BioStatFLOSS 6: Un software para gobernarlos a todos...

Xornada Software Libre Científico
31 de Marzo de 2022

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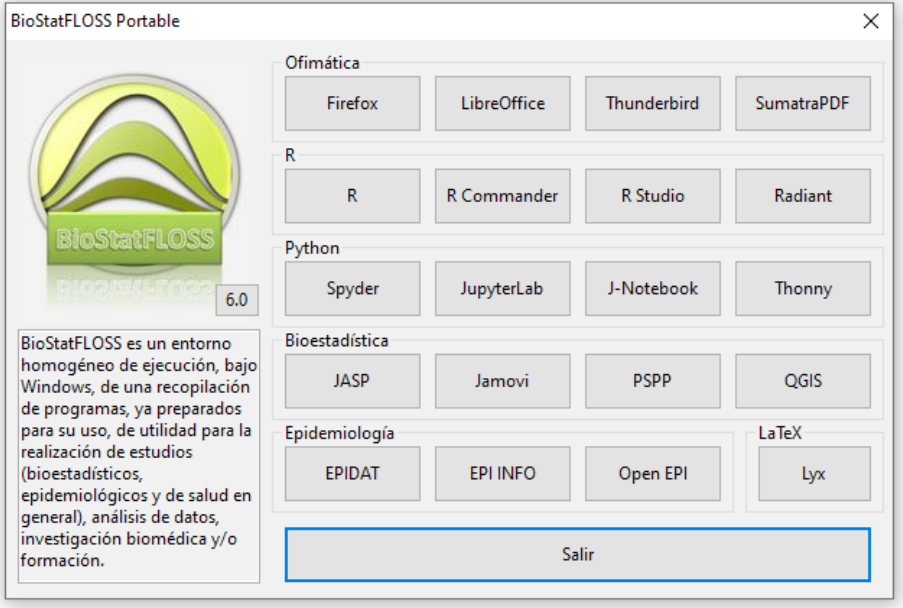
Dirección Xeral de Saúde Pública
Consellería de Sanidade - Xunta de Galicia

Un Anillo para gobernarlos a todos. Un Anillo para encontrarlos, un Anillo para atrerlos a todos y atarlos en las tinieblas.

Software Libre

Qué es BioStatFLOSS?



Pantalla principal de BioStatFLOSS

- Ofimática
  - Firefox: https://www.mozilla.org/
  - ThunderBird: https://www.thunderbird.net/
  - Sumatra PDF: https://www.sumatrapdfreader.org/
- R: https://www.r-project.org/
  - Rcommander: https://socialsciences.mcmaster.ca/jfox/Misc/Rcmdr/
  - Rstudio: https://www.rstudio.com/products/rstudio/
  - Radiant: https://radiant-rstats.github.io/docs/
- Python: https://www.python.org/
  - Spyder: https://www.spyder-ide.org/
  - JupiterLab: https://jupyter.org/
  - Jupiter Notebook: https://jupyter.org/
  - Thonny: https://thonny.org/

- Bioestadística
  - JASP: https://jasp-stats.org/
  - Jamovi: https://www.jamovi.org/
  - PSPP: https://www.gnu.org/software/pspp/
  - QGIS: https://www.qgis.org/
- Epidemiología
  - Epidat: https://www.sergas.es/Saude-publica/EPIDAT
  - EpiInfo: https://www.cdc.gov/epiinfo/esp/es_index.html
  - OpenEpi: https://www.openepi.com/Menu/OE_Menu.htm
- LaTeX
  - Lyx: https://www.lyx.org/

- Ofimática
  - Firefox: https://www.mozilla.org/
  - ThunderBird: https://www.thunderbird.net/
  - Sumatra PDF: https://www.sumatrapdfreader.org/
- R: https://www.r-project.org/
  - Rcommander: https://socialsciences.mcmaster.ca/jfox/Misc/Rcmdr/
  - Rstudio: https://www.rstudio.com/products/rstudio/
  - Radiant: https://radiant-rstats.github.io/docs/
- Python: https://www.python.org/
  - Spyder: https://www.spyder-ide.org/
  - JupiterLab: https://jupyter.org/
  - Jupiter Notebook: https://jupyter.org/
  - Thonny: https://thonny.org/

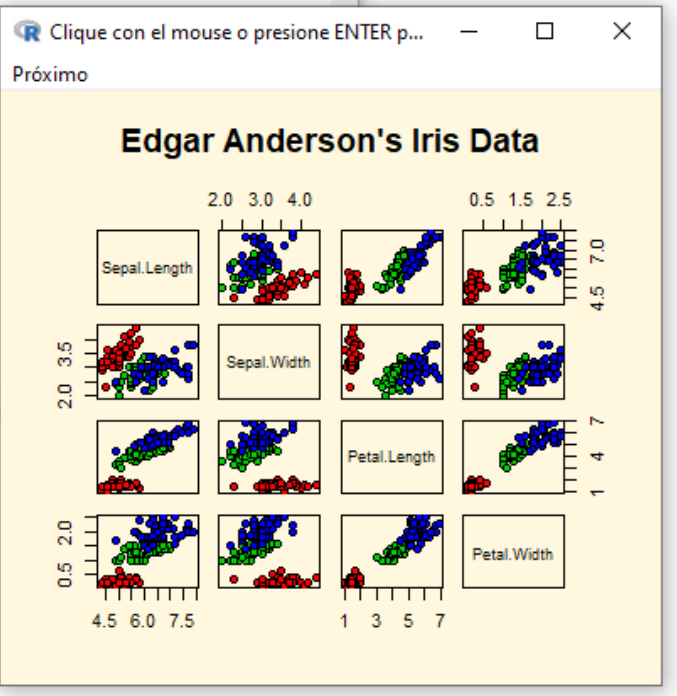
R Console (64-bit)

Archivo Editar Misc Paquetes Ventanas Ayuda installr

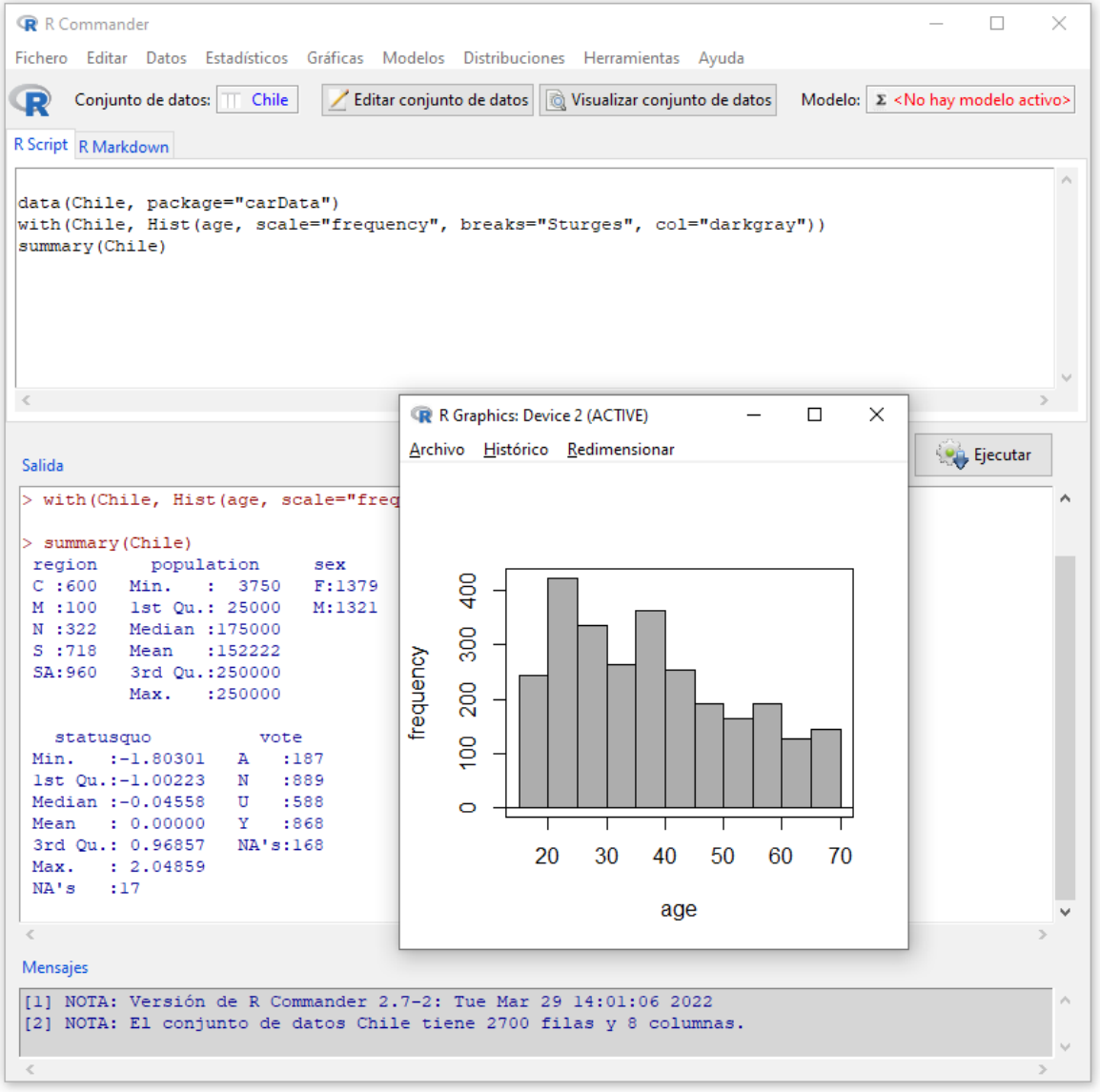
```
> lev <- pretty(range(volcano), 10)

> par(bg = "lightcyan")

> pin <- par("pin")

> xdelta <- diff(range(x))

> ydelta <- diff(range(y))

> xscale <- pin[1]/xdelta

> yscale <- pin[2]/ydelta

> scale <- min(xscale, yscale)

> xadd <- 0.5*(pin[1]/scale - xdelta)

> yadd <- 0.5*(pin[2]/scale - ydelta)

> plot(numeric(0), numeric(0),
+      xlim = range(x)+c(-1,1)*xadd, ylim = range(y)+c(-
+      type = "n", ann = FALSE)
Esperando para confirmar cambio de página...
```

Clique con el mouse o presione ENTER p...

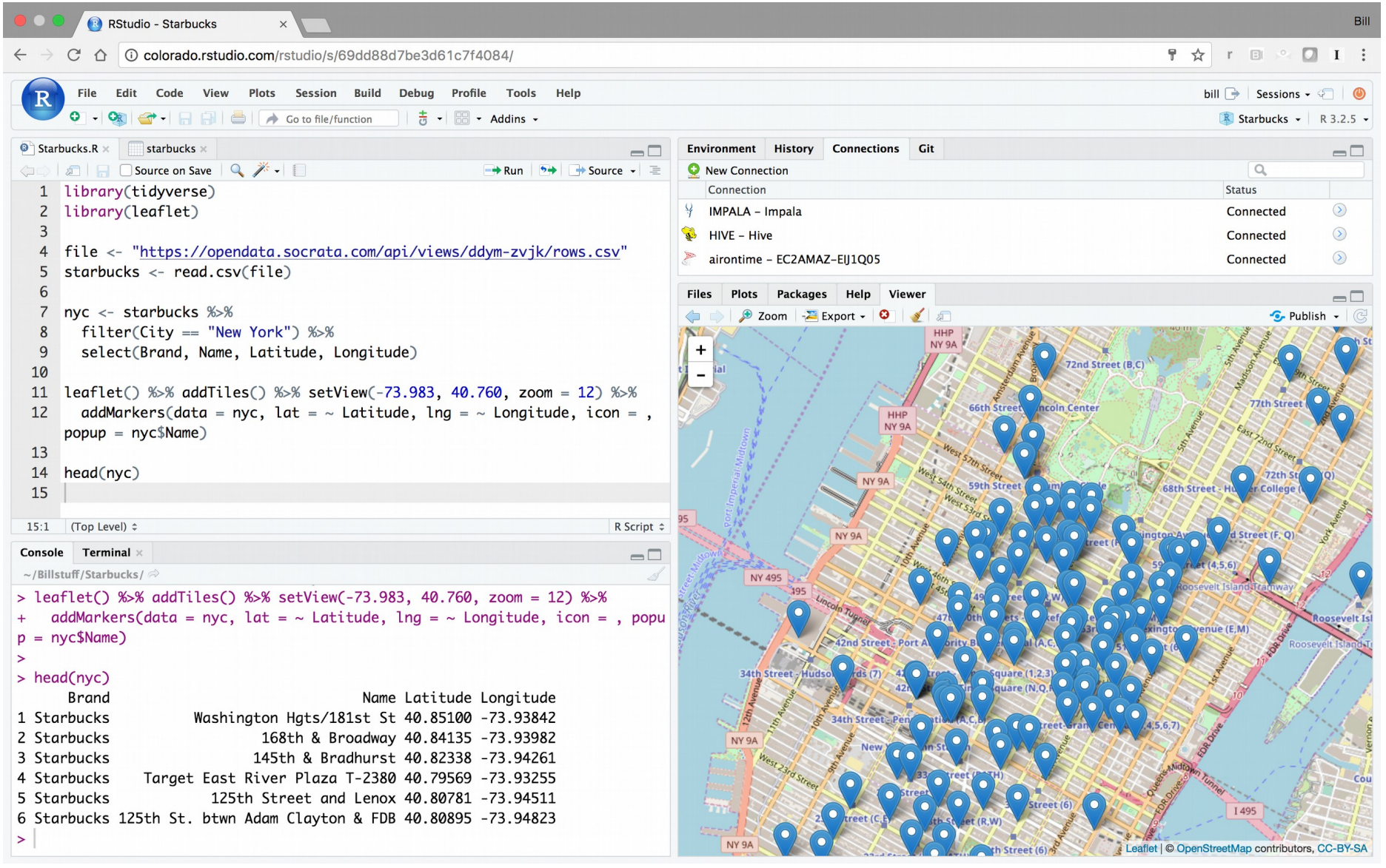
Próximo



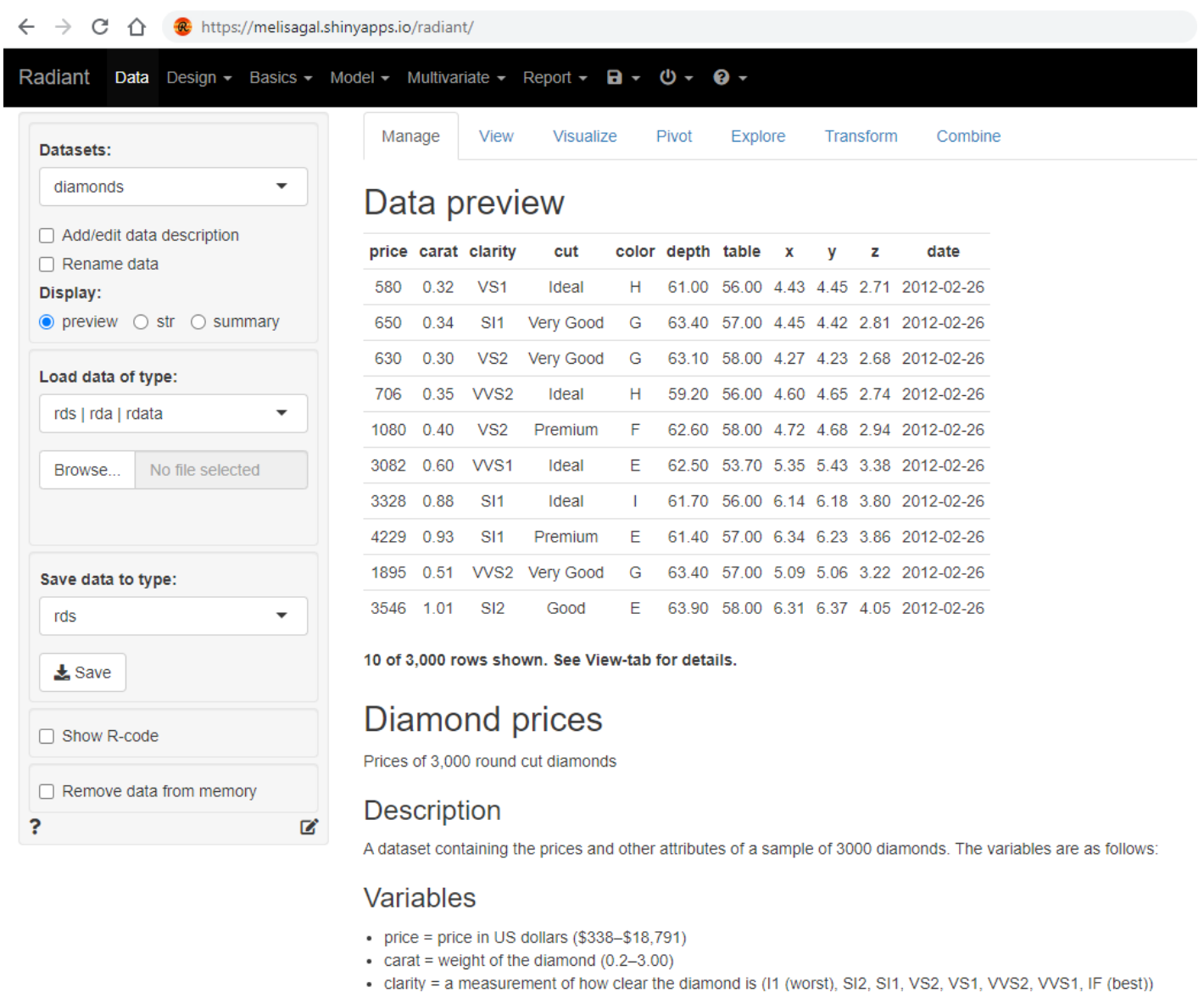
R


R Commander
Fichero Editar Datos Estadísticos Gráficas Modelos Distribuciones Herramientas Ayuda
Conjunto de datos: Chile
Editar conjunto de datos
Visualizar conjunto de datos
Modelo: <No hay modelo activo>
R Script
R Markdown
data(Chile, package="carData")
with(Chile, Hist(age, scale="frequency", breaks="Sturges", col="darkgray"))
summary(Chile)
Ejecutar
Salida
> with(Chile, Hist(age, scale="freq
> summary(Chile)
region population sex
C :600 Min. : 3750 F:1379
M :100 1st Qu.: 25000 M:1321
N :322 Median :175000
S :718 Mean :152222
SA:960 3rd Qu.:250000
Max. :250000
statusquo vote
Min. :-1.80301 A :187
1st Qu.:-1.00223 N :889
Median :-0.04558 U :588
Mean : 0.00000 Y :868
3rd Qu.: 0.96857 NA's:168
Max. : 2.04859
NA's :17
R Graphics: Device 2 (ACTIVE)
Archivo Histórico Redimensionar
frequency
0 100 200 300 400
20 30 40 50 60 70
age
Mensajes
[1] NOTA: Versión de R Commander 2.7-2: Tue Mar 29 14:01:06 2022
[2] NOTA: El conjunto de datos Chile tiene 2700 filas y 8 columnas.

RCommander


RStudio - Starbucks
Bill
colorado.rstudio.com/rstudio/s/69dd88d7be3d61c7f4084/
File Edit Code View Plots Session Build Debug Profile Tools Help
bill Sessions
Go to file/function
Addins
Starbucks R 3.2.5
Starbucks.R
starbucks
Source on Save
Run
Source
1 library(tidyverse)
2 library(leaflet)
3
4 file <- "https://opendata.socrata.com/api/views/ddym-zvjk/rows.csv"
5 starbucks <- read.csv(file)
6
7 nyc <- starbucks %>%
8 filter(City == "New York") %>%
9 select(Brand, Name, Latitude, Longitude)
10
11 leaflet() %>% addTiles() %>% setView(-73.983, 40.760, zoom = 12) %>%
12 addMarkers(data = nyc, lat = ~ Latitude, lng = ~ Longitude, icon = ,
popup = nyc$Name)
13
14 head(nyc)
15
15:1 (Top Level) R Script
Console Terminal
~/Billstuff/Starbucks/
> leaflet() %>% addTiles() %>% setView(-73.983, 40.760, zoom = 12) %>%
+ addMarkers(data = nyc, lat = ~ Latitude, lng = ~ Longitude, icon = , popu
p = nyc$Name)
>
> head(nyc)
Brand Name Latitude Longitude
1 Starbucks Washington Hgts/181st St 40.85100 -73.93842
2 Starbucks 168th & Broadway 40.84135 -73.93982
3 Starbucks 145th & Bradhurst 40.82338 -73.94261
4 Starbucks Target East River Plaza T-2380 40.79569 -73.93255
5 Starbucks 125th Street and Lenox 40.80781 -73.94511
6 Starbucks 125th St. btwn Adam Clayton & FDB 40.80895 -73.94823
>
Environment History Connections Git
New Connection
Connection Status
IMPALA – Impala Connected
HIVE – Hive Connected
airontime – EC2AMAZ-EIJ1Q05 Connected
Files Plots Packages Help Viewer
Zoom Export Publish
HHP NY 9A
NY 9A
NY 495
72nd Street (B,C)
66th Street - Lincoln Center
59th Street
42nd Street - Port Authority Bus Terminal (A,C,E)
34th Street - Hudson Yards (7)
34th Street - Penn Station (A,C,E)
Roosevelt Island Tramway
Lincoln Tunnel
Queens-Midtown Tunnel
I 495
Leaflet | © OpenStreetMap contributors, CC-BY-SA

RStudio


https://melisagal.shinyapps.io/radiant/
Radiant
Data
Design
Basics
Model
Multivariate
Report
Datasets:
diamonds
Add/edit data description
Rename data
Display:
preview
str
summary
Load data of type:
rds | rda | rdata
Browse...
No file selected
Save data to type:
rds
Save
Show R-code
Remove data from memory
Manage
View
Visualize
Pivot
Explore
Transform
Combine
Data preview
price carat clarity cut color depth table x y z date
580 0.32 VS1 Ideal H 61.00 56.00 4.43 4.45 2.71 2012-02-26
650 0.34 SI1 Very Good G 63.40 57.00 4.45 4.42 2.81 2012-02-26
630 0.30 VS2 Very Good G 63.10 58.00 4.27 4.23 2.68 2012-02-26
706 0.35 VVS2 Ideal H 59.20 56.00 4.60 4.65 2.74 2012-02-26
1080 0.40 VS2 Premium F 62.60 58.00 4.72 4.68 2.94 2012-02-26
3082 0.60 VVS1 Ideal E 62.50 53.70 5.35 5.43 3.38 2012-02-26
3328 0.88 SI1 Ideal I 61.70 56.00 6.14 6.18 3.80 2012-02-26
4229 0.93 SI1 Premium E 61.40 57.00 6.34 6.23 3.86 2012-02-26
1895 0.51 VVS2 Very Good G 63.40 57.00 5.09 5.06 3.22 2012-02-26
3546 1.01 SI2 Good E 63.90 58.00 6.31 6.37 4.05 2012-02-26
10 of 3,000 rows shown. See View-tab for details.
Diamond prices
Prices of 3,000 round cut diamonds
Description
A dataset containing the prices and other attributes of a sample of 3000 diamonds. The variables are as follows:
Variables
price = price in US dollars ($338–$18,791)
carat = weight of the diamond (0.2–3.00)
clarity = a measurement of how clear the diamond is (I1 (worst), SI2, SI1, VS2, VS1, VVS2, VVS1, IF (best))

Radiant

- Ofimática
  - Firefox: https://www.mozilla.org/
  - ThunderBird: https://www.thunderbird.net/
  - Sumatra PDF: https://www.sumatrapdfreader.org/
- R: https://www.r-project.org/
  - Rcommander: https://socialsciences.mcmaster.ca/jfox/Misc/Rcmdr/
  - Rstudio: https://www.rstudio.com/products/rstudio/
  - Radiant: https://radiant-rstats.github.io/docs/
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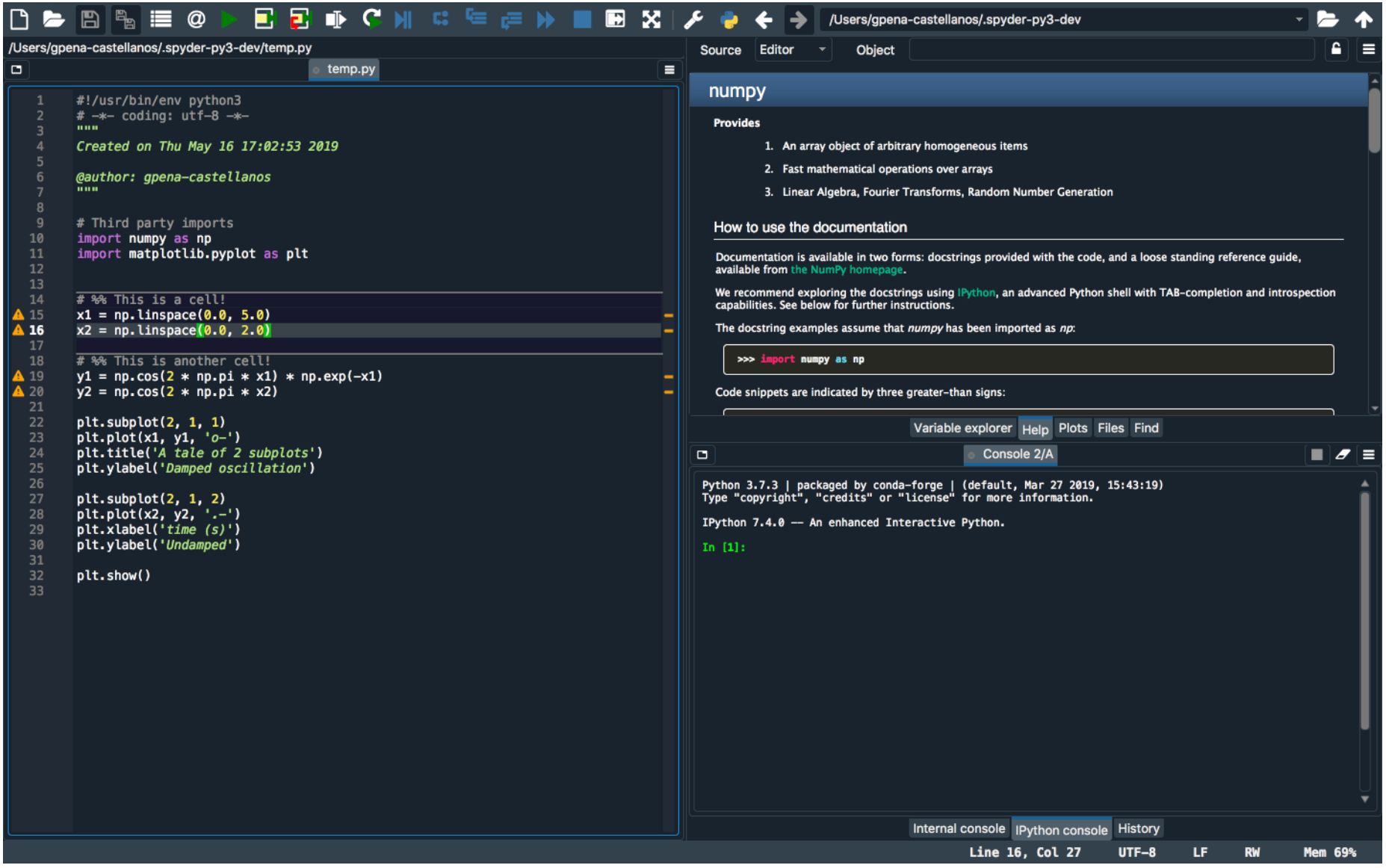
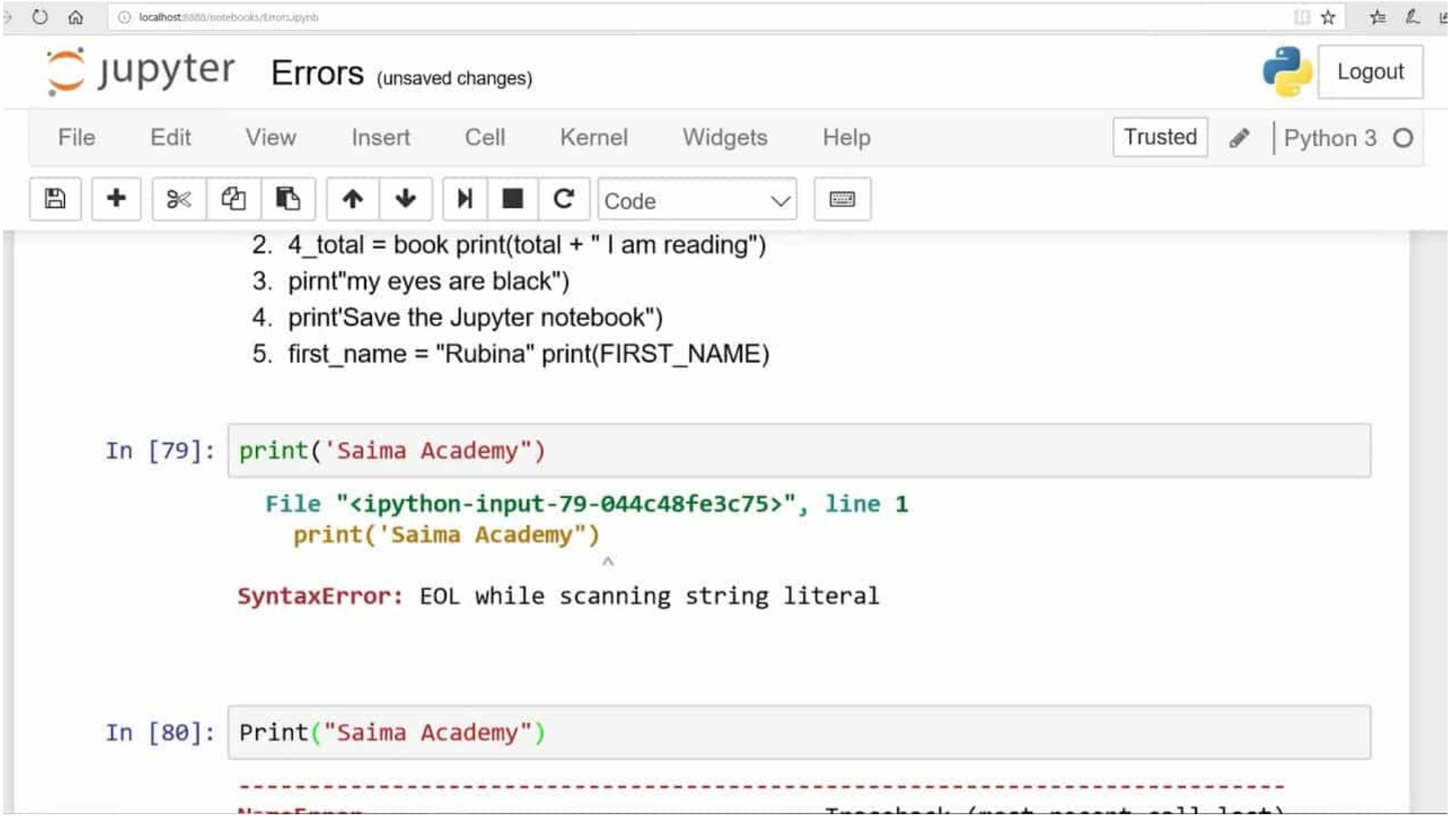
  - Spyder: https://www.spyder-ide.org/
  - Jupiter Notebook: https://jupyter.org/
  - JupiterLab: https://jupyter.org/
  - Thonny: https://thonny.org/


/Users/gpena-castellanos/.spyder-py3-dev
/Users/gpena-castellanos/.spyder-py3-dev/temp.py
temp.py
#!/usr/bin/env python3
-*- coding: utf-8 -*-
"""
Created on Thu May 16 17:02:53 2019
@author: gpena-castellanos
"""
# Third party imports
import numpy as np
import matplotlib.pyplot as plt
# %% This is a cell!
x1 = np.linspace(0.0, 5.0)
x2 = np.linspace(0.0, 2.0)
# %% This is another cell!
y1 = np.cos(2 * np.pi * x1) * np.exp(-x1)
y2 = np.cos(2 * np.pi * x2)
plt.subplot(2, 1, 1)
plt.plot(x1, y1, 'o-')
plt.title('A tale of 2 subplots')
plt.ylabel('Damped oscillation')
plt.subplot(2, 1, 2)
plt.plot(x2, y2, '.-')
plt.xlabel('time (s)')
plt.ylabel('Undamped')
plt.show()
Source
Editor
Object
numpy
Provides
1. An array object of arbitrary homogeneous items
2. Fast mathematical operations over arrays
3. Linear Algebra, Fourier Transforms, Random Number Generation
How to use the documentation
Documentation is available in two forms: docstrings provided with the code, and a loose standing reference guide, available from the NumPy homepage.
We recommend exploring the docstrings using IPython, an advanced Python shell with TAB-completion and introspection capabilities. See below for further instructions.
The docstring examples assume that numpy has been imported as np:
>>> import numpy as np
Code snippets are indicated by three greater-than signs:
Variable explorer
Help
Plots
Files
Find
Console 2/A
Python 3.7.3 | packaged by conda-forge | (default, Mar 27 2019, 15:43:19)
Type "copyright", "credits" or "license" for more information.
IPython 7.4.0 -- An enhanced Interactive Python.
In [1]:
Internal console
IPython console
History
Line 16, Col 27
UTF-8
LF
RW
Mem 69%

Spyder



Jupyter Notebook

Edit View Run Kernel Tabs Settings Help

notebooks

me	Last Modified
Data.ipynb	an hour ago
Fasta.ipynb	a day ago
Julia.ipynb	a day ago
Lorenz.ipynb	seconds ago
R.ipynb	a day ago
iris.csv	a day ago
lightning.json	9 days ago
lorenz.py	3 minutes ago

Lorenz.ipynb | Terminal 1 | Console 1 | Data.ipynb | README.md

Code Pythor

In this Notebook we explore the Lorenz system of differential equations:

$$\dot{x} = \sigma(y - x)$$
$$\dot{y} = \rho x - y - xz$$
$$\dot{z} = -\beta z + xy$$

Let's call the function once to view the solutions. For this set of parameters, we see the trajectories swirling around two point called attractors.

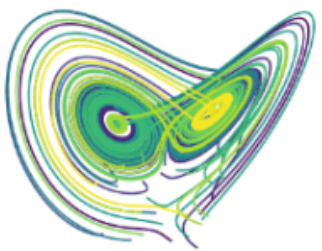
In [4]:
```
from lorenz import solve_lorenz
t, x_t = solve_lorenz(N=10)
```

Output View

sigma 10.00

beta 2.67

rho 28.00



lorenz.py

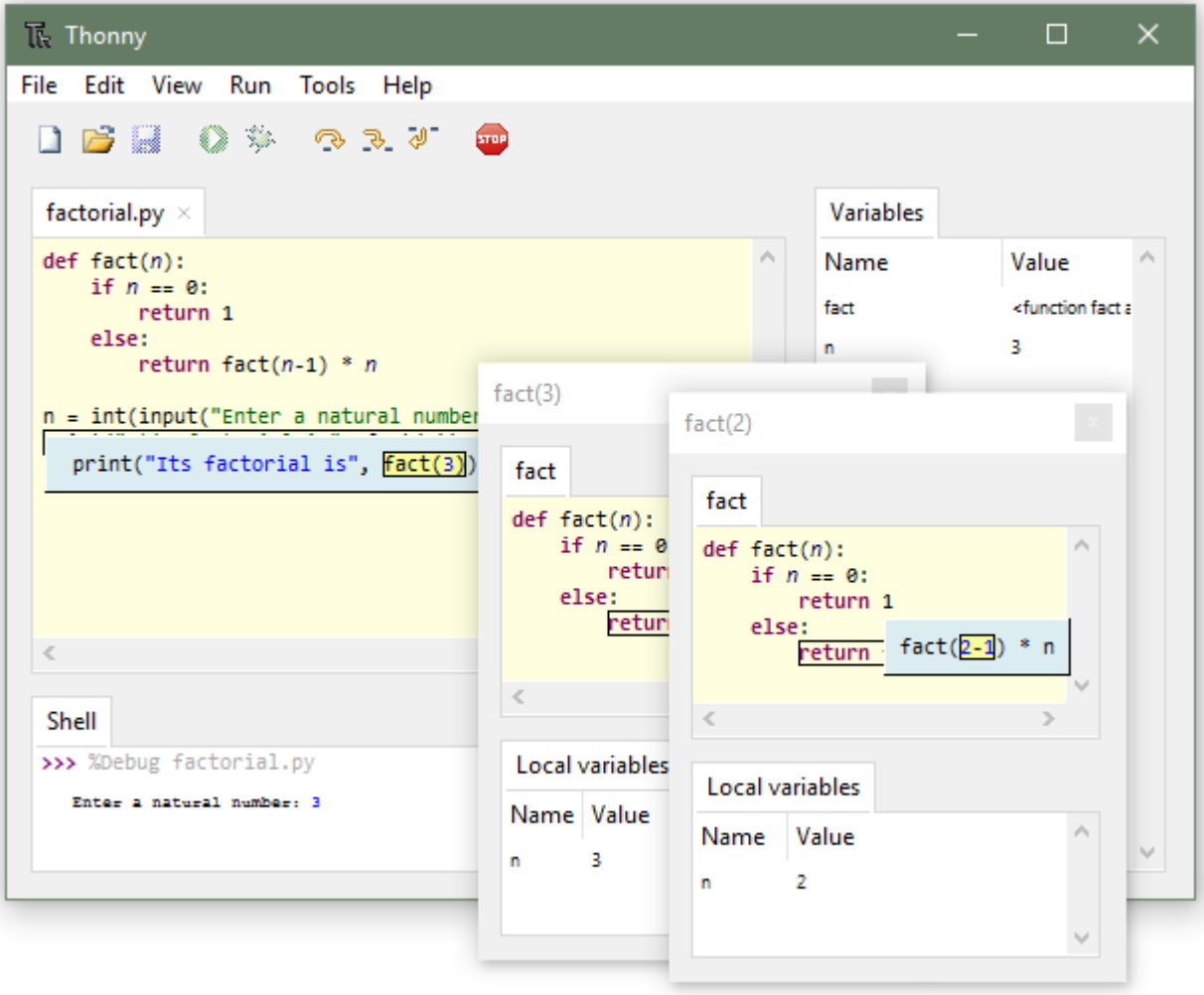
```
def solve_lorenz(N=10, max_time=4.0, sigma=10.0, beta=8./3, rho=28.0):
    """Plot a solution to the Lorenz differential equations."""
    fig = plt.figure()
    ax = fig.add_axes([0, 0, 1, 1], projection='3d')
    ax.axis('off')

    # prepare the axes limits
    ax.set_xlim((-25, 25))
    ax.set_ylim((-35, 35))
    ax.set_zlim((5, 55))

    def lorenz_deriv(x_y_z, t0, sigma=sigma, beta=beta, rho=rho):
        """Compute the time-derivative of a Lorenz system."""
        x, y, z = x_y_z
        return [sigma * (y - x), x * (rho - z) - y, x * y - beta * z]

    # Choose random starting points, uniformly distributed from -15 to
    np.random.seed(1)
    x0 = -15 + 30 * np.random.random((N, 3))
```

JupyterLab


Thonny
File Edit View Run Tools Help
factorial.py
def fact(n):
if n == 0:
return 1
else:
return fact(n-1) * n
n = int(input("Enter a natural number
print("Its factorial is", fact(3))
Variables
Name Value
fact <function fact a
n 3
Shell
>>> %Debug factorial.py
Enter a natural number: 3
fact(3)
fact
Local variables
Name Value
n 3
fact(2)
fact
def fact(n):
if n == 0:
return 1
else:
return fact(2-1) * n
Local variables
Name Value
n 2

Thonny

- Bioestadística
  - JASP: https://jasp-stats.org/
  - Jamovi: https://www.jamovi.org/
  - PSPP: https://www.gnu.org/software/pspp/
  - QGIS: https://www.qgis.org/
- Epidemiología
  - Epidat: https://www.sergas.es/Saude-publica/EPIDAT
  - EpiInfo: https://www.cdc.gov/epiinfo/esp/es_index.html
  - OpenEpi: https://www.openepi.com/Menu/OE_Menu.htm
- LaTeX
  - Lyx: https://www.lyx.org/

mydata100*

File | Common | +

Descriptives | T-Tests | ANOVA | Regression | Frequencies | Factor

pretest

Filter	Value	Label
✓	58	58
✓	62	62
✓	63	63

	id	workshop	gender	q1	q2	q3	q4	pretest	posttest
1	1	R	Female	4	3	4	5	72	80
2	2	SPSS	Male	3	4	3	4	70	75
3	3	SAS	Female	3	2		3	74	78
4	4	SPSS	Female	5	4	5	3	80	82
5	5	Stata	Female	4	4	3	4	75	81
6	6	SPSS	Female	5	4	3	5	72	77
7	7	R	Female	3	1	3	4	72	88
8	8	R	Female	4	4	2	5	83	92
9	9	SPSS	Female	3	2	2	1	73	76
10	10	SPSS	Female	5	5	5	5	79	84
11	11	SPSS	Male	3	4	4	3	82	83
12	12	SPSS	Female	3	3	3	3	77	81
13	13	SAS	Male	2	2	3	3	73	76
14	14	Stata	Female	5	4	3	4	75	74
15	15	SAS	Female	4	2	4	2	73	77
16	16	Stata	Male	5	4	5	5	81	84
17	17	SAS	Male	3	2	3	3	74	82
18	18	SAS	Female	5	4	5	3	83	86
19	19	R	Female	4	3	2	4	72	86
20	20	R	Male	4	5	4	4	72	84
21	21	SAS	Male	3	2	3	4	76	77
22	22	SAS	Male	1	2	2	1	75	81
23	23	R	Male	2	2	2	3	72	84
24	24	R	Male	3	2	2	5	67	79
25	25	R	Female	3	2	3	3	75	89
26	26	Stata	Female	4	3	2	4	71	76
27	27	SPSS	Female	5	4	3	3	80	90
28	28	Stata	Male	3	2	3	2	70	75
29	29	Stata	Female	4	3	3	3	81	82
30	30	R	Female	4	4	2	3	72	86
31	31	SAS	Male	4	5	4	3	76	77
32	32	SAS	Male	3	4	4	3	79	78

id
workshop
gender
q1
q2
q3
q4

Variables
pretest
posttest

Split

OK

☐ Frequency tables (nominal and ordinal variables)

Plots
- ☑ Distribution plots
  - ☑ Display density
- ☐ Correlation plot
- ☐ Boxplots
  - ☐ Label Outliers
  - ☐ Color
    - ☑ Boxplot Element
    - ☐ Violin Element
    - ☐ Jitter Element

Statistics

Results

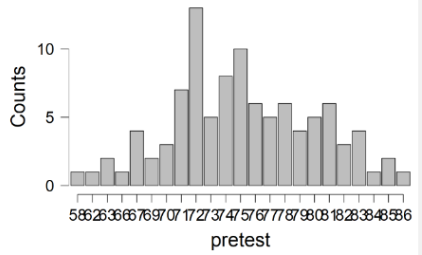
Descriptives

Descriptive Statistics

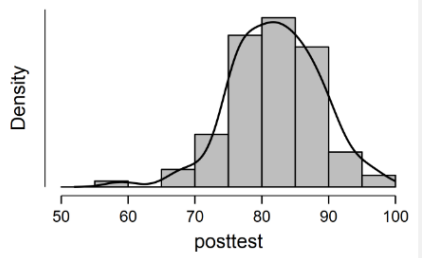
	pretest	posttest
Valid	100	100
Missing	0	0
Mean	74.97	82.06
Std. Deviation	5.296	6.590
Minimum	58.00	59.00
Maximum	86.00	98.00

Distribution Plots

pretest



posttest



JASP

Data | Analyses

Exploration | T-Tests | ANOVA | Regression | Frequencies | Factor | Walrus | Modules

	Sepal.Le...	Sepal.Wi...	Petal.Len...	Petal.Wid..	Species
1	5.1	3.5	1.4	0.2	setosa
2	4.9	3.0	1.4	0.2	setosa
3	4.7	3.2	1.3	0.2	setosa
4	4.6	3.1	1.5	0.2	setosa
5	5.0	3.6	1.4	0.2	setosa
6	5.4	3.9	1.7	0.4	setosa
7	4.6	3.4	1.4	0.3	setosa
8	5.0	3.4	1.5	0.2	setosa
9	4.4	2.9	1.4	0.2	setosa
10	4.9	3.1	1.5	0.1	setosa
11	5.4	3.7	1.5	0.2	setosa
12	4.8	3.4	1.6	0.2	setosa
13	4.8	3.0	1.4	0.1	setosa
14	4.3	3.0	1.1	0.1	setosa
15	5.8	4.0	1.2	0.2	setosa
16	5.7	4.4	1.5	0.4	setosa
17	5.4	3.9	1.3	0.4	setosa
18	5.1	3.5	1.4	0.3	setosa
19	5.7	3.8	1.7	0.3	setosa
20	5.1	3.8	1.5	0.3	setosa
21	5.4	3.4	1.7	0.2	setosa
22	5.1	3.7	1.5	0.4	setosa
23	4.6	3.6	1.0	0.2	setosa
24	5.1	3.3	1.7	0.5	setosa
25	4.8	3.4	1.9	0.2	setosa
26	5.0	3.0	1.6	0.2	setosa
27	5.0	3.4	1.6	0.4	setosa
28	5.2	3.5	1.5	0.2	setosa
29	5.2	3.4	1.4	0.2	setosa

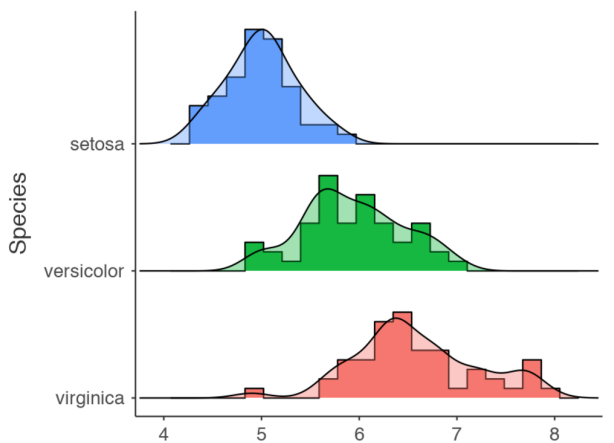
Descriptives

Descriptives

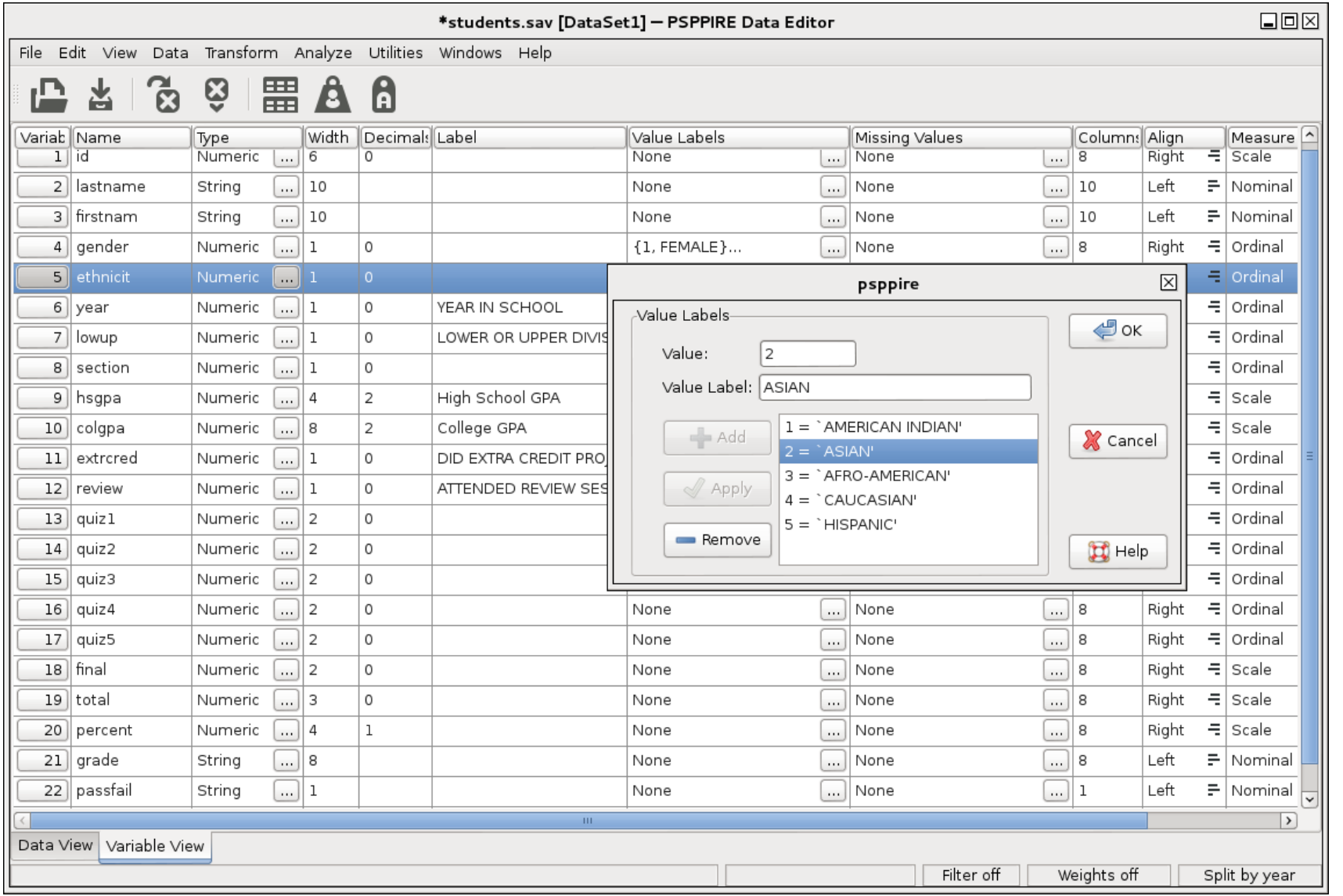
	Species	Sepal.Length	Sepal.Width
Median	setosa	5.00	3.40
	versicolor	5.90	2.80
	virginica	6.50	3.00

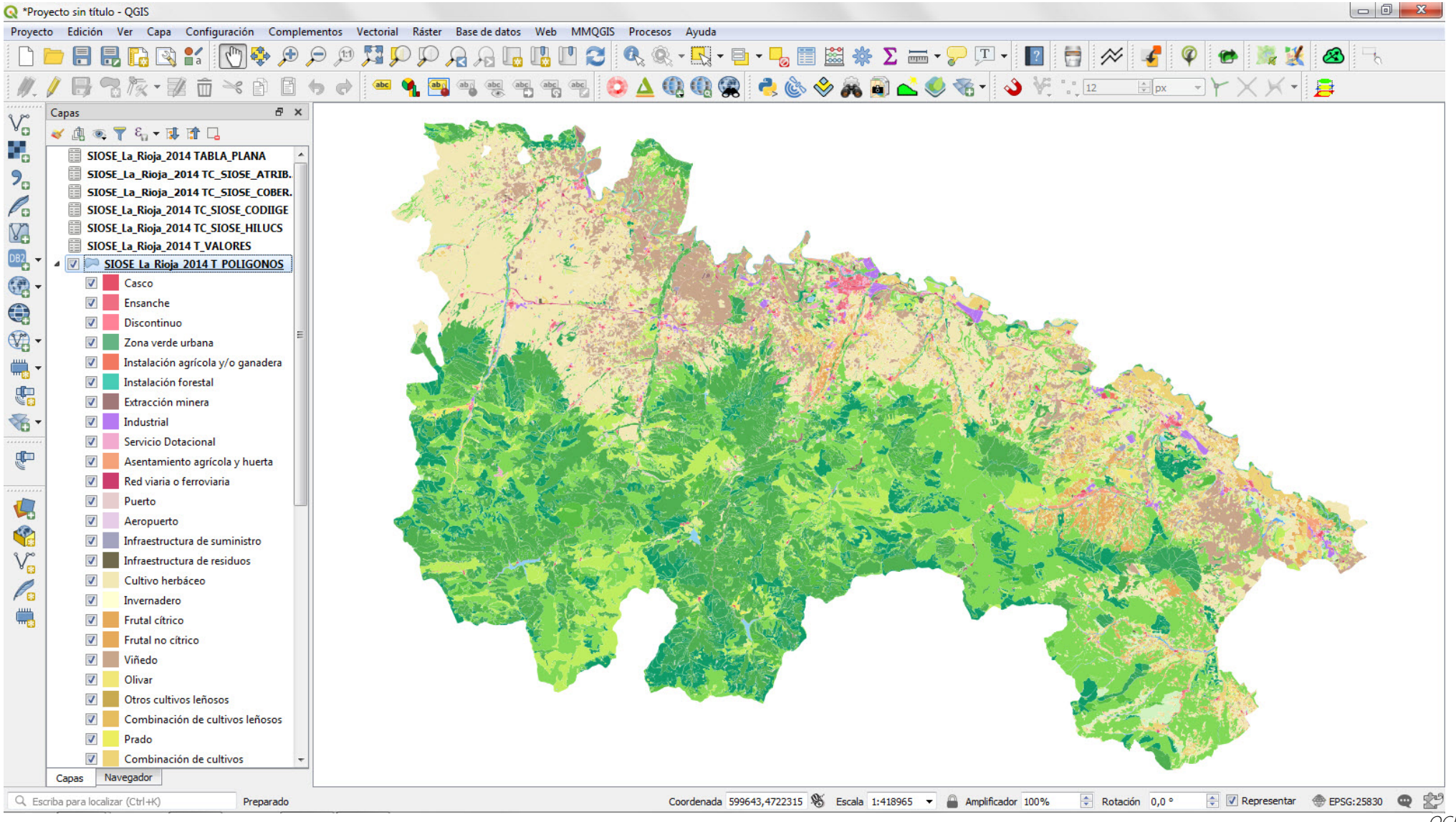
Plots

Sepal.Length



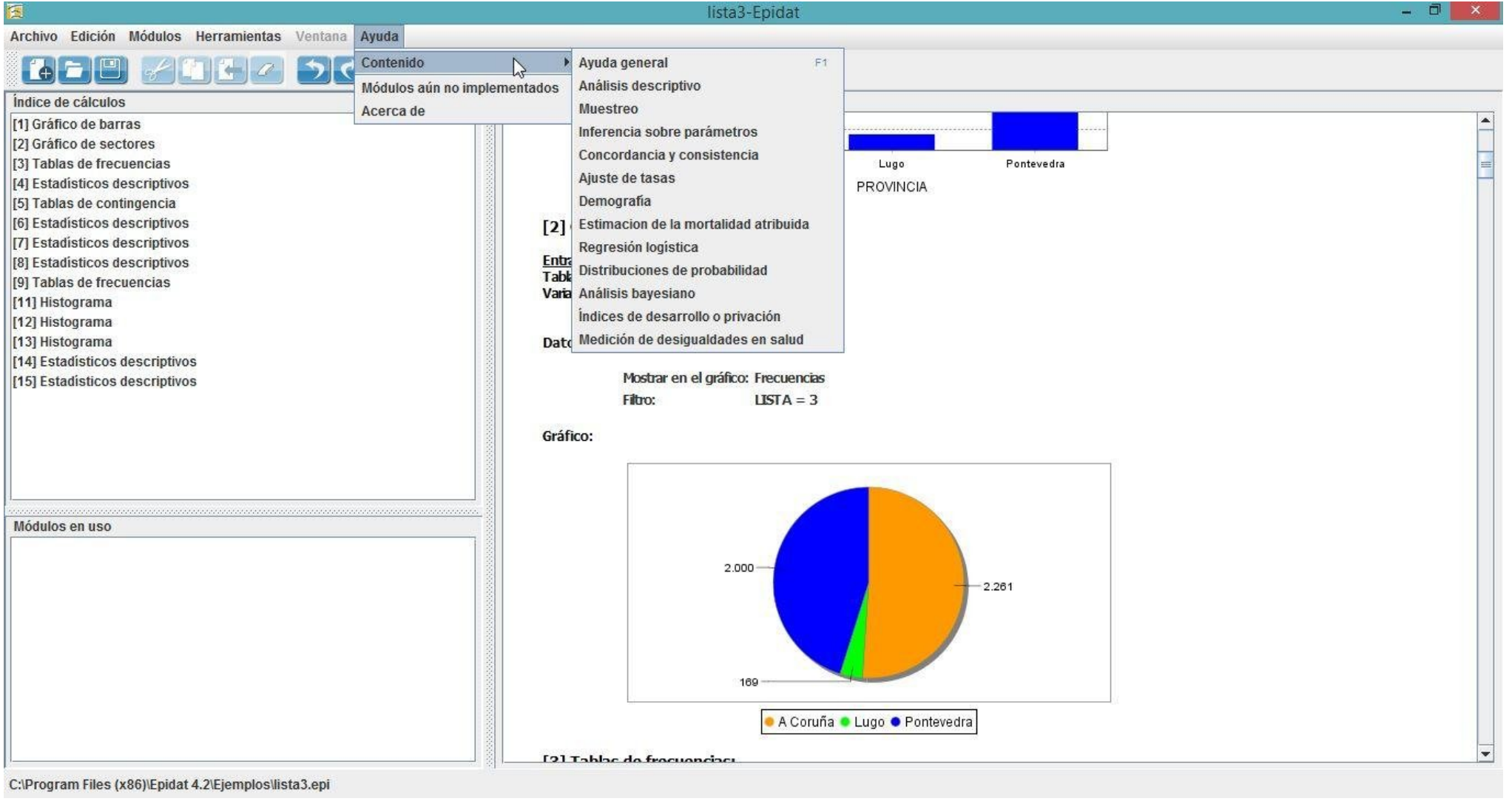
Jamovi


*students.sav [DataSet1] — PSPPIRE Data Editor
File Edit View Data Transform Analyze Utilities Windows Help
Variab Name Type Width Decimals Label Value Labels Missing Values Columns Align Measure
1 id Numeric 6 0 None None 8 Right Scale
2 lastname String 10 None None 10 Left Nominal
3 firstnam String 10 None None 10 Left Nominal
4 gender Numeric 1 0 {1, FEMALE}... None 8 Right Ordinal
5 ethnicit Numeric 1 0 Ordinal
6 year Numeric 1 0 YEAR IN SCHOOL Ordinal
7 lowup Numeric 1 0 LOWER OR UPPER DIVIS Ordinal
8 section Numeric 1 0 Ordinal
9 hsgpa Numeric 4 2 High School GPA Scale
10 colgpa Numeric 8 2 College GPA Scale
11 extrcred Numeric 1 0 DID EXTRA CREDIT PRO Ordinal
12 review Numeric 1 0 ATTENDED REVIEW SES Ordinal
13 quiz1 Numeric 2 0 Ordinal
14 quiz2 Numeric 2 0 Ordinal
15 quiz3 Numeric 2 0 Ordinal
16 quiz4 Numeric 2 0 None None 8 Right Ordinal
17 quiz5 Numeric 2 0 None None 8 Right Ordinal
18 final Numeric 2 0 None None 8 Right Scale
19 total Numeric 3 0 None None 8 Right Scale
20 percent Numeric 4 1 None None 8 Right Scale
21 grade String 8 None None 8 Left Nominal
22 passfail String 1 None None 1 Left Nominal
psppire
Value Labels
Value: 2
Value Label: ASIAN
OK
Cancel
Help
Add
Apply
Remove
1 = `AMERICAN INDIAN'
2 = `ASIAN'
3 = `AFRO-AMERICAN'
4 = `CAUCASIAN'
5 = `HISPANIC'
Data View
Variable View
Filter off
Weights off
Split by year


*Proyecto sin título - QGIS
Proyecto Edición Ver Capa Configuración Complementos Vectorial Ráster Base de datos Web MMQGIS Procesos Ayuda
Capas
SIOSE_La_Rioja_2014 TABLA_PLANA
SIOSE_La_Rioja_2014 TC_SIOSE_ATRIB.
SIOSE_La_Rioja_2014 TC_SIOSE_COBER.
SIOSE_La_Rioja_2014 TC_SIOSE_CODIIGE
SIOSE_La_Rioja_2014 TC_SIOSE_HILUCS
SIOSE_La_Rioja_2014 T_VALORES
SIOSE La Rioja 2014 T POLIGONOS
Casco
Ensanche
Discontinuo
Zona verde urbana
Instalación agrícola y/o ganadera
Instalación forestal
Extracción minera
Industrial
Servicio Dotacional
Asentamiento agrícola y huerta
Red viaria o ferroviaria
Puerto
Aeropuerto
Infraestructura de suministro
Infraestructura de residuos
Cultivo herbáceo
Invernadero
Frutal cítrico
Frutal no cítrico
Viñedo
Olivar
Otros cultivos leñosos
Combinación de cultivos leñosos
Prado
Combinación de cultivos
Capas
Navegador
Escriba para localizar (Ctrl+K)
Preparado
Coordenada 599643,4722315
Escala 1:418965
Amplificador 100%
Rotación 0,0 °
Representar
EPSG:25830

QGIS

- Bioestadística
  - JASP: https://jasp-stats.org/
  - Jamovi: https://www.jamovi.org/
  - PSPP: https://www.gnu.org/software/pspp/
  - QGIS: https://www.qgis.org/
- Epidemiología
  - Epidat: https://www.sergas.es/Saude-publica/EPIDAT
  - EpiInfo: https://www.cdc.gov/epiinfo/esp/es_index.html
  - OpenEpi: https://www.openepi.com/Menu/OE_Menu.htm
- LaTeX
  - Lyx: https://www.lyx.org/


lista3-Epidat
Archivo Edición Módulos Herramientas Ventana Ayuda
Contenido
Módulos aún no implementados
Acerca de
Ayuda general F1
Análisis descriptivo
Muestreo
Inferencia sobre parámetros
Concordancia y consistencia
Ajuste de tasas
Demografía
Estimacion de la mortalidad atribuida
Regresión logística
Distribuciones de probabilidad
Análisis bayesiano
Índices de desarrollo o privación
Medición de desigualdades en salud
Índice de cálculos
[1] Gráfico de barras
[2] Gráfico de sectores
[3] Tablas de frecuencias
[4] Estadísticos descriptivos
[5] Tablas de contingencia
[6] Estadísticos descriptivos
[7] Estadísticos descriptivos
[8] Estadísticos descriptivos
[9] Tablas de frecuencias
[11] Histograma
[12] Histograma
[13] Histograma
[14] Estadísticos descriptivos
[15] Estadísticos descriptivos
Módulos en uso
Lugo
Pontevedra
PROVINCIA
Mostrar en el gráfico: Frecuencias
Filtro: LISTA = 3
Gráfico:
2.000
2.261
169
A Coruña
Lugo
Pontevedra
C:\Program Files (x86)\Epidat 4.2\Ejemplos\lista3.epi

Epidat


epiinfo™
CREAR FORMULARIOS
Crear cuestionarios con reglas de validación y patrones de salto.
ENTRAR DATOS
Introducir, revisar y búscar registros.
CREAR MAPAS
Representar datos con mapas de coordenadas, colores, o puntos.
STATCALC
Calculadora estadística para el tamaño de la muestra, el poder, y mucho más.
ANALIZAR DATOS
CLÁSICO
Manipular, transformar y analizar datos utilizando comandos.
TABLERO VISUAL
Ver resultados analíticos con instrumentos, gráficos y tablas.

EpiInfo

OpenEpi Open Source Epidemiologic Statistics for Public Health

Now in English, French, Spanish, Italian, and Portuguese

Version 3.01 Updated 2013/04/06 ***Try it in a Smartphone browser!***

OpenEpi provides statistics for counts and measurements in descriptive and analytic studies, stratified analysis with exact confidence limits, matched pair and person-time analysis, sample size and power calculations, random numbers, sensitivity, specificity and other evaluation statistics, R x C tables, chi-square for dose-response, and links to other useful sites.

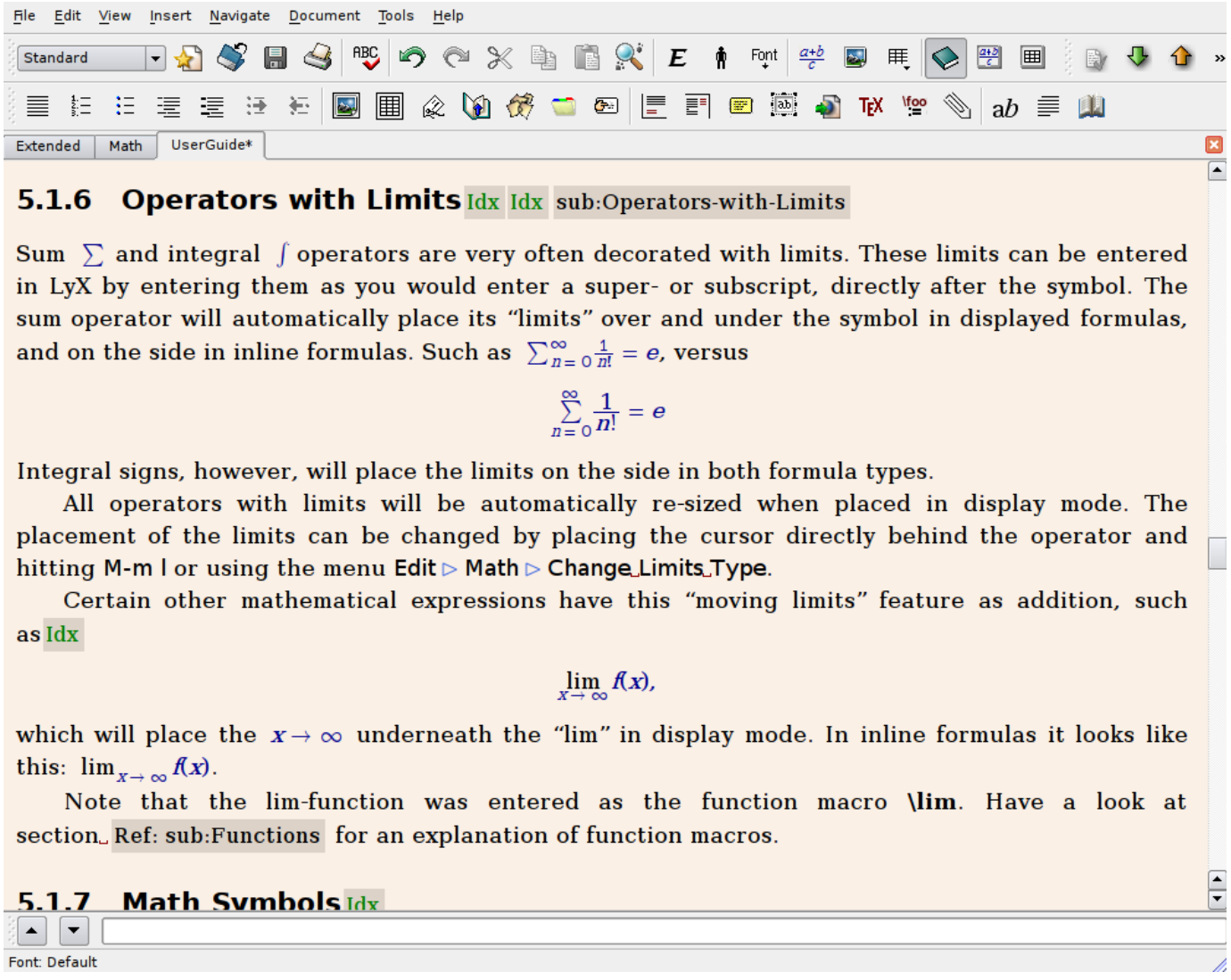
OpenEpi is free and **open source** software for epidemiologic statistics. It can be run from a web server or downloaded and run without a web connection. A server is not required. The programs are written in JavaScript and HTML, and should be compatible with recent Linux, Mac, and PC browsers, regardless of operating system. (If you are seeing this, your browser settings are allowing JavaScript.) The programs can be run in the browsers of many iPhone and Android cellphones

Test results are provided for each module so that you can judge reliability, although it is always a good idea to check important results with software from more than one source. Links to hundreds of Internet calculators are provided.

The programs have an open source license and can be downloaded, distributed, or translated. Some of the components from other sources have licensing statements in the source code files. Licenses referred to are available in full text at OpenSource.org/licenses. OpenEpi development was supported in part by a grant from the Bill and Melinda Gates Foundation to Emory University, Rollins School of Public Health.

A toolkit for creating new modules and for translation is included. Please let us know if you would like to collaborate in this way. Suggestions, comments, and expressions of interest in contributing to this effort should be sent by email to: andy.dean@gmail.com, cdckms@sph.emory.edu, and msoe@cdc.gov

Suggested citation: **Dean AG, Sullivan KM, Soe MM. OpenEpi: Open Source Epidemiologic Statistics for Public Health, Version. www.OpenEpi.com, updated 2013/04/06, accessed 2013/06/12.**


File Edit View Insert Navigate Document Tools Help
Standard
Extended Math UserGuide*
5.1.6 Operators with Limits Idx Idx sub:Operators-with-Limits
Sum ∑ and integral ∫ operators are very often decorated with limits. These limits can be entered in LyX by entering them as you would enter a super- or subscript, directly after the symbol. The sum operator will automatically place its "limits" over and under the symbol in displayed formulas, and on the side in inline formulas. Such as $\sum_{n=0}^{\infty} \frac{1}{n!} = e$, versus
$$\sum_{n=0}^{\infty} \frac{1}{n!} = e$$
Integral signs, however, will place the limits on the side in both formula types.
All operators with limits will be automatically re-sized when placed in display mode. The placement of the limits can be changed by placing the cursor directly behind the operator and hitting M-m l or using the menu Edit ▷ Math ▷ Change_Limits_Type.
Certain other mathematical expressions have this "moving limits" feature as addition, such as Idx
$$\lim_{x \to \infty} f(x),$$
which will place the $x \to \infty$ underneath the "lim" in display mode. In inline formulas it looks like this: $\lim_{x \to \infty} f(x)$.
Note that the lim-function was entered as the function macro \lim. Have a look at section Ref: sub:Functions for an explanation of function macros.
5.1.7 Math Symbols Idx
Font: Default

Lyx

Web de BioStatFLOSS…

sergas.es/Saude-publica/BioStatFLOSS

Galego Castellano

SERVIZO GALEGO DE SAÚDE

FONDO EUROPEO DE DESENVOLVEMENTO REXIONAL "Unha maneira de facer Europa"

UNIÓN EUROPEA

CONSELLERÍA E SERGAS | TEMAS | COLECTIVOS | INTERÉSAME | E-SERVIZOS

Fai a túa busca...

Temas > Saúde pública > BioStatFLOSS

BIOSTATFLOSS

Escoitar

Recompilación de software portable para Windows, de libre distribución, especialmente indicado para a realización de estudos bioestatísticos, epidemiolóxicos e de saúde en xeral

Novidades:
[14/03/2022] Nova versión 6.0 xa dispoñible para a súa descarga.

Que é BioStatFLOSS

BioStatFLOSS consiste nun ámbito unificado e homoxéneo de execución, baixo o sistema operativo Microsoft Windows, dunha recompilación de programas, xa existentes e sobradamente contrastados

DESCARGA

- Oficina de Software Libre do CIXUG (ftp)
- Oficina de Software Libre do CIXUG (http)

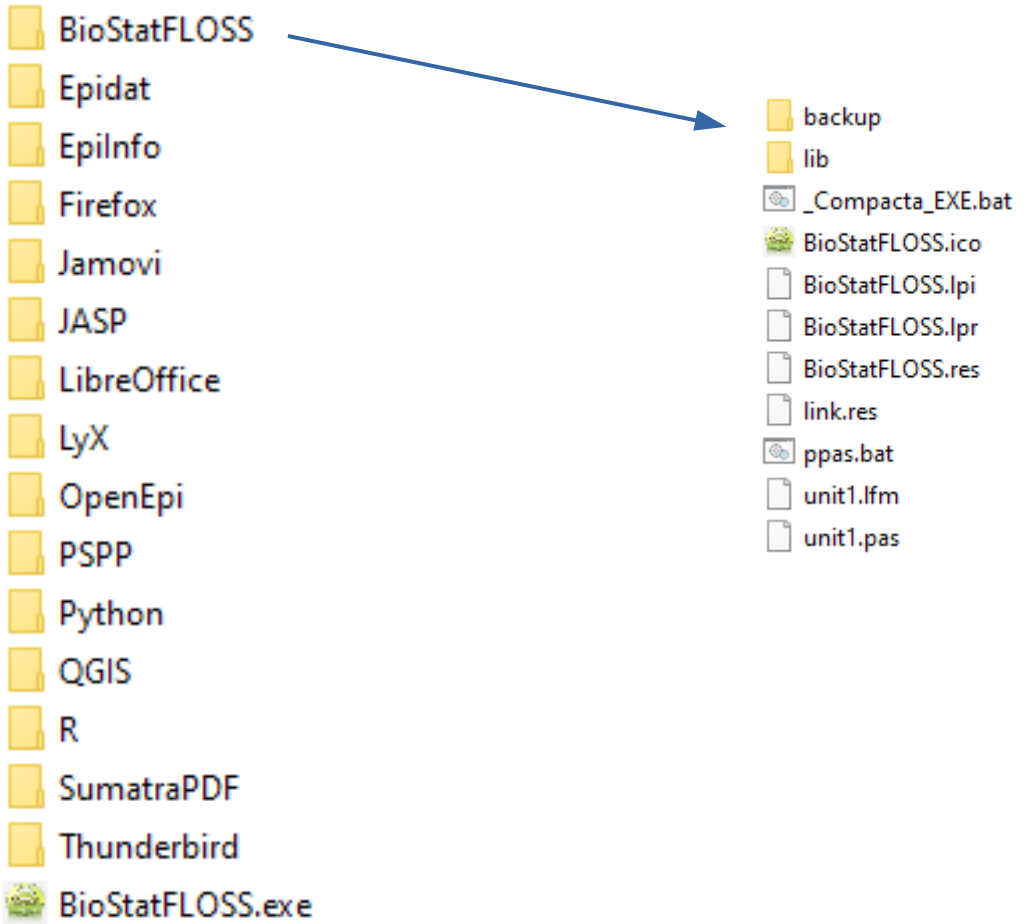
REFERENCIAS

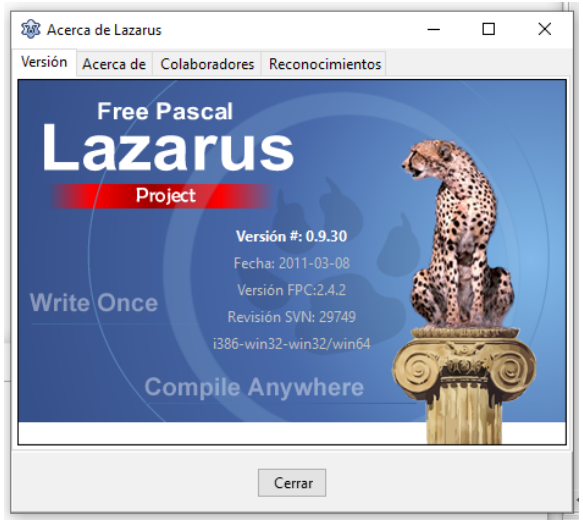
- Mancomun: Novas versións de EpiLinux e BioStatFLOSS
- Entrevista ao equipo responsable do proxecto BioStatFLOSS
- CIXUG - Oficina de Software Libre
- Datanalytics

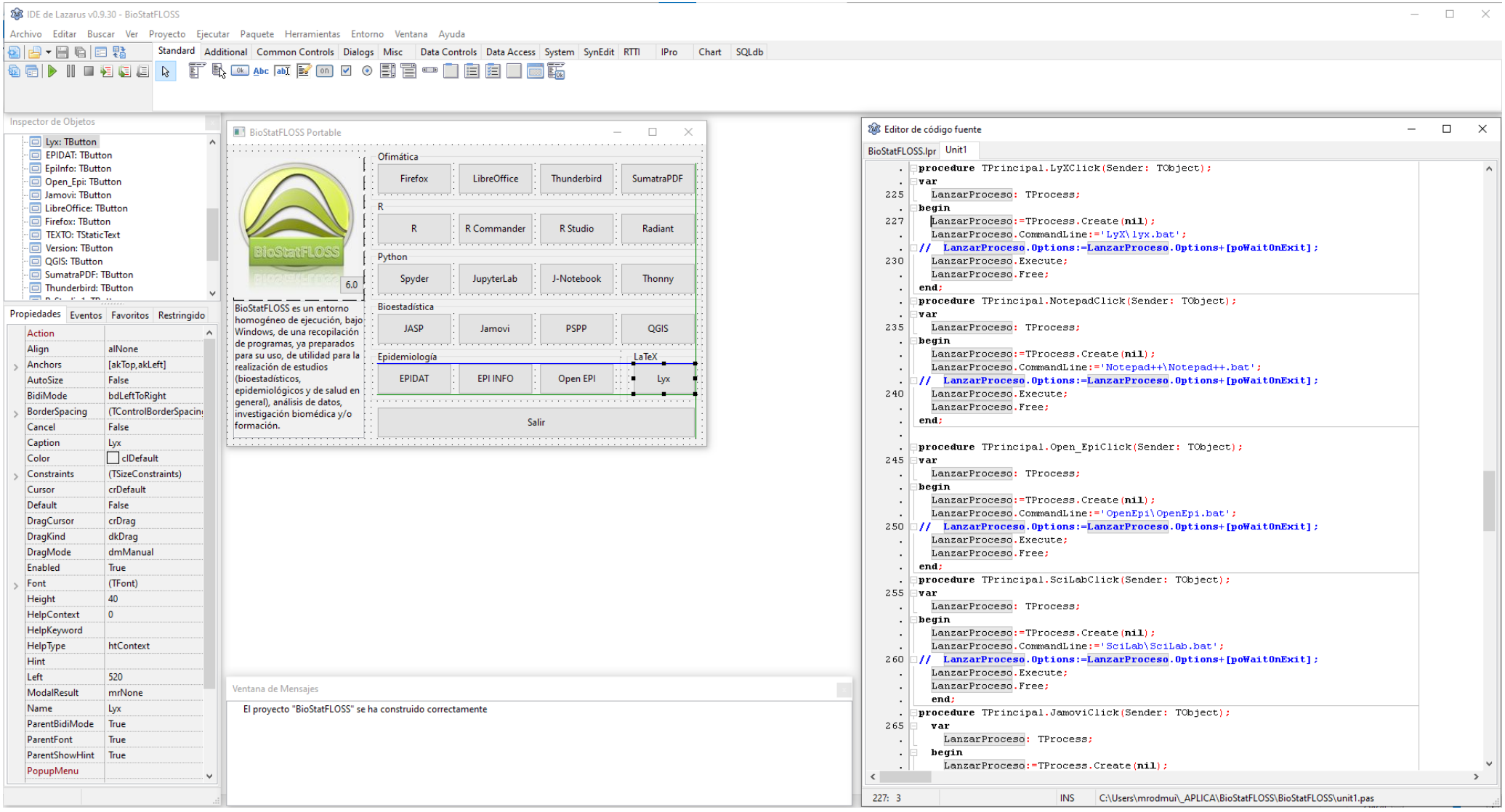
PREGUNTAS FRECUENTES

- F.A.Q.

Web de BioStatFLOSS


BioStatFLOSS
Epidat
EpiInfo
Firefox
Jamovi
JASP
LibreOffice
LyX
OpenEpi
PSPP
Python
QGIS
R
SumatraPDF
Thunderbird
BioStatFLOSS.exe
backup
lib
_Compacta_EXE.bat
BioStatFLOSS.ico
BioStatFLOSS.lpi
BioStatFLOSS.lpr
BioStatFLOSS.res
link.res
ppas.bat
unit1.lfm
unit1.pas


Acerca de Lazarus
Versión
Acerca de
Colaboradores
Reconocimientos
Free Pascal
Lazarus
Project
Versión #: 0.9.30
Fecha: 2011-03-08
Versión FPC:2.4.2
Revisión SVN: 29749
i386-win32-win32/win64
Write Once
Compile Anywhere
Cerrar


IDE de Lazarus v0.9.30 - BioStatFLOSS
Archivo Editar Buscar Ver Proyecto Ejecutar Paquete Herramientas Entorno Ventana Ayuda
Standard Additional Common Controls Dialogs Misc Data Controls Data Access System SynEdit RTTI IPro Chart SQLdb
Inspector de Objetos
Lyx: TButton
EPIDAT: TButton
EpiInfo: TButton
Open_Epi: TButton
Jamovi: TButton
LibreOffice: TButton
Firefox: TButton
TEXTO: TStaticText
Version: TButton
QGIS: TButton
SumatraPDF: TButton
Thunderbird: TButton
Propiedades Eventos Favoritos Restringido
Action
Align alNone
Anchors [akTop,akLeft]
AutoSize False
BidiMode bdLeftToRight
BorderSpacing (TControlBorderSpacin
Cancel False
Caption Lyx
Color clDefault
Constraints (TSizeConstraints)
Cursor crDefault
Default False
DragCursor crDrag
DragKind dkDrag
DragMode dmManual
Enabled True
Font (TFont)
Height 40
HelpContext 0
HelpKeyword
HelpType htContext
Hint
Left 520
ModalResult mrNone
Name Lyx
ParentBidiMode True
ParentFont True
ParentShowHint True
PopupMenu
BioStatFLOSS Portable
BioStatFLOSS
6.0
BioStatFLOSS es un entorno homogéneo de ejecución, bajo Windows, de una recopilación de programas, ya preparados para su uso, de utilidad para la realización de estudios (bioestadísticos, epidemiológicos y de salud en general), análisis de datos, investigación biomédica y/o formación.
Ofimática
Firefox LibreOffice Thunderbird SumatraPDF
R
R R Commander R Studio Radiant
Python
Spyder JupyterLab J-Notebook Thonny
Bioestadística
JASP Jamovi PSPP QGIS
Epidemiología
LaTeX
EPIDAT EPI INFO Open EPI Lyx
Salir
Ventana de Mensajes
El proyecto "BioStatFLOSS" se ha construido correctamente
Editor de código fuente
BioStatFLOSS.lpr Unit1
procedure TPrincipal.LyXClick(Sender: TObject);
var
LanzarProceso: TProcess;
begin
LanzarProceso:=TProcess.Create(nil);
LanzarProceso.CommandLine:='LyX\lyx.bat';
// LanzarProceso.Options:=LanzarProceso.Options+[poWaitOnExit];
LanzarProceso.Execute;
LanzarProceso.Free;
end;
procedure TPrincipal.NotepadClick(Sender: TObject);
var
LanzarProceso: TProcess;
begin
LanzarProceso:=TProcess.Create(nil);
LanzarProceso.CommandLine:='Notepad++\Notepad++.bat';
// LanzarProceso.Options:=LanzarProceso.Options+[poWaitOnExit];
LanzarProceso.Execute;
LanzarProceso.Free;
end;
procedure TPrincipal.Open_EpiClick(Sender: TObject);
var
LanzarProceso: TProcess;
begin
LanzarProceso:=TProcess.Create(nil);
LanzarProceso.CommandLine:='OpenEpi\OpenEpi.bat';
// LanzarProceso.Options:=LanzarProceso.Options+[poWaitOnExit];
LanzarProceso.Execute;
LanzarProceso.Free;
end;
procedure TPrincipal.SciLabClick(Sender: TObject);
var
LanzarProceso: TProcess;
begin
LanzarProceso:=TProcess.Create(nil);
LanzarProceso.CommandLine:='SciLab\SciLab.bat';
// LanzarProceso.Options:=LanzarProceso.Options+[poWaitOnExit];
LanzarProceso.Execute;
LanzarProceso.Free;
end;
procedure TPrincipal.JamoviClick(Sender: TObject);
var
LanzarProceso: TProcess;
begin
LanzarProceso:=TProcess.Create(nil);
227: 3
INS
C:\Users\mrodmui_APLICA\BioStatFLOSS\BioStatFLOSS\unit1.pas

Agradecimientos...

Asociación de usuarios de software libre da Terra de Melide

melisa.gal

Con la colaboración de:

Esta actividad forma parte de las actividades que Melisa realiza en el marco del convenio de colaboración firmado con la Agencia **para la Modernización Tecnológica de Galicia (AMTEGA)**, e incluidas en el Plan de Acción de Software Libre de la Xunta de Galicia.

Gracias por vuestra atención.

soporte.epilinux@sergas.es