

## Getting Data into R

```
data("anscombe")
```

```
ans <- anscombe
```

```
str(ans)
```

```
'data.frame':  11 obs. of  8 variables:
 $ x1: num  10 8 13 9 11 14 6 4 12 7 ...
 $ x2: num  10 8 13 9 11 14 6 4 12 7 ...
 $ x3: num  10 8 13 9 11 14 6 4 12 7 ...
 $ x4: num   8 8 8 8 8 8 8 19 8 8 ...
 $ y1: num  8.04 6.95 7.58 8.81 8.33 ...
 $ y2: num  9.14 8.14 8.74 8.77 9.26 8.1 6.13 3.1 9.13 7.26 ...
 $ y3: num  7.46 6.77 12.74 7.11 7.81 ...
 $ y4: num  6.58 5.76 7.71 8.84 8.47 7.04 5.25 12.5 5.56 7.91 ...
```

```
head(ans)
```

	x1	x2	x3	x4	y1	y2	y3	y4
1	10	10	10	8	8.04	9.14	7.46	6.58
2	8	8	8	8	6.95	8.14	6.77	5.76
3	13	13	13	8	7.58	8.74	12.74	7.71
4	9	9	9	8	8.81	8.77	7.11	8.84
5	11	11	11	8	8.33	9.26	7.81	8.47
6	14	14	14	8	9.96	8.10	8.84	7.04

```
data("injury")
```

```
str(injury)
```

```
'data.frame':  7150 obs. of  30 variables:
 $ durat   : num  1 1 84 4 1 1 7 2 175 60 ...
 $ afchnge : int  1 1 1 1 1 1 1 1 1 1 ...
 $ highearn: int  1 1 1 1 1 1 1 1 1 1 ...
 $ male    : int  1 1 1 1 1 1 1 1 1 1 ...
 $ married : int  0 1 1 1 1 1 1 1 1 1 ...
 $ hosp     : int  1 0 1 1 0 0 0 1 1 1 ...
 $ indust  : int  3 3 3 3 3 3 3 3 3 3 ...
 $ injtype  : int  1 1 1 1 1 1 1 1 1 1 ...
 $ age      : int  26 31 37 31 23 34 35 45 41 33 ...
 $ prewage  : num  405 644 398 528 529 ...
 $ totmed   : num  1188 361 8964 1100 373 ...
 $ injdes   : int  1010 1404 1032 1940 1940 1425 1110 1207 1425 1010 ...
 $ benefit  : num  247 247 247 247 212 ...
 $ ky       : int  1 1 1 1 1 1 1 1 1 1 ...
 $ mi       : int  0 0 0 0 0 0 0 0 0 0 ...
```

```

$ ldurat : num 0 0 4.43 1.39 0 ...
$ afhigh : int 1 1 1 1 1 1 1 1 1 1 ...
$ lprewage: num 6 6.47 5.99 6.27 6.27 ...
$ lage : num 3.26 3.43 3.61 3.43 3.14 ...
$ ltotmed : num 7.08 5.89 9.1 7 5.92 ...
$ head : int 1 1 1 1 1 1 1 1 1 1 ...
$ neck : int 0 0 0 0 0 0 0 0 0 0 ...
$ upextr : int 0 0 0 0 0 0 0 0 0 0 ...
$ trunk : int 0 0 0 0 0 0 0 0 0 0 ...
$ lowback : int 0 0 0 0 0 0 0 0 0 0 ...
$ lowextr : int 0 0 0 0 0 0 0 0 0 0 ...
$ occdis : int 0 0 0 0 0 0 0 0 0 0 ...
$ manuf : int 0 0 0 0 0 0 0 0 0 0 ...
$ construc: int 0 0 0 0 0 0 0 0 0 0 ...
$ highlpre: num 6 6.47 5.99 6.27 6.27 ...
- attr(*, "time.stamp")= chr "25 Jun 2011 23:03"

```

```
names(injury)
```

```

[1] "durat"      "afchnge"    "highearn"   "male"       "married"    "hosp"
[7] "indust"     "injtype"    "age"        "prewage"     "totmed"     "injdes"
[13] "benefit"    "ky"         "mi"         "ldurat"      "afhigh"     "lprewage"
[19] "lage"       "ltotmed"    "head"       "neck"        "upextr"     "trunk"
[25] "lowback"    "lowextr"    "occdis"     "manuf"       "construc"   "highlpre"

```

## CSV

```
ifri_car_liv <- get_csv("ifri_car_liv.csv")
```

```

ifri <- ifri_car_liv
str(ifri)

```

Classes 'data.table' and 'data.frame': 100 obs. of 10 variables:

```

$ forest_id: int 217 325 88 174 240 287 324 321 216 82 ...
$ cid : chr "NEP" "IND" "UGA" "NEP" ...
$ zliv : num -0.614 -0.654 -0.338 -0.786 -0.45 ...
$ zbio : num -0.451 -0.365 -0.97 -1.325 -1.049 ...
$ livcar1 : int 3 3 3 3 3 3 3 3 3 3 ...
$ ownstate : int 1 1 1 1 1 1 1 1 1 0 ...
$ distance : int 2 1 1 2 2 1 2 2 2 1 ...
$ sadmin : int 0 1 3 26 3 40 8 0 0 0 ...
$ rulematch: int 0 0 0 0 1 1 0 0 1 1 ...
$ lnfsiz : num 4.43 8.2 4.94 5.29 4.34 ...
- attr(*, ".internal.selfref")= <externalptr>

```

## STRATA

```
ifir <- get_strata('ifri_car_liv.dta')
str(ifir)
```

```
Classes 'tbl_df', 'tbl' and 'data.frame': 80 obs. of 10 variables:
 $ forest_id: num 217 325 88 174 240 287 324 321 216 82 ...
 .. attr(*, "label")= chr "Forest_ID"
 .. attr(*, "format.stata")= chr "%8.0g"
 $ cid : chr "NEP" "IND" "UGA" "NEP" ...
 .. attr(*, "label")= chr "Country"
 .. attr(*, "format.stata")= chr "%9s"
 $ zliv : num -0.614 -0.654 -0.338 -0.786 -0.45 ...
 .. attr(*, "label")= chr "Livelihood Contributions Index (Standardized)"
 .. attr(*, "format.stata")= chr "%9.0g"
 $ zbio : num -0.451 -0.365 -0.97 -1.325 -1.049 ...
 .. attr(*, "label")= chr "Carbon Storage (Basal Area)"
 .. attr(*, "format.stata")= chr "%9.0g"
 $ livcar1 : 'haven_labelled' num 3 3 3 3 3 3 3 3 3 3 ...
 .. attr(*, "label")= chr "Forest Commons Outcomes"
 .. attr(*, "format.stata")= chr "%13.0g"
 .. attr(*, "labels")= Named num 1 2 3 4
 .. ..- attr(*, "names")= chr "Deferred Use" "Sustainable" "Overused" "Unsustainable"
 $ ownstate : 'haven_labelled' num 1 1 1 1 1 1 1 1 1 0 ...
 .. attr(*, "label")= chr "Forest Commons Ownership"
 .. attr(*, "format.stata")= chr "%9.0g"
 .. attr(*, "labels")= Named num 0 1
 .. ..- attr(*, "names")= chr "Community" "Government"
 $ distance : 'haven_labelled' num 2 1 1 2 2 1 2 2 2 1 ...
 .. attr(*, "label")= chr "Distance of Users to Forest Commons"
 .. attr(*, "format.stata")= chr "%9.0g"
 .. attr(*, "labels")= Named num 1 2 3
 .. ..- attr(*, "names")= chr "< 5KM" "5 - 10KM" ">10KM"
 $ sadmin : num 0 1 3 26 3 40 8 0 0 0 ...
 .. attr(*, "label")= chr "Distance of Forest to Nearest Administrative Center"
 .. attr(*, "format.stata")= chr "%9.0g"
 $ rulematch: 'haven_labelled' num 0 0 0 0 1 1 0 0 1 1 ...
 .. attr(*, "label")= chr "Local Autonomy "
 .. attr(*, "format.stata")= chr "%9.0g"
 .. attr(*, "labels")= Named num 0 1
 .. ..- attr(*, "names")= chr "Low Autonomy" "High Autonomy"
 $ lnfsiz : num 4.43 8.2 4.94 5.29 4.34 ...
 .. attr(*, "label")= chr "Log of Forest Size"
 .. attr(*, "format.stata")= chr "%9.0g"
```

Search World Development Indicators

```
WDIsearch("gdp.*capita.*PPP")
```

```
      indicator
[1,] "6.0.GDPpc_constant"
[2,] "NY.GDP.PCAP.PP.KD.ZG"
[3,] "NY.GDP.PCAP.PP.KD.87"
[4,] "NY.GDP.PCAP.PP.KD"
[5,] "NY.GDP.PCAP.PP.CD"
      name
[1,] "GDP per capita, PPP (constant 2011 international $) "
[2,] "GDP per capita, PPP annual growth (%)"
[3,] "GDP per capita, PPP (constant 1987 international $)"
[4,] "GDP per capita, PPP (constant 2011 international $)"
[5,] "GDP per capita, PPP (current international $)"
```

```
wdi_data <- WDI(indicator =
                c("NY.GDP.PCAP.PP.KD",
                  "EN.ATM.CO2E.PC"),
                start = 2010,
                end = 2010,
                extra = T)
```

```
names(wdi_data)
```

```
[1] "iso2c"          "country"        "year"
[4] "NY.GDP.PCAP.PP.KD" "EN.ATM.CO2E.PC" "iso3c"
[7] "region"         "capital"        "longitude"
[10] "latitude"       "income"         "lending"
```