

# Package: radiant.basics (via r-universe)

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**Type** Package

**Title** Basics Menu for Radiant: Business Analytics using R and Shiny

**Version** 1.6.6

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**Description** The Radiant Basics menu includes interfaces for probability calculation, central limit theorem simulation, comparing means and proportions, goodness-of-fit testing, cross-tabs, and correlation. The application extends the functionality in 'radiant.data'.

**Depends** R (>= 4.3.0), radiant.data (>= 1.6.6)

**Imports** ggplot2 (>= 2.2.1), scales (>= 0.4.0), dplyr (>= 1.0.7), tidyr (>= 0.8.2), magrittr (>= 1.5), shiny (>= 1.8.1), psych (>= 1.8.3.3), import (>= 1.1.0), lubridate (>= 1.7.4), polycor (>= 0.7.10), patchwork (>= 1.0.0), rlang (>= 1.0.6)

**Suggests** testthat (>= 2.0.0), pkgdown (>= 1.1.0), markdown (>= 1.3)

**URL** <https://github.com/radiant-rstats/radiant.basics/>,  
<https://radiant-rstats.github.io/radiant.basics/>,  
<https://radiant-rstats.github.io/docs/>

**BugReports** <https://github.com/radiant-rstats/radiant.basics/issues/>

**License** AGPL-3 | file LICENSE

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## Contents

clt . . . . .	3
compare_means . . . . .	4
compare_props . . . . .	6
consider . . . . .	7
cor2df . . . . .	7
correlation . . . . .	8
cross_tabs . . . . .	9
demand_uk . . . . .	10
goodness . . . . .	10
newspaper . . . . .	11
plot.clt . . . . .	12
plot.compare_means . . . . .	12
plot.compare_props . . . . .	13
plot.correlation . . . . .	14
plot.cross_tabs . . . . .	15
plot.goodness . . . . .	16
plot.prob_binom . . . . .	17
plot.prob_chisq . . . . .	18
plot.prob_disc . . . . .	18
plot.prob_expo . . . . .	19
plot.prob_fdist . . . . .	20
plot.prob_lnorm . . . . .	21
plot.prob_norm . . . . .	21
plot.prob_pois . . . . .	22
plot.prob_tdist . . . . .	23
plot.prob_unif . . . . .	24
plot.single_mean . . . . .	24
plot.single_prop . . . . .	25
print.rcorr . . . . .	26
prob_binom . . . . .	27
prob_chisq . . . . .	28
prob_disc . . . . .	29
prob_expo . . . . .	30
prob_fdist . . . . .	31
prob_lnorm . . . . .	32
prob_norm . . . . .	33
prob_pois . . . . .	34
prob_tdist . . . . .	35
prob_unif . . . . .	36
radiant.basics . . . . .	37
radiant.basics_viewer . . . . .	37
radiant.basics_window . . . . .	38
salary . . . . .	38
single_mean . . . . .	39
single_prop . . . . .	40
summary.compare_means . . . . .	41

summary.compare\_props . . . . . 42

summary.correlation . . . . . 42

summary.cross\_tabs . . . . . 43

summary.goodness . . . . . 44

summary.prob\_binom . . . . . 45

summary.prob\_chisq . . . . . 46

summary.prob\_disc . . . . . 46

summary.prob\_expo . . . . . 47

summary.prob\_fdist . . . . . 48

summary.prob\_lnorm . . . . . 49

summary.prob\_norm . . . . . 49

summary.prob\_pois . . . . . 50

summary.prob\_tdist . . . . . 51

summary.prob\_unif . . . . . 52

summary.single\_mean . . . . . 52

summary.single\_prop . . . . . 53

**Index** **55**

clt *Central Limit Theorem simulation*

**Description**

Central Limit Theorem simulation

**Usage**

```
clt(
  dist,
  n = 100,
  m = 100,
  norm_mean = 0,
  norm_sd = 1,
  binom_size = 10,
  binom_prob = 0.2,
  unif_min = 0,
  unif_max = 1,
  expo_rate = 1
)
```

**Arguments**

- dist            Distribution to simulate
- n              Sample size
- m              Number of samples
- norm\_mean      Mean for the normal distribution

norm_sd	Standard deviation for the normal distribution
binom_size	Size for the binomial distribution
binom_prob	Probability for the binomial distribution
unif_min	Minimum for the uniform distribution
unif_max	Maximum for the uniform distribution
expo_rate	Rate for the exponential distribution

### Details

See <https://radiant-rstats.github.io/docs/basics/clt.html> for an example in Radiant

### Value

A list with the name of the Distribution and a matrix of simulated data

### Examples

```
clt("Uniform", 10, 10, unif_min = 10, unif_max = 20)
```

---

compare_means	<i>Compare sample means</i>
---------------	-----------------------------

---

### Description

Compare sample means

### Usage

```
compare_means(  
  dataset,  
  var1,  
  var2,  
  samples = "independent",  
  alternative = "two.sided",  
  conf_lev = 0.95,  
  comb = "",  
  adjust = "none",  
  test = "t",  
  data_filter = "",  
  envir = parent.frame()  
)
```

**Arguments**

dataset	Dataset
var1	A numeric variable or factor selected for comparison
var2	One or more numeric variables for comparison. If var1 is a factor only one variable can be selected and the mean of this variable is compared across (factor) levels of var1
samples	Are samples independent ("independent") or not ("paired")
alternative	The alternative hypothesis ("two.sided", "greater" or "less")
conf_lev	Span of the confidence interval
comb	Combinations to evaluate
adjust	Adjustment for multiple comparisons ("none" or "bonf" for Bonferroni)
test	t-test ("t") or Wilcox ("wilcox")
data_filter	Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000")
envir	Environment to extract data from

**Details**

See [https://radiant-rstats.github.io/docs/basics/compare\\_means.html](https://radiant-rstats.github.io/docs/basics/compare_means.html) for an example in Radiant

**Value**

A list of all variables defined in the function as an object of class `compare_means`

**See Also**

[summary.compare\\_means](#) to summarize results

[plot.compare\\_means](#) to plot results

**Examples**

```
compare_means(diamonds, "cut", "price") %>% str()
```

---

compare_props	<i>Compare sample proportions across groups</i>
---------------	---

---

### Description

Compare sample proportions across groups

### Usage

```
compare_props(  
  dataset,  
  var1,  
  var2,  
  levs = "",  
  alternative = "two.sided",  
  conf_lev = 0.95,  
  comb = "",  
  adjust = "none",  
  data_filter = "",  
  envir = parent.frame()  
)
```

### Arguments

dataset	Dataset
var1	A grouping variable to split the data for comparisons
var2	The variable to calculate proportions for
levs	The factor level selected for the proportion comparison
alternative	The alternative hypothesis ("two.sided", "greater" or "less")
conf_lev	Span of the confidence interval
comb	Combinations to evaluate
adjust	Adjustment for multiple comparisons ("none" or "bonf" for Bonferroni)
data_filter	Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000")
envir	Environment to extract data from

### Details

See [https://radiant-rstats.github.io/docs/basics/compare\\_props.html](https://radiant-rstats.github.io/docs/basics/compare_props.html) for an example in Radiant

### Value

A list of all variables defined in the function as an object of class `compare_props`

**See Also**

[summary.compare\\_props](#) to summarize results

[plot.compare\\_props](#) to plot results

**Examples**

```
compare_props(titanic, "pclass", "survived") %>% str()
```

---

consider	<i>Car brand consideration</i>
----------	--------------------------------

---

**Description**

Car brand consideration

**Usage**

```
data(consider)
```

**Format**

A data frame with 1000 rows and 2 variables

**Details**

Survey data of consumer purchase intentions. Description provided in `attr(consider,"description")`

---

cor2df	<i>Store a correlation matrix as a (long) data.frame</i>
--------	--

---

**Description**

Store a correlation matrix as a (long) data.frame

**Usage**

```
cor2df(object, labels = c("label1", "label2"), ...)
```

**Arguments**

object	Return value from <a href="#">correlation</a>
labels	Column names for the correlation pairs
...	further arguments passed to or from other methods

**Details**

Return the correlation matrix as a (long) data.frame. See <https://radiant-rstats.github.io/docs/basics/correlation.html> for an example in Radiant

---

correlation	<i>Calculate correlations for two or more variables</i>
-------------	---

---

**Description**

Calculate correlations for two or more variables

**Usage**

```
correlation(
  dataset,
  vars = "",
  method = "pearson",
  hcor = FALSE,
  hcor_se = FALSE,
  data_filter = "",
  envir = parent.frame()
)
```

**Arguments**

dataset	Dataset
vars	Variables to include in the analysis. Default is all but character and factor variables with more than two unique values are removed
method	Type of correlations to calculate. Options are "pearson", "spearman", and "kendall". "pearson" is the default
hcor	Use polycor::hetcor to calculate the correlation matrix
hcor_se	Calculate standard errors when using polycor::hetcor
data_filter	Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000")
envir	Environment to extract data from

**Details**

See <https://radiant-rstats.github.io/docs/basics/correlation.html> for an example in Radiant

**Value**

A list with all variables defined in the function as an object of class `compare_means`



**See Also**

[summary.correlation](#) to summarize results

[plot.correlation](#) to plot results

**Examples**

```
correlation(diamonds, c("price", "carat")) %>% str()
correlation(diamonds, "x:z") %>% str()
```

---

cross\_tabs

*Evaluate associations between categorical variables*

---

**Description**

Evaluate associations between categorical variables

**Usage**

```
cross_tabs(
  dataset,
  var1,
  var2,
  tab = NULL,
  data_filter = "",
  envir = parent.frame()
)
```

**Arguments**

dataset	Dataset (i.e., a data.frame or table)
var1	A categorical variable
var2	A categorical variable
tab	Table with frequencies as alternative to dataset
data_filter	Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000")
envir	Environment to extract data from

**Details**

See [https://radiant-rstats.github.io/docs/basics/cross\\_tabs.html](https://radiant-rstats.github.io/docs/basics/cross_tabs.html) for an example in Radiant

**Value**

A list of all variables used in cross\_tabs as an object of class cross\_tabs

**See Also**

[summary.cross\\_tabs](#) to summarize results

[plot.cross\\_tabs](#) to plot results

**Examples**

```
cross_tabs(newspaper, "Income", "Newspaper") %>% str()
table(select(newspaper, Income, Newspaper)) %>% cross_tabs(tab = .)
```

---

demand_uk	<i>Demand in the UK</i>
-----------	-------------------------

---

**Description**

Demand in the UK

**Usage**

```
data(demand_uk)
```

**Format**

A data frame with 1000 rows and 2 variables

**Details**

Survey data of consumer purchase intentions. Description provided in `attr(demand_uk, "description")`

---

goodness	<i>Evaluate if sample data for a categorical variable is consistent with a hypothesized distribution</i>
----------	--

---

**Description**

Evaluate if sample data for a categorical variable is consistent with a hypothesized distribution

**Usage**

```
goodness(
  dataset,
  var,
  p = NULL,
  tab = NULL,
  data_filter = "",
  envir = parent.frame()
)
```

**Arguments**

dataset	Dataset
var	A categorical variable
p	Hypothesized distribution as a number, fraction, or numeric vector. If unspecified, defaults to an even distribution
tab	Table with frequencies as alternative to dataset
data_filter	Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000")
envir	Environment to extract data from

**Details**

See <https://radiant-rstats.github.io/docs/basics/goodness.html> for an example in Radiant

**Value**

A list of all variables used in goodness as an object of class goodness

**See Also**

[summary.goodness](#) to summarize results

[plot.goodness](#) to plot results

**Examples**

```
goodness(newspaper, "Income") %>% str()
goodness(newspaper, "Income", p = c(3 / 4, 1 / 4)) %>% str()
table(select(newspaper, Income)) %>% goodness(tab = .)
```

---

newspaper

*Newspaper readership*

---

**Description**

Newspaper readership

**Usage**

```
data(newspaper)
```

**Format**

A data frame with 580 rows and 2 variables

**Details**

Newspaper readership data for 580 consumers. Description provided in `attr(newspaper,"description")`

---

`plot.clt` *Plot method for the Central Limit Theorem simulation*

---

**Description**

Plot method for the Central Limit Theorem simulation

**Usage**

```
## S3 method for class 'clt'
plot(x, stat = "sum", bins = 15, ...)
```

**Arguments**

<code>x</code>	Return value from <code>clt</code>
<code>stat</code>	Statistic to use (sum or mean)
<code>bins</code>	Number of bins to use
<code>...</code>	further arguments passed to or from other methods

**Details**

See <https://radiant-rstats.github.io/docs/basics/clt.html> for an example in Radiant

**Examples**

```
clt("Uniform", 100, 100, unif_min = 10, unif_max = 20) %>% plot()
```

---

`plot.compare_means` *Plot method for the compare\_means function*

---

**Description**

Plot method for the `compare_means` function

**Usage**

```
## S3 method for class 'compare_means'
plot(x, plots = "scatter", shiny = FALSE, custom = FALSE, ...)
```

**Arguments**

x	Return value from <a href="#">compare_means</a>
plots	One or more plots ("bar", "density", "box", or "scatter")
shiny	Did the function call originate inside a shiny app
custom	Logical (TRUE, FALSE) to indicate if ggplot object (or list of ggplot objects) should be returned. This option can be used to customize plots (e.g., add a title, change x and y labels, etc.). See examples and <a href="https://ggplot2.tidyverse.org/">https://ggplot2.tidyverse.org/</a> for options.
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/compare\\_means.html](https://radiant-rstats.github.io/docs/basics/compare_means.html) for an example in Radiant

**See Also**

[compare\\_means](#) to calculate results  
[summary.compare\\_means](#) to summarize results

**Examples**

```
result <- compare_means(diamonds, "cut", "price")
plot(result, plots = c("bar", "density"))
```

---

plot.compare\_props      *Plot method for the compare\_props function*

---

**Description**

Plot method for the compare\_props function

**Usage**

```
## S3 method for class 'compare_props'
plot(x, plots = "bar", shiny = FALSE, custom = FALSE, ...)
```

**Arguments**

x	Return value from <a href="#">compare_props</a>
plots	One or more plots of proportions ("bar" or "dodge")
shiny	Did the function call originate inside a shiny app

custom	Logical (TRUE, FALSE) to indicate if ggplot object (or list of ggplot objects) should be returned. This option can be used to customize plots (e.g., add a title, change x and y labels, etc.). See examples and <a href="https://ggplot2.tidyverse.org/">https://ggplot2.tidyverse.org/</a> for options.
...	further arguments passed to or from other methods

### Details

See [https://radiant-rstats.github.io/docs/basics/compare\\_props.html](https://radiant-rstats.github.io/docs/basics/compare_props.html) for an example in Radiant

### See Also

[compare\\_props](#) to calculate results  
[summary.compare\\_props](#) to summarize results

### Examples

```
result <- compare_props(titanic, "pclass", "survived")
plot(result, plots = c("bar", "dodge"))
```

---

plot.correlation      *Plot method for the correlation function*

---

### Description

Plot method for the correlation function

### Usage

```
## S3 method for class 'correlation'
plot(x, nrobs = -1, jit = c(0, 0), dec = 2, ...)
```

### Arguments

x	Return value from <a href="#">correlation</a>
nrobs	Number of data points to show in scatter plots (-1 for all)
jit	A numeric vector that determines the amount of jittering to apply to the x and y variables in a scatter plot. Default is 0. Use, e.g., 0.3 to add some jittering
dec	Number of decimals to show
...	further arguments passed to or from other methods.

### Details

See <https://radiant-rstats.github.io/docs/basics/correlation.html> for an example in Radiant

**See Also**

[correlation](#) to calculate results

[summary.correlation](#) to summarize results

**Examples**

```
result <- correlation(diamonds, c("price", "carat", "table"))
plot(result)
```

---

plot.cross\_tabs      *Plot method for the cross\_tabs function*

---

**Description**

Plot method for the cross\_tabs function

**Usage**

```
## S3 method for class 'cross_tabs'
plot(x, check = "", shiny = FALSE, custom = FALSE, ...)
```

**Arguments**

x	Return value from <a href="#">cross_tabs</a>
check	Show plots for variables var1 and var2. "observed" for the observed frequencies table, "expected" for the expected frequencies table (i.e., frequencies that would be expected if the null hypothesis holds), "chi_sq" for the contribution to the overall chi-squared statistic for each cell (i.e., $(o - e)^2 / e$ ), "dev_std" for the standardized differences between the observed and expected frequencies (i.e., $(o - e) / \sqrt{e}$ ), and "row_perc", "col_perc", and "perc" for row, column, and table percentages respectively
shiny	Did the function call originate inside a shiny app
custom	Logical (TRUE, FALSE) to indicate if ggplot object (or list of ggplot objects) should be returned. This option can be used to customize plots (e.g., add a title, change x and y labels, etc.). See examples and <a href="https://ggplot2.tidyverse.org/">https://ggplot2.tidyverse.org/</a> for options.
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/cross\\_tabs.html](https://radiant-rstats.github.io/docs/basics/cross_tabs.html) for an example in Radiant

**See Also**

[cross\\_tabs](#) to calculate results

[summary.cross\\_tabs](#) to summarize results

**Examples**

```
result <- cross_tabs(newspaper, "Income", "Newspaper")
plot(result, check = c("observed", "expected", "chi_sq"))
```

---

plot.goodness

*Plot method for the goodness function*

---

**Description**

Plot method for the goodness function

**Usage**

```
## S3 method for class 'goodness'
plot(x, check = "", fillcol = "blue", shiny = FALSE, custom = FALSE, ...)
```

**Arguments**

x	Return value from <a href="#">goodness</a>
check	Show plots for variable var. "observed" for the observed frequencies table, "expected" for the expected frequencies table (i.e., frequencies that would be expected if the null hypothesis holds), "chi_sq" for the contribution to the overall chi-squared statistic for each cell (i.e., $(o - e)^2 / e$ ), and "dev_std" for the standardized differences between the observed and expected frequencies (i.e., $(o - e) / \sqrt{e}$ )
fillcol	Color used for bar plots
shiny	Did the function call originate inside a shiny app
custom	Logical (TRUE, FALSE) to indicate if ggplot object (or list of ggplot objects) should be returned. This option can be used to customize plots (e.g., add a title, change x and y labels, etc.). See examples and <a href="https://ggplot2.tidyverse.org/">https://ggplot2.tidyverse.org/</a> for options.
...	further arguments passed to or from other methods

**Details**

See <https://radiant-rstats.github.io/docs/basics/goodness> for an example in Radiant



**See Also**

[goodness](#) to calculate results

[summary.goodness](#) to summarize results

**Examples**

```
result <- goodness(newspaper, "Income")
plot(result, check = c("observed", "expected", "chi_sq"))
goodness(newspaper, "Income") %>% plot(c("observed", "expected"))
```

---

plot.prob_binom	<i>Plot method for the probability calculator (binomial)</i>
-----------------	--

---

**Description**

Plot method for the probability calculator (binomial)

**Usage**

```
## S3 method for class 'prob_binom'
plot(x, type = "values", ...)
```

**Arguments**

x	Return value from <a href="#">prob_binom</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[prob\\_binom](#) to calculate results

[summary.prob\\_binom](#) to summarize results

**Examples**

```
result <- prob_binom(n = 10, p = 0.3, ub = 3)
plot(result, type = "values")
```

---

plot.prob\_chisq      *Plot method for the probability calculator (Chi-squared distribution)*

---

### Description

Plot method for the probability calculator (Chi-squared distribution)

### Usage

```
## S3 method for class 'prob_chisq'  
plot(x, type = "values", ...)
```

### Arguments

x	Return value from <a href="#">prob_chisq</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

### Details

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

### See Also

[prob\\_chisq](#) to calculate results  
[summary.prob\\_chisq](#) to summarize results

### Examples

```
result <- prob_chisq(df = 1, ub = 3.841)  
plot(result, type = "values")
```

---

plot.prob\_disc      *Plot method for the probability calculator (discrete)*

---

### Description

Plot method for the probability calculator (discrete)

### Usage

```
## S3 method for class 'prob_disc'  
plot(x, type = "values", ...)
```

**Arguments**

x	Return value from <a href="#">prob_disc</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[prob\\_disc](#) to calculate results  
[summary.prob\\_disc](#) to summarize results

**Examples**

```
result <- prob_disc(v = 1:6, p = c(2 / 6, 2 / 6, 1 / 12, 1 / 12, 1 / 12, 1 / 12), prob = 0.95)
plot(result, type = "probs")
```

---

plot.prob\_expo      *Plot method for the probability calculator (Exponential distribution)*

---

**Description**

Plot method for the probability calculator (Exponential distribution)

**Usage**

```
## S3 method for class 'prob_expo'
plot(x, type = "values", ...)
```

**Arguments**

x	Return value from <a href="#">prob_expo</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[prob\\_expo](#) to calculate results  
[summary.prob\\_expo](#) to summarize results

**Examples**

```
result <- prob_expo(rate = 1, ub = 2.996)
plot(result, type = "values")
```

---

plot.prob_fdist	<i>Plot method for the probability calculator (F-distribution)</i>
-----------------	--

---

**Description**

Plot method for the probability calculator (F-distribution)

**Usage**

```
## S3 method for class 'prob_fdist'
plot(x, type = "values", ...)
```

**Arguments**

x	Return value from <a href="#">prob_fdist</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[prob\\_fdist](#) to calculate results  
[summary.prob\\_fdist](#) to summarize results

**Examples**

```
result <- prob_fdist(df1 = 10, df2 = 10, ub = 2.978)
plot(result, type = "values")
```

---

plot.prob_lnorm	<i>Plot method for the probability calculator (log normal)</i>
-----------------	--

---

**Description**

Plot method for the probability calculator (log normal)

**Usage**

```
## S3 method for class 'prob_lnorm'  
plot(x, type = "values", ...)
```

**Arguments**

x	Return value from <a href="#">prob_norm</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[prob\\_lnorm](#) to calculate results  
[plot.prob\\_lnorm](#) to plot results

**Examples**

```
result <- prob_lnorm(meanlog = 0, sdlog = 1, lb = 0, ub = 1)  
plot(result, type = "values")
```

---

plot.prob_norm	<i>Plot method for the probability calculator (normal)</i>
----------------	--

---

**Description**

Plot method for the probability calculator (normal)

**Usage**

```
## S3 method for class 'prob_norm'  
plot(x, type = "values", ...)
```

**Arguments**

x	Return value from <a href="#">prob_norm</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[prob\\_norm](#) to calculate results  
[summary.prob\\_norm](#) to summarize results

**Examples**

```
result <- prob_norm(mean = 0, stdev = 1, ub = 0)
plot(result)
```

---

plot.prob_pois	<i>Plot method for the probability calculator (poisson)</i>
----------------	---

---

**Description**

Plot method for the probability calculator (poisson)

**Usage**

```
## S3 method for class 'prob_pois'
plot(x, type = "values", ...)
```

**Arguments**

x	Return value from <a href="#">prob_pois</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[prob\\_pois](#) to calculate results  
[summary.prob\\_pois](#) to summarize results

**Examples**

```
result <- prob_pois(lambda = 1, ub = 3)
plot(result, type = "values")
```

---

plot.prob_tdist	<i>Plot method for the probability calculator (t-distribution)</i>
-----------------	--

---

**Description**

Plot method for the probability calculator (t-distribution)

**Usage**

```
## S3 method for class 'prob_tdist'
plot(x, type = "values", ...)
```

**Arguments**

x	Return value from <a href="#">prob_tdist</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[prob\\_tdist](#) to calculate results  
[summary.prob\\_tdist](#) to summarize results

**Examples**

```
result <- prob_tdist(df = 10, ub = 2.228)
plot(result, type = "values")
```

---

plot.prob\_unif      *Plot method for the probability calculator (uniform)*

---

### Description

Plot method for the probability calculator (uniform)

### Usage

```
## S3 method for class 'prob_unif'  
plot(x, type = "values", ...)
```

### Arguments

x	Return value from <a href="#">prob_unif</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

### Details

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

### See Also

[prob\\_unif](#) to calculate results  
[summary.prob\\_unif](#) to summarize results

### Examples

```
result <- prob_unif(min = 0, max = 1, ub = 0.3)  
plot(result, type = "values")
```

---

plot.single\_mean      *Plot method for the single\_mean function*

---

### Description

Plot method for the single\_mean function

### Usage

```
## S3 method for class 'single_mean'  
plot(x, plots = "hist", shiny = FALSE, custom = FALSE, ...)
```



**Arguments**

x	Return value from <a href="#">single_mean</a>
plots	Plots to generate. "hist" shows a histogram of the data along with vertical lines that indicate the sample mean and the confidence interval. "simulate" shows the location of the sample mean and the comparison value (comp_value). Simulation is used to demonstrate the sampling variability in the data under the null-hypothesis
shiny	Did the function call originate inside a shiny app
custom	Logical (TRUE, FALSE) to indicate if ggplot object (or list of ggplot objects) should be returned. This option can be used to customize plots (e.g., add a title, change x and y labels, etc.). See examples and <a href="https://ggplot2.tidyverse.org/">https://ggplot2.tidyverse.org/</a> for options.
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/single\\_mean.html](https://radiant-rstats.github.io/docs/basics/single_mean.html) for an example in Radiant

**See Also**

[single\\_mean](#) to generate the result  
[summary.single\\_mean](#) to summarize results

**Examples**

```
result <- single_mean(diamonds, "price", comp_value = 3500)
plot(result, plots = c("hist", "simulate"))
```

---

plot.single\_prop      *Plot method for the single\_prop function*

---

**Description**

Plot method for the single\_prop function

**Usage**

```
## S3 method for class 'single_prop'
plot(x, plots = "bar", shiny = FALSE, custom = FALSE, ...)
```

**Arguments**

x	Return value from <a href="#">single_prop</a>
plots	Plots to generate. "bar" shows a bar chart of the data. The "simulate" chart shows the location of the sample proportion and the comparison value (comp_value). Simulation is used to demonstrate the sampling variability in the data under the null-hypothesis
shiny	Did the function call originate inside a shiny app
custom	Logical (TRUE, FALSE) to indicate if ggplot object (or list of ggplot objects) should be returned. This option can be used to customize plots (e.g., add a title, change x and y labels, etc.). See examples and <a href="https://ggplot2.tidyverse.org/">https://ggplot2.tidyverse.org/</a> for options.
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/single\\_prop.html](https://radiant-rstats.github.io/docs/basics/single_prop.html) for an example in Radiant

**See Also**

[single\\_prop](#) to generate the result  
[summary.single\\_prop](#) to summarize the results

**Examples**

```
result <- single_prop(titanic, "survived", lev = "Yes", comp_value = 0.5, alternative = "less")
plot(result, plots = c("bar", "simulate"))
```

---

print.rcorr                      *Print method for the correlation function*

---

**Description**

Print method for the correlation function

**Usage**

```
## S3 method for class 'rcorr'
print(x, ...)
```

**Arguments**

x	Return value from <a href="#">correlation</a>
...	further arguments passed to or from other methods

---

prob_binom	<i>Probability calculator for the binomial distribution</i>
------------	---

---

**Description**

Probability calculator for the binomial distribution

**Usage**

```
prob_binom(n, p, lb = NA, ub = NA, plb = NA, pub = NA, dec = 3)
```

**Arguments**

n	Number of trials
p	Probability
lb	Lower bound on the number of successes
ub	Upper bound on the number of successes
plb	Lower probability bound
pub	Upper probability bound
dec	Number of decimals to show

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[summary.prob\\_binom](#) to summarize results

[plot.prob\\_binom](#) to plot results

**Examples**

```
prob_binom(n = 10, p = 0.3, ub = 3)
```

---

prob_chisq	<i>Probability calculator for the chi-squared distribution</i>
------------	--

---

### Description

Probability calculator for the chi-squared distribution

### Usage

```
prob_chisq(df, lb = NA, ub = NA, plb = NA, pub = NA, dec = 3)
```

### Arguments

df	Degrees of freedom
lb	Lower bound (default is 0)
ub	Upper bound (default is Inf)
plb	Lower probability bound
pub	Upper probability bound
dec	Number of decimals to show

### Details

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

### See Also

[summary.prob\\_chisq](#) to summarize results

[plot.prob\\_chisq](#) to plot results

### Examples

```
prob_chisq(df = 1, ub = 3.841)
```

---

prob_disc	<i>Probability calculator for a discrete distribution</i>
-----------	---

---

## Description

Probability calculator for a discrete distribution

## Usage

```
prob_disc(v, p, lb = NA, ub = NA, plb = NA, pub = NA, dec = 3)
```

## Arguments

v	Values
p	Probabilities
lb	Lower bound on the number of successes
ub	Upper bound on the number of successes
plb	Lower probability bound
pub	Upper probability bound
dec	Number of decimals to show

## Details

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

## See Also

[summary.prob\\_disc](#) to summarize results

[plot.prob\\_disc](#) to plot results

## Examples

```
prob_disc(v = 1:6, p = 1 / 6, pub = 0.95)  
prob_disc(v = 1:6, p = c(2 / 6, 2 / 6, 1 / 12, 1 / 12, 1 / 12, 1 / 12), pub = 0.95)
```

---

prob_expo	<i>Probability calculator for the exponential distribution</i>
-----------	--

---

### Description

Probability calculator for the exponential distribution

### Usage

```
prob_expo(rate, lb = NA, ub = NA, plb = NA, pub = NA, dec = 3)
```

### Arguments

rate	Rate
lb	Lower bound (default is 0)
ub	Upper bound (default is Inf)
plb	Lower probability bound
pub	Upper probability bound
dec	Number of decimals to show

### Details

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

### See Also

[summary.prob\\_expo](#) to summarize results

[plot.prob\\_expo](#) to plot results

### Examples

```
prob_expo(rate = 1, ub = 2.996)
```

---

prob_fdist	<i>Probability calculator for the F-distribution</i>
------------	--

---

### Description

Probability calculator for the F-distribution

### Usage

```
prob_fdist(df1, df2, lb = NA, ub = NA, plb = NA, pub = NA, dec = 3)
```

### Arguments

df1	Degrees of freedom
df2	Degrees of freedom
lb	Lower bound (default is 0)
ub	Upper bound (default is Inf)
plb	Lower probability bound
pub	Upper probability bound
dec	Number of decimals to show

### Details

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

### See Also

[summary.prob\\_fdist](#) to summarize results

[plot.prob\\_fdist](#) to plot results

### Examples

```
prob_fdist(df1 = 10, df2 = 10, ub = 2.978)
```

---

prob_lnorm	<i>Probability calculator for the log normal distribution</i>
------------	---

---

### Description

Probability calculator for the log normal distribution

### Usage

```
prob_lnorm(meanlog, sdlog, lb = NA, ub = NA, plb = NA, pub = NA, dec = 3)
```

### Arguments

meanlog	Mean of the distribution on the log scale
sdlog	Standard deviation of the distribution on the log scale
lb	Lower bound (default is -Inf)
ub	Upper bound (default is Inf)
plb	Lower probability bound
pub	Upper probability bound
dec	Number of decimals to show

### Details

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

### See Also

[summary.prob\\_lnorm](#) to summarize results

[plot.prob\\_lnorm](#) to plot results

### Examples

```
prob_lnorm(meanlog = 0, sdlog = 1, lb = 0, ub = 1)
```



---

prob_norm	<i>Probability calculator for the normal distribution</i>
-----------	---

---

**Description**

Probability calculator for the normal distribution

**Usage**

```
prob_norm(mean, stdev, lb = NA, ub = NA, plb = NA, pub = NA, dec = 3)
```

**Arguments**

mean	Mean
stdev	Standard deviation
lb	Lower bound (default is -Inf)
ub	Upper bound (default is Inf)
plb	Lower probability bound
pub	Upper probability bound
dec	Number of decimals to show

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[summary.prob\\_norm](#) to summarize results

[plot.prob\\_norm](#) to plot results

**Examples**

```
prob_norm(mean = 0, stdev = 1, ub = 0)
```

---

prob_pois	<i>Probability calculator for the poisson distribution</i>
-----------	--

---

### Description

Probability calculator for the poisson distribution

### Usage

```
prob_pois(lambda, lb = NA, ub = NA, plb = NA, pub = NA, dec = 3)
```

### Arguments

lambda	Rate
lb	Lower bound (default is 0)
ub	Upper bound (default is Inf)
plb	Lower probability bound
pub	Upper probability bound
dec	Number of decimals to show

### Details

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

### See Also

[summary.prob\\_pois](#) to summarize results

[plot.prob\\_pois](#) to plot results

### Examples

```
prob_pois(lambda = 1, ub = 3)
```

---

prob_tdist	<i>Probability calculator for the t-distribution</i>
------------	--

---

## Description

Probability calculator for the t-distribution

## Usage

```
prob_tdist(df, lb = NA, ub = NA, plb = NA, pub = NA, dec = 3)
```

## Arguments

df	Degrees of freedom
lb	Lower bound (default is -Inf)
ub	Upper bound (default is Inf)
plb	Lower probability bound
pub	Upper probability bound
dec	Number of decimals to show

## Details

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

## See Also

[summary.prob\\_tdist](#) to summarize results

[plot.prob\\_tdist](#) to plot results

## Examples

```
prob_tdist(df = 10, ub = 2.228)
```

---

prob_unif	<i>Probability calculator for the uniform distribution</i>
-----------	--

---

**Description**

Probability calculator for the uniform distribution

**Usage**

```
prob_unif(min, max, lb = NA, ub = NA, plb = NA, pub = NA, dec = 3)
```

**Arguments**

min	Minimum value
max	Maximum value
lb	Lower bound (default = 0)
ub	Upper bound (default = 1)
plb	Lower probability bound
pub	Upper probability bound
dec	Number of decimals to show

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[summary.prob\\_unif](#) to summarize results

[plot.prob\\_unif](#) to plot results

**Examples**

```
prob_unif(min = 0, max = 1, ub = 0.3)
```

---

radiant.basics	<i>radiant.basics</i>
----------------	-----------------------

---

**Description**

Launch radiant.basics in the default web browser

**Usage**

```
radiant.basics(state, ...)
```

**Arguments**

state	Path to state file to load
...	additional arguments to pass to shiny::runApp (e.g, port = 8080)

**Details**

See <https://radiant-rstats.github.io/docs/> for documentation and tutorials

**Examples**

```
## Not run:  
radiant.basics()  
  
## End(Not run)
```

---

radiant.basics_viewer	<i>Launch radiant.basics in the Rstudio viewer</i>
-----------------------	--

---

**Description**

Launch radiant.basics in the Rstudio viewer

**Usage**

```
radiant.basics_viewer(state, ...)
```

**Arguments**

state	Path to state file to load
...	additional arguments to pass to shiny::runApp (e.g, port = 8080)

**Details**

See <https://radiant-rstats.github.io/docs/> for documentation and tutorials

**Examples**

```
## Not run:
radiant.basics_viewer()

## End(Not run)
```

---

```
radiant.basics_window Launch radiant.basics in an Rstudio window
```

---

**Description**

Launch radiant.basics in an Rstudio window

**Usage**

```
radiant.basics_window(state, ...)
```

**Arguments**

state	Path to state file to load
...	additional arguments to pass to shiny::runApp (e.g, port = 8080)

**Details**

See <https://radiant-rstats.github.io/docs/> for documentation and tutorials

**Examples**

```
## Not run:
radiant.basics_window()

## End(Not run)
```

---

```
salary Salaries for Professors
```

---

**Description**

Salaries for Professors

**Usage**

```
data(salary)
```

**Format**

A data frame with 397 rows and 6 variables

**Details**

2008-2009 nine-month salary for professors in a college in the US. Description provided in attr(salary,description")

---

single_mean	<i>Compare a sample mean to a population mean</i>
-------------	---

---

**Description**

Compare a sample mean to a population mean

**Usage**

```
single_mean(
  dataset,
  var,
  comp_value = 0,
  alternative = "two.sided",
  conf_lev = 0.95,
  data_filter = "",
  envir = parent.frame()
)
```

**Arguments**

dataset	Dataset
var	The variable selected for the mean comparison
comp_value	Population value to compare to the sample mean
alternative	The alternative hypothesis ("two.sided", "greater", or "less")
conf_lev	Span for the confidence interval
data_filter	Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000")
envir	Environment to extract data from

**Details**

See [https://radiant-rstats.github.io/docs/basics/single\\_mean.html](https://radiant-rstats.github.io/docs/basics/single_mean.html) for an example in Radiant

**Value**

A list of variables defined in single\_mean as an object of class single\_mean

**See Also**

[summary.single\\_mean](#) to summarize results

[plot.single\\_mean](#) to plot results

**Examples**

```
single_mean(diamonds, "price") %>% str()
```

---

single\_prop

---

*Compare a sample proportion to a population proportion*


---

**Description**

Compare a sample proportion to a population proportion

**Usage**

```
single_prop(
  dataset,
  var,
  lev = "",
  comp_value = 0.5,
  alternative = "two.sided",
  conf_lev = 0.95,
  test = "binom",
  data_filter = "",
  envir = parent.frame()
)
```

**Arguments**

dataset	Dataset
var	The variable selected for the proportion comparison
lev	The factor level selected for the proportion comparison
comp_value	Population value to compare to the sample proportion
alternative	The alternative hypothesis ("two.sided", "greater", or "less")
conf_lev	Span of the confidence interval
test	bionomial exact test ("binom") or Z-test ("z")
data_filter	Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000")
envir	Environment to extract data from

**Details**

See [https://radiant-rstats.github.io/docs/basics/single\\_prop.html](https://radiant-rstats.github.io/docs/basics/single_prop.html) for an example in Radiant

**Value**

A list of variables used in single\_prop as an object of class single\_prop



**See Also**

[summary.single\\_prop](#) to summarize the results

[plot.single\\_prop](#) to plot the results

**Examples**

```
single_prop(titanic, "survived") %>% str()
single_prop(titanic, "survived", lev = "Yes", comp_value = 0.5, alternative = "less") %>% str()
```

---

summary.compare\_means *Summary method for the compare\_means function*

---

**Description**

Summary method for the compare\_means function

**Usage**

```
## S3 method for class 'compare_means'
summary(object, show = FALSE, dec = 3, ...)
```

**Arguments**

object	Return value from <a href="#">compare_means</a>
show	Show additional output (i.e., t.value, df, and confidence interval)
dec	Number of decimals to show
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/compare\\_means.html](https://radiant-rstats.github.io/docs/basics/compare_means.html) for an example in Radiant

**See Also**

[compare\\_means](#) to calculate results

[plot.compare\\_means](#) to plot results

**Examples**

```
result <- compare_means(diamonds, "cut", "price")
summary(result)
```

---

summary.compare\_props *Summary method for the compare\_props function*

---

### Description

Summary method for the compare\_props function

### Usage

```
## S3 method for class 'compare_props'  
summary(object, show = FALSE, dec = 3, ...)
```

### Arguments

object	Return value from <a href="#">compare_props</a>
show	Show additional output (i.e., chisq.value, df, and confidence interval)
dec	Number of decimals to show
...	further arguments passed to or from other methods

### Details

See [https://radiant-rstats.github.io/docs/basics/compare\\_props.html](https://radiant-rstats.github.io/docs/basics/compare_props.html) for an example in Radiant

### See Also

[compare\\_props](#) to calculate results  
[plot.compare\\_props](#) to plot results

### Examples

```
result <- compare_props(titanic, "pclass", "survived")  
summary(result)
```

---

summary.correlation *Summary method for the correlation function*

---

### Description

Summary method for the correlation function

### Usage

```
## S3 method for class 'correlation'  
summary(object, cutoff = 0, covar = FALSE, dec = 2, ...)
```

**Arguments**

object	Return value from <a href="#">correlation</a>
cutoff	Show only correlations larger than the cutoff in absolute value. Default is a cutoff of 0
covar	Show the covariance matrix (default is FALSE)
dec	Number of decimals to show
...	further arguments passed to or from other methods.

**Details**

See <https://radiant-rstats.github.io/docs/basics/correlation.html> for an example in Radiant

**See Also**

[correlation](#) to calculate results  
[plot.correlation](#) to plot results

**Examples**

```
result <- correlation(diamonds, c("price", "carat", "table"))
summary(result, cutoff = .3)
```

---

summary.cross\_tabs      *Summary method for the cross\_tabs function*

---

**Description**

Summary method for the cross\_tabs function

**Usage**

```
## S3 method for class 'cross_tabs'
summary(object, check = "", dec = 2, ...)
```

**Arguments**

object	Return value from <a href="#">cross_tabs</a>
check	Show table(s) for variables var1 and var2. "observed" for the observed frequencies table, "expected" for the expected frequencies table (i.e., frequencies that would be expected if the null hypothesis holds), "chi_sq" for the contribution to the overall chi-squared statistic for each cell (i.e., $(o - e)^2 / e$ ), "dev_std" for the standardized differences between the observed and expected frequencies (i.e., $(o - e) / \sqrt{e}$ ), and "dev_perc" for the percentage difference between the observed and expected frequencies (i.e., $(o - e) / e$ )
dec	Number of decimals to show
...	further arguments passed to or from other methods.

**Details**

See [https://radiant-rstats.github.io/docs/basics/cross\\_tabs.html](https://radiant-rstats.github.io/docs/basics/cross_tabs.html) for an example in Radiant

**See Also**

[cross\\_tabs](#) to calculate results

[plot.cross\\_tabs](#) to plot results

**Examples**

```
result <- cross_tabs(newspaper, "Income", "Newspaper")
summary(result, check = c("observed", "expected", "chi_sq"))
```

---

summary.goodness

*Summary method for the goodness function*


---

**Description**

Summary method for the goodness function

**Usage**

```
## S3 method for class 'goodness'
summary(object, check = "", dec = 2, ...)
```

**Arguments**

object	Return value from <a href="#">goodness</a>
check	Show table(s) for the selected variable (var). "observed" for the observed frequencies table, "expected" for the expected frequencies table (i.e., frequencies that would be expected if the null hypothesis holds), "chi_sq" for the contribution to the overall chi-squared statistic for each cell (i.e., $(o - e)^2 / e$ ), "dev_std" for the standardized differences between the observed and expected frequencies (i.e., $(o - e) / \sqrt{e}$ ), and "dev_perc" for the percentage difference between the observed and expected frequencies (i.e., $(o - e) / e$ )
dec	Number of decimals to show
...	further arguments passed to or from other methods.

**Details**

See <https://radiant-rstats.github.io/docs/basics/goodness> for an example in Radiant

**See Also**

[goodness](#) to calculate results

[plot.goodness](#) to plot results

**Examples**

```
result <- goodness(newspaper, "Income", c(.3, .7))
summary(result, check = c("observed", "expected", "chi_sq"))
goodness(newspaper, "Income", c(1 / 3, 2 / 3)) %>% summary("observed")
```

---

summary.prob_binom	<i>Summary method for the probability calculator (binomial)</i>
--------------------	---

---

**Description**

Summary method for the probability calculator (binomial)

**Usage**

```
## S3 method for class 'prob_binom'
summary(object, type = "values", ...)
```

**Arguments**

object	Return value from <a href="#">prob_binom</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[prob\\_binom](#) to calculate results

[plot.prob\\_binom](#) to plot results

**Examples**

```
result <- prob_binom(n = 10, p = 0.3, ub = 3)
summary(result, type = "values")
```

---

summary.prob\_chisq      *Summary method for the probability calculator (Chi-squared distribution)*

---

### Description

Summary method for the probability calculator (Chi-squared distribution)

### Usage

```
## S3 method for class 'prob_chisq'  
summary(object, type = "values", ...)
```

### Arguments

object	Return value from <a href="#">prob_chisq</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

### Details

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

### See Also

[prob\\_chisq](#) to calculate results  
[plot.prob\\_chisq](#) to plot results

### Examples

```
result <- prob_chisq(df = 1, ub = 3.841)  
summary(result, type = "values")
```

---

summary.prob\_disc      *Summary method for the probability calculator (discrete)*

---

### Description

Summary method for the probability calculator (discrete)

### Usage

```
## S3 method for class 'prob_disc'  
summary(object, type = "values", ...)
```

**Arguments**

object	Return value from <a href="#">prob_disc</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[prob\\_disc](#) to calculate results  
[plot.prob\\_disc](#) to plot results

**Examples**

```
result <- prob_disc(v = 1:6, p = c(2 / 6, 2 / 6, 1 / 12, 1 / 12, 1 / 12, 1 / 12), pub = 0.95)
summary(result, type = "probs")
```

---

summary.prob_expo	<i>Summary method for the probability calculator (exponential)</i>
-------------------	--

---

**Description**

Summary method for the probability calculator (exponential)

**Usage**

```
## S3 method for class 'prob_expo'
summary(object, type = "values", ...)
```

**Arguments**

object	Return value from <a href="#">prob_expo</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[prob\\_expo](#) to calculate results

[plot.prob\\_expo](#) to plot results

**Examples**

```
result <- prob_expo(rate = 1, ub = 2.996)
summary(result, type = "values")
```

---

summary.prob\_fdist      *Summary method for the probability calculator (F-distribution)*

---

**Description**

Summary method for the probability calculator (F-distribution)

**Usage**

```
## S3 method for class 'prob_fdist'
summary(object, type = "values", ...)
```

**Arguments**

object	Return value from <a href="#">prob_fdist</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[prob\\_fdist](#) to calculate results

[plot.prob\\_fdist](#) to plot results

**Examples**

```
result <- prob_fdist(df1 = 10, df2 = 10, ub = 2.978)
summary(result, type = "values")
```



---

summary.prob\_lnorm      *Summary method for the probability calculator (log normal)*

---

### Description

Summary method for the probability calculator (log normal)

### Usage

```
## S3 method for class 'prob_lnorm'  
summary(object, type = "values", ...)
```

### Arguments

object	Return value from <a href="#">prob_norm</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

### Details

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

### See Also

[prob\\_lnorm](#) to calculate results  
[plot.prob\\_lnorm](#) to summarize results

### Examples

```
result <- prob_lnorm(meanlog = 0, sdlog = 1, lb = 0, ub = 1)  
summary(result, type = "values")
```

---

summary.prob\_norm      *Summary method for the probability calculator (normal)*

---

### Description

Summary method for the probability calculator (normal)

### Usage

```
## S3 method for class 'prob_norm'  
summary(object, type = "values", ...)
```

**Arguments**

object	Return value from <a href="#">prob_norm</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[prob\\_norm](#) to calculate results  
[plot.prob\\_norm](#) to plot results

**Examples**

```
result <- prob_norm(mean = 0, stdev = 1, ub = 0)
summary(result)
```

---

summary.prob\_pois      *Summary method for the probability calculator (poisson)*

---

**Description**

Summary method for the probability calculator (poisson)

**Usage**

```
## S3 method for class 'prob_pois'
summary(object, type = "values", ...)
```

**Arguments**

object	Return value from <a href="#">prob_pois</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[prob\\_pois](#) to calculate results

[plot.prob\\_pois](#) to plot results

**Examples**

```
result <- prob_pois(lambda = 1, ub = 3)
summary(result, type = "values")
```

---

summary.prob\_tdist      *Summary method for the probability calculator (t-distribution)*

---

**Description**

Summary method for the probability calculator (t-distribution)

**Usage**

```
## S3 method for class 'prob_tdist'
summary(object, type = "values", ...)
```

**Arguments**

object	Return value from <a href="#">prob_tdist</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

**See Also**

[prob\\_tdist](#) to calculate results

[plot.prob\\_tdist](#) to plot results

**Examples**

```
result <- prob_tdist(df = 10, ub = 2.228)
summary(result, type = "values")
```

---

summary.prob\_unif      *Summary method for the probability calculator (uniform)*

---

### Description

Summary method for the probability calculator (uniform)

### Usage

```
## S3 method for class 'prob_unif'  
summary(object, type = "values", ...)
```

### Arguments

object	Return value from <a href="#">prob_unif</a>
type	Probabilities ("probs") or values ("values")
...	further arguments passed to or from other methods

### Details

See [https://radiant-rstats.github.io/docs/basics/prob\\_calc.html](https://radiant-rstats.github.io/docs/basics/prob_calc.html) for an example in Radiant

### See Also

[prob\\_unif](#) to calculate results  
[plot.prob\\_unif](#) to plot results

### Examples

```
result <- prob_unif(min = 0, max = 1, ub = 0.3)  
summary(result, type = "values")
```

---

summary.single\_mean      *Summary method for the single\_mean function*

---

### Description

Summary method for the single\_mean function

### Usage

```
## S3 method for class 'single_mean'  
summary(object, dec = 3, ...)
```

**Arguments**

object	Return value from <a href="#">single_mean</a>
dec	Number of decimals to show
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/single\\_mean.html](https://radiant-rstats.github.io/docs/basics/single_mean.html) for an example in Radiant

**See Also**

[single\\_mean](#) to generate the results

[plot.single\\_mean](#) to plot results

**Examples**

```
result <- single_mean(diamonds, "price")
summary(result)
diamonds %>%
  single_mean("price") %>%
  summary()
```

---

summary.single\_prop    *Summary method for the single\_prop function*

---

**Description**

Summary method for the single\_prop function

**Usage**

```
## S3 method for class 'single_prop'
summary(object, dec = 3, ...)
```

**Arguments**

object	Return value from <a href="#">single_prop</a>
dec	Number of decimals to show
...	further arguments passed to or from other methods

**Details**

See [https://radiant-rstats.github.io/docs/basics/single\\_prop.html](https://radiant-rstats.github.io/docs/basics/single_prop.html) for an example in Radiant

**See Also**

[single\\_prop](#) to generate the results

[plot.single\\_prop](#) to plot the results

**Examples**

```
result <- single_prop(titanic, "survived", lev = "Yes", comp_value = 0.5, alternative = "less")
summary(result)
```

# Index

## \* datasets

- consider, 7
  - demand\_uk, 10
  - newspaper, 11
  - salary, 38
- clt, 3, 12
- compare\_means, 4, 13, 41
- compare\_props, 6, 13, 14, 42
- consider, 7
- cor2df, 7
- correlation, 7, 8, 14, 15, 26, 43
- cross\_tabs, 9, 15, 16, 43, 44
- demand\_uk, 10
- goodness, 10, 16, 17, 44, 45
- newspaper, 11
- plot.clt, 12
- plot.compare\_means, 5, 12, 41
- plot.compare\_props, 7, 13, 42
- plot.correlation, 9, 14, 43
- plot.cross\_tabs, 10, 15, 44
- plot.goodness, 11, 16, 45
- plot.prob\_binom, 17, 27, 45
- plot.prob\_chisq, 18, 28, 46
- plot.prob\_disc, 18, 29, 47
- plot.prob\_expo, 19, 30, 48
- plot.prob\_fdist, 20, 31, 48
- plot.prob\_lnorm, 21, 21, 32, 49
- plot.prob\_norm, 21, 33, 50
- plot.prob\_pois, 22, 34, 51
- plot.prob\_tdist, 23, 35, 51
- plot.prob\_unif, 24, 36, 52
- plot.single\_mean, 24, 39, 53
- plot.single\_prop, 25, 41, 54
- print.rcorr, 26
- prob\_binom, 17, 27, 45
- prob\_chisq, 18, 28, 46
- prob\_disc, 19, 29, 47
- prob\_expo, 19, 20, 30, 47, 48
- prob\_fdist, 20, 31, 48
- prob\_lnorm, 21, 32, 49
- prob\_norm, 21, 22, 33, 49, 50
- prob\_pois, 22, 23, 34, 50, 51
- prob\_tdist, 23, 35, 51
- prob\_unif, 24, 36, 52
- radiant.basics, 37
- radiant.basics\_viewer, 37
- radiant.basics\_window, 38
- salary, 38
- single\_mean, 25, 39, 53
- single\_prop, 26, 40, 53, 54
- summary.compare\_means, 5, 13, 41
- summary.compare\_props, 7, 14, 42
- summary.correlation, 9, 15, 42
- summary.cross\_tabs, 10, 16, 43
- summary.goodness, 11, 17, 44
- summary.prob\_binom, 17, 27, 45
- summary.prob\_chisq, 18, 28, 46
- summary.prob\_disc, 19, 29, 46
- summary.prob\_expo, 20, 30, 47
- summary.prob\_fdist, 20, 31, 48
- summary.prob\_lnorm, 32, 49
- summary.prob\_norm, 22, 33, 49
- summary.prob\_pois, 23, 34, 50
- summary.prob\_tdist, 23, 35, 51
- summary.prob\_unif, 24, 36, 52
- summary.single\_mean, 25, 39, 52
- summary.single\_prop, 26, 41, 53