Title*

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Abstract

Abstract here

*Thanks
†author 1 details
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1 Introduction

Text here.[1]

Some text styles: normal, **bold**, *italics*, `programming`.

Some references: (in collection) [1], (journal) [2], (book) [3], (other) [4].

Reference to Section 1.

1.1 A subsection

1.1.1 A subsubsection

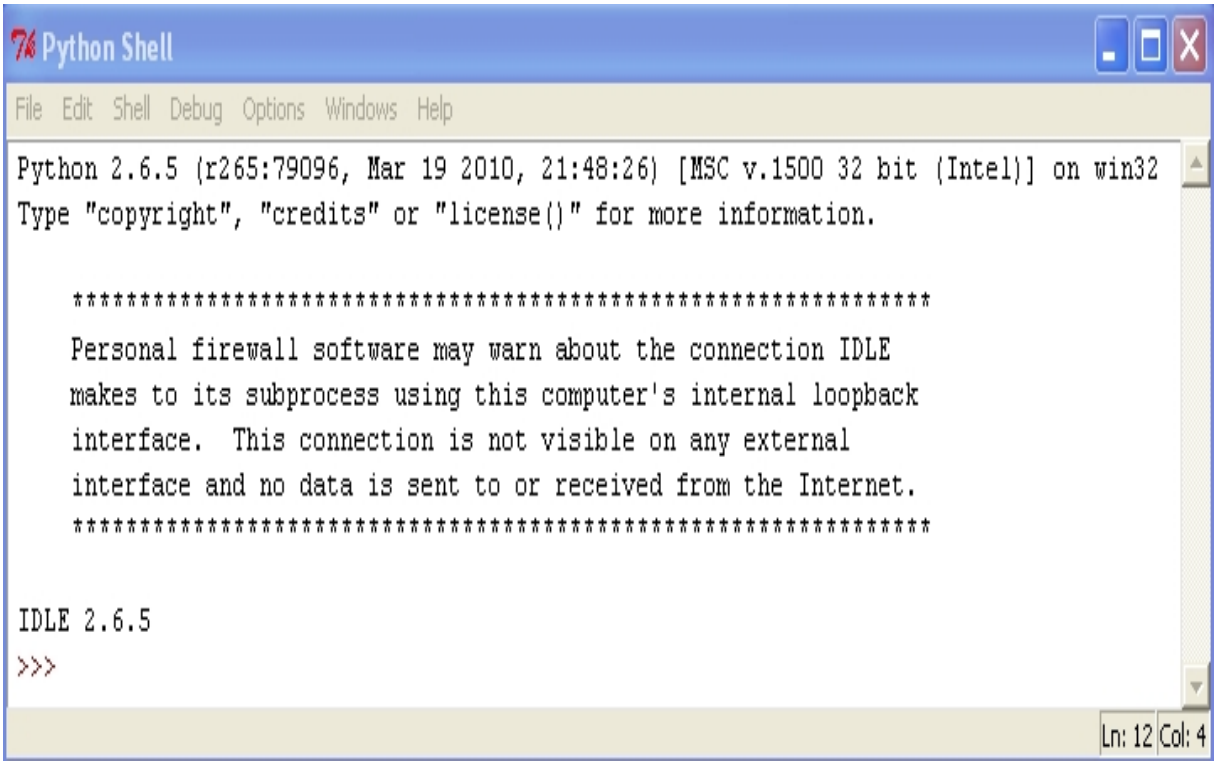

Figure 1: Caption for jpg figure.

[1] Footnote here.

Reference to Figure 1.

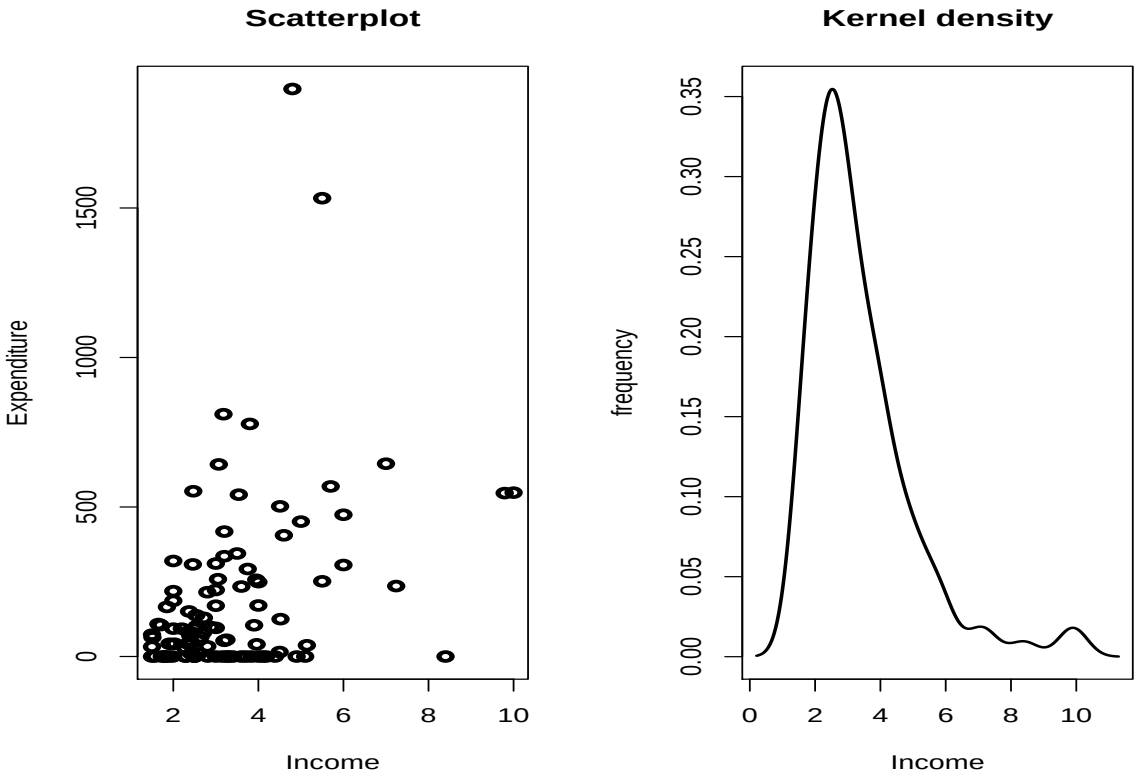

Figure 2: Caption for pdf figure.

Reference to Figure 2.

An in-text equation: $\text{Prob}(y_i = 1) = \Phi(x_i'\beta) + u_i,\ i = 1, 2, \ldots, 100.$

A numbered equation:

$$-\ln \mathcal{L}(\beta) = -\sum_{i=1}^{100} \{y_i \ln \Phi(x_i'\beta) + (1 - y_i) \ln(1 - \Phi(x_i'\beta))\}. \tag{1}$$

A reference to an equation: 1.

Test	Python	GAUSS	Mathematica	Ox	R	Scilab
Fast Fourier Transform over vector	0.2	2.2	0.2	0.2	0.6	0.7
Linear solve of $Xw = y$ for w	0.2	2.4	0.2	0.7	0.8	0.2
Vector numerical sort	0.2	0.9	0.5	0.2	0.4	0.3
Gaussian error function over matrix	0.3	0.9	3.6	0.1	1.0	0.3
Random Fibonacci numbers	0.3	0.4	2.3	0.3	0.6	0.5
Cholesky decomposition	0.4	1.6	0.3	0.6	1.3	0.2
Data import and statistics	0.4	0.2	0.5	0.3	0.8	0.3
Gamma function over matrix	0.5	0.7	3.3	0.2	0.7	0.2
Matrix element-wise exponentiation	0.5	0.7	0.2	0.2	0.8	0.6
Matrix determinant	0.7	7.3	0.5	3.4	2.1	0.4
Matrix dot product	1.4	8.9	1.0	1.7	7.8	1.0
Matrix inverse	2.0	7.3	1.9	6.4	9.0	1.4
Two nested loops*	8.1	4.3	84.7	4.8	58.0	295.9
Principal components analysis	11.1	359.0	141.7	n/a	55.9	88.3
Computation of eigenvalues	32.3	90.2	24.2	21.7	13.6	17.3
Overall performance	**67%**	**30%**	**53%**	**70%**	**29%**	**65%**

Table 1: Caption here.

A non-numbered equation:

$$\frac{\partial(-\ln \mathcal{L}(\beta))}{\partial \beta} = -\sum_{i=1}^{100} \left(\frac{\phi(x_i'\beta)(y_i - \Phi(x_i'\beta))}{\Phi(x_i'\beta)(1 - \Phi(x_i'\beta))} \right) x_i.$$

A bullet list:

- one
- two

A table (note the positioning of the Table):

References

[1] Aigner, D., Hsiao, C., Kapteyn, A., and Wansbeek, T. Latent variable models in econometrics. In *Handbook of Econometrics*, Z. Griliches and M. Intriligator, Eds., vol. 2. North-Holland, 1984.

[2] Anderson, T., Kunitomo, N., and Sawa, T. Evaluation of the distribution function of the Limited-Information Maximum Likelihood estimator. *Econometrica 50* (1982), 1009–1027.

[3] Beazley, D. *Python Essential Reference*, 2nd ed. New Riders, 2001.

[4] Dale, D., Droettboom, M., Firing, E., and Hunter, J. Matplotlib Release 0.99.3. `matplotlib.sf.net/Matplotlib.pdf`, 2010.

A Appendix

A.1 An appendix