

The Lisp-Stat Reference Manual

A statistical computing environment for Common Lisp, version 2.0

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1 Systems

The main system appears first, followed by any subsystem dependency.

1.1 lisp-stat

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License MS-PL

Description

A statistical computing environment for Common Lisp

Version 2.0

Dependencies

- alexandria
- array-operations
- data-frame
- dfio
- num-utils
- select
- dexador
- split-sequence

Source [lisp-stat.asd], page 5, (file)

Directory s:/src/lisp-stat/

Components

- [pkgdcls.lisp], page 5, (file)
- [license], page 8, (file)
- [base], page 3, (module)
- [statistics], page 3, (module)
- [docs], page 3, (module)
- [ls-init.lisp], page 8, (file)

2 Modules

Modules are listed depth-first from the system components tree.

2.1 lisp-stat/base

Parent [lisp-stat], page 1, (system)

Location base/

Components

- [variables.lisp], page 5, (file)
- [rdata.lisp], page 5, (file)

2.2 lisp-stat/statistics

Parent [lisp-stat], page 1, (system)

Location statistics/

Component

[stats.lisp], page 8, (file)

2.3 lisp-stat/docs

Parent [lisp-stat], page 1, (system)

Location docs/

Component

[doc-strings.lisp], page 8, (file)

3 Files

Files are sorted by type and then listed depth-first from the systems components trees.

3.1 Lisp

3.1.1 lisp-stat.asd

Location lisp-stat.asd

Systems [lisp-stat], page 1, (system)

3.1.2 lisp-stat/pkgdcls.lisp

Parent [lisp-stat], page 1, (system)

Location pkgdcls.lisp

Packages [lisp-stat], page 9,

3.1.3 lisp-stat/base/variables.lisp

Parent [base], page 3, (module)

Location base/variables.lisp

Exported Definitions

- [def], page 22, (macro)
- [savevar], page 23, (function)
- [variables], page 23, (function)

Internal Definitions

- [*ask-on-redefine*], page 24, (special variable)
- [*variables*], page 24, (special variable)
- [save-obj], page 25, (generic function)
- [save-variable], page 25, (generic function)

3.1.4 lisp-stat/base/rdata.lisp

Dependency

[variables.lisp], page 5, (file)

Parent [base], page 3, (module)

Location base/rdata.lisp

Packages [rdata], page 9,

Exported Definitions

- [*r-default-datasets*], page 13, (special variable)
- [ability.cov], page 13, (special variable)
- [airmiles], page 13, (special variable)
- [airpassengers], page 13, (special variable)
- [airquality], page 13, (special variable)
- [anscombe], page 13, (special variable)
- [attenu], page 13, (special variable)
- [attitude], page 13, (special variable)

- [austres], page 14, (special variable)
- [base-url], page 14, (special variable)
- [bjsales], page 14, (special variable)
- [bod], page 14, (special variable)
- [cars], page 14, (special variable)
- [chickweight], page 14, (special variable)
- [chickwts], page 14, (special variable)
- [co2-1], page 14, (special variable)
- [co2-2], page 14, (special variable)
- [crimtab], page 15, (special variable)
- [discoveries], page 15, (special variable)
- [dnase], page 15, (special variable)
- [esoph], page 15, (special variable)
- [euro], page 15, (special variable)
- [eustockmarkets], page 15, (special variable)
- [faithful], page 15, (special variable)
- [formaldehyde], page 15, (special variable)
- [freeny], page 15, (special variable)
- [get-r-data], page 23, (function)
- [haireyecolor], page 16, (special variable)
- [harman23.cor], page 16, (special variable)
- [harman74.cor], page 16, (special variable)
- [index], page 16, (special variable)
- [indometh], page 16, (special variable)
- [infert], page 16, (special variable)
- [insectsprays], page 16, (special variable)
- [iris], page 16, (special variable)
- [iris3], page 16, (special variable)
- [islands], page 16, (special variable)
- [johnsonjohnson], page 17, (special variable)
- [lakehuron], page 17, (special variable)
- [lh], page 17, (special variable)
- [lifecyclesavings], page 17, (special variable)
- [load-r-default-datasets], page 23, (function)
- [load-r-metadata], page 23, (function)
- [loblolly], page 17, (special variable)
- [longley], page 17, (special variable)
- [lynx], page 17, (special variable)
- [morley], page 17, (special variable)
- [mtcars], page 17, (special variable)
- [nhtemp], page 18, (special variable)
- [nile], page 18, (special variable)
- [nottem], page 18, (special variable)

- `[npk]`, page 18, (special variable)
- `[occupationalstatus]`, page 18, (special variable)
- `[orange]`, page 18, (special variable)
- `[orchardsprays]`, page 18, (special variable)
- `[plantgrowth]`, page 18, (special variable)
- `[precip]`, page 18, (special variable)
- `[presidents]`, page 19, (special variable)
- `[pressure]`, page 19, (special variable)
- `[puromycin]`, page 19, (special variable)
- `[quakes]`, page 19, (special variable)
- `[randu]`, page 19, (special variable)
- `[rivers]`, page 19, (special variable)
- `[rock]`, page 19, (special variable)
- `[save-r-default-datasets]`, page 23, (function)
- `[seatbelts]`, page 19, (special variable)
- `[stackloss]`, page 19, (special variable)
- `[sunspot.month]`, page 20, (special variable)
- `[sunspot.year]`, page 20, (special variable)
- `[sunspots]`, page 20, (special variable)
- `[swiss]`, page 20, (special variable)
- `[theoph]`, page 20, (special variable)
- `[titanic]`, page 20, (special variable)
- `[toothgrowth]`, page 20, (special variable)
- `[treering]`, page 20, (special variable)
- `[trees]`, page 20, (special variable)
- `[ucbadmissions]`, page 21, (special variable)
- `[ukdriverdeaths]`, page 21, (special variable)
- `[ukgas]`, page 21, (special variable)
- `[usaccdeaths]`, page 21, (special variable)
- `[usarrests]`, page 21, (special variable)
- `[usjudgeratings]`, page 21, (special variable)
- `[uspersonalexpenditure]`, page 21, (special variable)
- `[uspop]`, page 21, (special variable)
- `[vadeaths]`, page 21, (special variable)
- `[volcano]`, page 22, (special variable)
- `[warpbreaks]`, page 22, (special variable)
- `[women]`, page 22, (special variable)
- `[worldphones]`, page 22, (special variable)
- `[wwwusage]`, page 22, (special variable)

Internal Definitions

- `[*r-default-dataframes*]`, page 24, (special variable)
- `[student-sleep]`, page 24, (special variable)

3.1.5 lisp-stat/statistics/stats.lisp

Parent [statistics], page 3, (module)

Location statistics/stats.lisp

Exported Definitions

- [fivenum], page 22, (function)
- [interquartile-range], page 23, (function)

3.1.6 lisp-stat/docs/doc-strings.lisp

Parent [docs], page 3, (module)

Location docs/doc-strings.lisp

3.1.7 lisp-stat/ls-init.lisp

Parent [lisp-stat], page 1, (system)

Location ls-init.lisp

Packages [ls-user], page 12,

Internal Definitions

[setup-ls-translations], page 25, (function)

3.2 Static

3.2.1 lisp-stat/license

Parent [lisp-stat], page 1, (system)

Location LICENSE

4 Packages

Packages are listed by definition order.

4.1 lisp-stat

Base functions for Lisp-Stat

Source [pkgdcls.lisp], page 5, (file)

Nickname ls

Use List

- split-sequence
- select
- num-utils.utilities
- num-utils.elementwise
- num-utils.statistics
- num-utils.arithmetic
- dfio
- data-frame
- array-operations/all
- alexandria
- common-lisp

Used By List

- ls-tests
- [ls-user], page 12,

Exported Definitions

- [def], page 22, (macro)
- [fivenum], page 22, (function)
- [interquartile-range], page 23, (function)
- [savevar], page 23, (function)
- [variables], page 23, (function)

Internal Definitions

- [*ask-on-redefine*], page 24, (special variable)
- [*variables*], page 24, (special variable)
- [save-obj], page 25, (generic function)
- [save-variable], page 25, (generic function)
- [setup-ls-translations], page 25, (function)

4.2 rdata

Source [rdata.lisp], page 5, (file)

Use List common-lisp

Exported Definitions

- [*r-default-datasets*], page 13, (special variable)
- [ability.cov], page 13, (special variable)

- [airmiles], page 13, (special variable)
- [airpassengers], page 13, (special variable)
- [airquality], page 13, (special variable)
- [anscombe], page 13, (special variable)
- [attenu], page 13, (special variable)
- [attitude], page 13, (special variable)
- [austres], page 14, (special variable)
- [base-url], page 14, (special variable)
- [bjsales], page 14, (special variable)
- [bod], page 14, (special variable)
- [cars], page 14, (special variable)
- [chickweight], page 14, (special variable)
- [chickwts], page 14, (special variable)
- [co2-1], page 14, (special variable)
- [co2-2], page 14, (special variable)
- [crimtab], page 15, (special variable)
- [discoveries], page 15, (special variable)
- [dnase], page 15, (special variable)
- [esoph], page 15, (special variable)
- [euro], page 15, (special variable)
- [eustockmarkets], page 15, (special variable)
- [faithful], page 15, (special variable)
- [formaldehyde], page 15, (special variable)
- [freeny], page 15, (special variable)
- [get-r-data], page 23, (function)
- [haireyecolor], page 16, (special variable)
- [harman23.cor], page 16, (special variable)
- [harman74.cor], page 16, (special variable)
- [index], page 16, (special variable)
- [indometh], page 16, (special variable)
- [infert], page 16, (special variable)
- [insectsprays], page 16, (special variable)
- [iris], page 16, (special variable)
- [iris3], page 16, (special variable)
- [islands], page 16, (special variable)
- [johnsonjohnson], page 17, (special variable)
- [lakehuron], page 17, (special variable)
- [lh], page 17, (special variable)
- [lifecyclesavings], page 17, (special variable)
- [load-r-default-datasets], page 23, (function)
- [load-r-metadata], page 23, (function)
- [loblolly], page 17, (special variable)
- [longley], page 17, (special variable)

- [lynx], page 17, (special variable)
- [morley], page 17, (special variable)
- [mtcars], page 17, (special variable)
- [nhtemp], page 18, (special variable)
- [nile], page 18, (special variable)
- [nottem], page 18, (special variable)
- [npk], page 18, (special variable)
- [occupationalstatus], page 18, (special variable)
- [orange], page 18, (special variable)
- [orchardsprays], page 18, (special variable)
- [plantgrowth], page 18, (special variable)
- [precip], page 18, (special variable)
- [presidents], page 19, (special variable)
- [pressure], page 19, (special variable)
- [puromycin], page 19, (special variable)
- [quakes], page 19, (special variable)
- [randu], page 19, (special variable)
- [rivers], page 19, (special variable)
- [rock], page 19, (special variable)
- [save-r-default-datasets], page 23, (function)
- [seatbelts], page 19, (special variable)
- [stackloss], page 19, (special variable)
- [sunspot.month], page 20, (special variable)
- [sunspot.year], page 20, (special variable)
- [sunspots], page 20, (special variable)
- [swiss], page 20, (special variable)
- [theoph], page 20, (special variable)
- [titanic], page 20, (special variable)
- [toothgrowth], page 20, (special variable)
- [treering], page 20, (special variable)
- [trees], page 20, (special variable)
- [ucbadmissions], page 21, (special variable)
- [ukdriverdeaths], page 21, (special variable)
- [ukgas], page 21, (special variable)
- [usaccdeaths], page 21, (special variable)
- [usarrests], page 21, (special variable)
- [usjudgeratings], page 21, (special variable)
- [uspersonalexpenditure], page 21, (special variable)
- [uspop], page 21, (special variable)
- [vadeaths], page 21, (special variable)
- [volcano], page 22, (special variable)
- [warpbreaks], page 22, (special variable)
- [women], page 22, (special variable)

- [worldphones], page 22, (special variable)
- [wwwusage], page 22, (special variable)

Internal Definitions

- [*r-default-dataframes*], page 24, (special variable)
- [student-sleep], page 24, (special variable)

4.3 ls-user

User package for Lisp-Stat

Source [ls-init.lisp], page 8, (file)

Use List

- [lisp-stat], page 9,
- common-lisp

Internal Definitions

- [*default-datasets*], page 24, (special variable)
- [iris], page 24, (special variable)
- [plantgrowth], page 24, (special variable)
- [toothgrowth], page 24, (special variable)
- [usarrests], page 24, (special variable)

5 Definitions

Definitions are sorted by export status, category, package, and then by lexicographic order.

5.1 Exported definitions

5.1.1 Special variables

r-default-datasets	[Special Variable]
All data sets included by default in R	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
ability.cov	[Special Variable]
Ability and Intelligence Tests	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
airmiles	[Special Variable]
Passenger Miles on Commercial US Airlines, 1937-1960	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
airpassengers	[Special Variable]
Monthly Airline Passenger Numbers 1949-1960	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
airquality	[Special Variable]
New York Air Quality Measurements	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
anscombe	[Special Variable]
Anscombe's Quartet of 'Identical' Simple Linear Regressions	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
attenu	[Special Variable]
The Joyner-Boore Attenuation Data	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
attitude	[Special Variable]
The Chatterjee-Price Attitude Data	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)

austres	[Special Variable]
Quarterly Time Series of the Number of Australian Residents	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
base-url	[Special Variable]
Base URL for datasets included in R	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
bjsales	[Special Variable]
Sales Data with Leading Indicator	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
bod	[Special Variable]
Biochemical Oxygen Demand	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
cars	[Special Variable]
Speed and Stopping Distances of Cars	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
chickweight	[Special Variable]
Weight versus age of chicks on different diets	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
chickwts	[Special Variable]
Chicken Weights by Feed Type	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
co2-1	[Special Variable]
Carbon Dioxide Uptake in Grass Plants	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
co2-2	[Special Variable]
Mauna Loa Atmospheric CO2 Concentration	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	

crimtab Student's 3000 Criminals Data	[Special Variable]
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
discoveries Yearly Numbers of Important Discoveries	[Special Variable]
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
dnase Elisa assay of DNase	[Special Variable]
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
esoph Smoking, Alcohol and (O)esophageal Cancer	[Special Variable]
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
euro Conversion Rates of Euro Currencies	[Special Variable]
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
eustockmarkets Daily Closing Prices of Major European Stock Indices, 1991-1998	[Special Variable]
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
faithful Old Faithful Geyser Data	[Special Variable]
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
formaldehyde Determination of Formaldehyde	[Special Variable]
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
freeny Freeny's Revenue Data	[Special Variable]
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	

haireyecolor	[Special Variable]
Hair and Eye Color of Statistics Students	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
harman23.cor	[Special Variable]
Harman Example 2.3	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
harman74.cor	[Special Variable]
Harman Example 7.4	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
index	[Special Variable]
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
indometh	[Special Variable]
Pharmacokinetics of Indomethacin	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
infert	[Special Variable]
Infertility after Spontaneous and Induced Abortion	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
insectsprays	[Special Variable]
Effectiveness of Insect Sprays	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
iris	[Special Variable]
Edgar Anderson's Iris Data	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
iris3	[Special Variable]
Edgar Anderson's Iris Data	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
islands	[Special Variable]
Areas of the World's Major Landmasses	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)

johnsonjohnson	[Special Variable]
Quarterly Earnings per Johnson & Johnson Share	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
lakehuron	[Special Variable]
Level of Lake Huron 1875-1972	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
lh	[Special Variable]
Luteinizing Hormone in Blood Samples	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
lifecyclesavings	[Special Variable]
Intercountry Life-Cycle Savings Data	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
loblolly	[Special Variable]
Growth of Loblolly pine trees	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
longley	[Special Variable]
Longley's Economic Regression Data	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
lynx	[Special Variable]
Annual Canadian Lynx trappings 1821-1934	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
morley	[Special Variable]
Michelson Speed of Light Data	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
mtcars	[Special Variable]
Motor Trend Car Road Tests	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	

nhtemp	[Special Variable]
Average Yearly Temperatures in New Haven	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
nile	[Special Variable]
Flow of the River Nile	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
nottem	[Special Variable]
Average Monthly Temperatures at Nottingham, 1920-1939	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
npk	[Special Variable]
Classical N, P, K Factorial Experiment	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
occupationalstatus	[Special Variable]
Occupational Status of Fathers and their Sons	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
orange	[Special Variable]
Growth of Orange Trees	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
orchardsprays	[Special Variable]
Potency of Orchard Sprays	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
plantgrowth	[Special Variable]
Results from an Experiment on Plant Growth	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)
precip	[Special Variable]
Annual Precipitation in US Cities	
Package	[rdata], page 9,
Source	[rdata.lisp], page 5, (file)

presidents	[Special Variable]
Quarterly Approval Ratings of US Presidents	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
pressure	[Special Variable]
Vapor Pressure of Mercury as a Function of Temperature	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
puromycin	[Special Variable]
Reaction Velocity of an Enzymatic Reaction	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
quakes	[Special Variable]
Locations of Earthquakes off Fiji	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
randu	[Special Variable]
Random Numbers from Congruential Generator RANDU	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
rivers	[Special Variable]
Lengths of Major North American Rivers	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
rock	[Special Variable]
Measurements on Petroleum Rock Samples	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
seatbelts	[Special Variable]
Road Casualties in Great Britain 1969-84	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
stackloss	[Special Variable]
Brownlee's Stack Loss Plant Data	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	

sunspot.month	[Special Variable]
Monthly Sunspot Data, from 1749 to Present	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
sunspot.year	[Special Variable]
Yearly Sunspot Data, 1700-1988	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
sunspots	[Special Variable]
Monthly Sunspot Numbers, 1749-1983	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
swiss	[Special Variable]
Swiss Fertility and Socioeconomic Indicators (1888) Data	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
theoph	[Special Variable]
Pharmacokinetics of Theophylline	
Package [rdata], page 9,	
Source [rdata.lisp], page 5, (file)	
titanic	[Special Variable]
Survival of passengers on the Titanic	
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 Topographic Information on Auckland's Maunga Whau Volcano
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- warpbreaks** [Special Variable]
 The Number of Breaks in Yarn during Weaving
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- women** [Special Variable]
 Average Heights and Weights for American Women
Package [rdata], page 9,
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- worldphones** [Special Variable]
 The World's Telephones
Package [rdata], page 9,
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- wwwusage** [Special Variable]
 Internet Usage per Minute
Package [rdata], page 9,
Source [rdata.lisp], page 5, (file)

5.1.2 Macros

- def** *NAME* *VALUE* &**optional** *DOCUMENTATION* [Macro]
 Define a data variable
VALUE is not evaluated and must be a symbol. Assigns the value of *FORM* to *VALUE* and adds *VALUE* to the list **VARIABLES** of def'd variables. Returns *VALUE*. If *VALUE* is already bound and the global variable **ASK-ON-REDEFINE** is not nil then you are asked if you want to redefine the variable.
Package [lisp-stat], page 9,
Source [variables.lisp], page 5, (file)

5.1.3 Functions

- fivenum** *X* [Function]
 Returns the five number summary (min, 1st quartile, median, 3rd quartile, max) of the elements *X*.
 Note this is not Tukey's fivenum summary, which R returns. The results will differ when *X* contains an even number of elements. See:
<https://www.icalcu.com/stat/fivenum.html> <https://math.stackexchange.com/questions/398077/question-on-five-number-summary-quantile>
Package [lisp-stat], page 9,
Source [stats.lisp], page 8, (file)

- get-r-data ()** [Function]
Package [rdata], page 9,
Source [rdata.lisp], page 5, (file)
- interquartile-range X** [Function]
Returns the interquartile range of the elements of X .
Package [lisp-stat], page 9,
Source [stats.lisp], page 8, (file)
- load-r-default-datasets ()** [Function]
Load the data sets included in base R
Package [rdata], page 9,
Source [rdata.lisp], page 5, (file)
- load-r-metadata ()** [Function]
Loads the master R data set index as a data frame

This allows you to slice & dice the 1500+ data sets to find what you need
Package [rdata], page 9,
Source [rdata.lisp], page 5, (file)
- save-r-default-datasets ()** [Function]
Save the data sets included in base R
Package [rdata], page 9,
Source [rdata.lisp], page 5, (file)
- savevar *VARS FILE* &optional *SUFFIX*** [Function]
 $VARS$ is a symbol or a list of symbols. $FILE$ is a string (or a symbol whose print name is used) not ending in $SUFFIX$ (defaults to ".lisp"). The $VARS$ and their current values are written to the file $FILE.lisp$ in a form suitable for use with the load command. NOTE: Ensure $VARS$ doesn't contain CLOS objects that don't have a SAVE-OBJ method. Example (savevar 'urban "urban")
Package [lisp-stat], page 9,
Source [variables.lisp], page 5, (file)
- variables ()** [Function]
Returns a list of the names of all def'd variables.
Package [lisp-stat], page 9,
Source [variables.lisp], page 5, (file)

5.2 Internal definitions

5.2.1 Special variables

ask-on-redefine [Special Variable]

Package [lisp-stat], page 9,

Source [variables.lisp], page 5, (file)

default-datasets [Special Variable]

Data sets loaded as part of personal Lisp-Stat initialisation. Available in every session.

Package [ls-user], page 12,

Source /Users/nunez/ls-init.lisp

r-default-dataframes [Special Variable]

Data frames corresponding to the default R datasets

Package [rdata], page 9,

Source [rdata.lisp], page 5, (file)

variables [Special Variable]

Package [lisp-stat], page 9,

Source [variables.lisp], page 5, (file)

iris [Special Variable]

Edgar Anderson's Iris Data

Package [ls-user], page 12,

Source /Users/nunez/ls-init.lisp

plantgrowth [Special Variable]

Results from an Experiment on Plant Growth

Package [ls-user], page 12,

Source /Users/nunez/ls-init.lisp

student-sleep [Special Variable]

Student's Sleep Data

Package [rdata], page 9,

Source [rdata.lisp], page 5, (file)

toothgrowth [Special Variable]

The Effect of Vitamin C on Tooth Growth in Guinea Pigs

Package [ls-user], page 12,

Source /Users/nunez/ls-init.lisp

usarrests [Special Variable]

Violent Crime Rates by US State

Package [ls-user], page 12,

Source /Users/nunez/ls-init.lisp

5.2.2 Functions

`setup-ls-translations ()` [Function]

Package [lisp-stat], page 9,

Source [ls-init.lisp], page 8, (file)

5.2.3 Generic functions

`save-obj DATA` [Generic Function]
Save data object

Package [lisp-stat], page 9,

Source [variables.lisp], page 5, (file)

`save-variable DATA` [Generic Function]
Save the data.

Package [lisp-stat], page 9,

Source [variables.lisp], page 5, (file)

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