382 94.2296040  3.0983617 0.01736213
mpg          -4.43485184  1.5364290 -2.8864672 0.02343414
hp           -0.06905319  0.3396118 -0.2033298 0.84466159
drat        -15.44260687 18.3034139 -0.8437009 0.42672465

$`cyl = 8`
             Estimate  Std. Error     t value    Pr(>|t|)
(Intercept) 599.07461416 188.0764183  3.18527235 0.009731938
mpg         -13.36500593   7.8802088 -1.69602180 0.120737856
hp            0.04906465   0.5310913  0.09238459 0.928217072
drat        -16.85451710  69.8014973 -0.24146355 0.814075033
```

RStudio

Untitled2* | Untitled1*

Source on Save | Run | Source

```
1  mtcars %>%
2    group_by(cyl) %>%
3    select(mpg, disp, hp, drat) %>%
4    group_map(~ broom::tidy(lm(disp ~ ., data = .x)))
5
```

5:1 (Top Level) R Script

Console | Terminal | Jobs

~/

```
> mtcars %>%
+   group_by(cyl) %>%
+   select(mpg, disp, hp, drat) %>%
+   group_map(~ broom::tidy(lm(disp ~ ., data = .x)))
Adding missing grouping variables: `cyl`
# A tibble: 12 x 6
# Groups:   cyl [3]
     cyl term        estimate std.error statistic p.value
   <dbl> <chr>          <dbl>     <dbl>     <dbl>   <dbl>
 1     4 (Intercept)  292.        94.2      3.10   0.0174
 2     4 mpg           -4.43       1.54    -2.89   0.0234
 3     4 hp            -0.0691     0.340   -0.203  0.845
 4     4 drat         -15.4       18.3     -0.844  0.427
 5     6 (Intercept)  410.       158.       2.60   0.0804
 6     6 mpg            4.32       6.96     0.620  0.579
 7     6 hp            -0.558      0.424   -1.32   0.280
 8     6 drat         -67.9       21.6     -3.15   0.0514
 9     8 (Intercept)  599.       188.       3.19   0.00973
10     8 mpg          -13.4        7.88    -1.70   0.121
11     8 hp             0.0491     0.531    0.0924 0.928
12     8 drat         -16.9       69.8     -0.241  0.814
>
```

Before

After

Q & A

Do you have any question?