The Book of R

A First Course in Programming and Statistics

by Tilman M. Davies

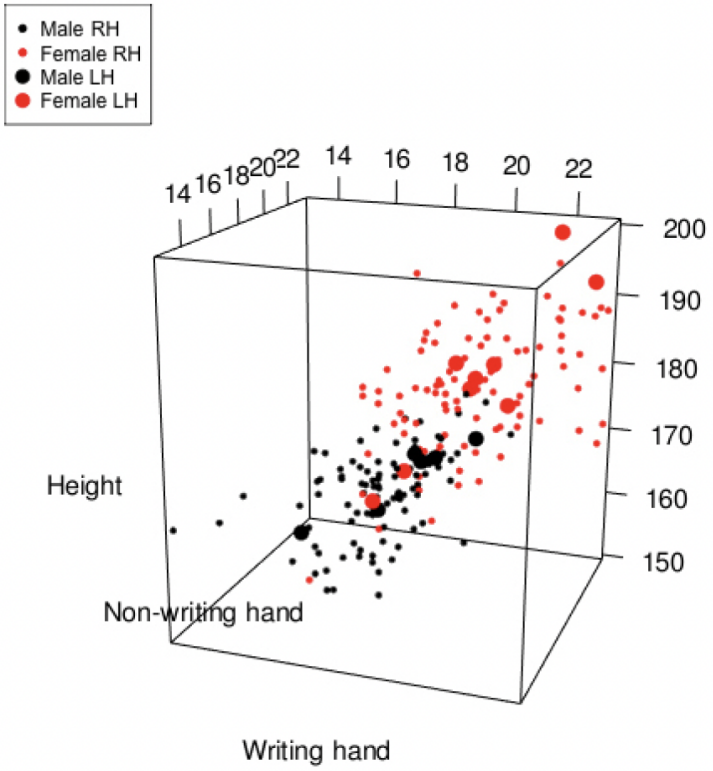
errata updated to print 11

Page	Error	Correction	Print corrected
95	iii. Use `"flags"` and the logical negation operator `!` to extract the entries of `"num"` corresponding to `FALSE`.	iii. Use `"flags"` and the logical negation operator `!` to extract the entries of `"nums"` corresponding to `FALSE`.	Print 8
101–102	Resource file update	*The answer for Exercise 5.2 (a) has been updated in the resource file. In the call to* `data.frame`*, the correct use should have* `stringsAsFactors=F`*.*	Print 2
135	This line of code adds two separate horizontal lines, one at y = **5** and the other at y = 5, using `h=c(-5,5)`.	This line of code adds two separate horizontal lines, one at y = **−5** and the other at y = 5, using `h=c(-5,5)`.	Print 5
154	URL update	*http://jse.amstat.org/jse_data_archive.htm*	Print 10
154	URL update	*http://jse.amstat.org/v9n2/4Cdata.txt*	Print 10
155, 206, 568, 606	`R> dia.url <- "http://www.amstat.org/publications/jse/v9n2/4cdata.txt"`	`R> dia.url <- "http://www.amstat.org/publications/jse/v9n2/4Cdata.txt"`	Prints 2 & 6
213	That is, produce the same vector as `loop2.result` in the text.	That is, produce the same vector as `loop1.result` in the text.	Print 5
213	ii. Obtain the same result as `loop3.result`, the example concerning next, using an `ifelse` function instead of a loop.	ii. Obtain the same result as `loop2.result`, the example concerning next, using an `ifelse` function instead of a loop.	Print 5
214	`matlist1 <- list(matrix(1:4,2,2),matrix(2:5,2,2)` `  matrix(1:16,4,2))`	`matlist1 <- list(matrix(1:4,2,2),matrix(2:5,2,2)` `  matrix(1:16,8,2))`	Print 2
238	**120** factorial is 479,001,600.	**12** factorial is 479,001,600.	Print 2
280	$r_{xy} = \frac{1}{n-1}\sum_{i-1}^{n}(x_i - \bar{x})(y_i - \bar{y})$ (13.6)	$r_{xy} = \frac{1}{n-1}\sum_{i=1}^{n}(x_i - \bar{x})(y_i - \bar{y})$ (13.6)	Print 4

Page	Error	Correction	Print corrected

307	Resource file update	*The answer for Exercise 14.1 (i) has been updated in the resource file. It should read:*
		`magquan <- quantile(quakes$mag,c(1/3,2/3))`
		`magfac <- cut(quakes$mag,breaks=c(min(quakes$mag),magquan[1],`
		`magquan[2],max(quakes$mag)), include.lowest=TRUE)`
			Print 9

317	$\sigma_X^2 = \text{Var}[X] = (x_1 - \mu_X)^2 \times \Pr(X = x_1) + \ldots + (x_k - \mu_X)^2 \times \Pr(X = x_k) = \sum_{i=1}^{k} (x_i - \mu_X) \Pr(X = x_i)$ (15.4)	$\sigma_X^2 = \text{Var}[X] = (x_1 - \mu_X)^2 \times \Pr(X = x_1) + \ldots + (x_k - \mu_X)^2 \times \Pr(X = x_k) = \sum_{i=1}^{k} (x_i - \mu_X)^2 \Pr(X = x_i)$ (15.4)	Print 9
325	$\mu_W = \text{Var}[W] = \int_{-\infty}^{\infty} (w - \mu_W)^2 f(w)\, dw$ (15.8)	$\sigma_W^2 = \text{Var}[W] = \int_{-\infty}^{\infty} (w - \mu_W)^2 f(w)\, dw$ (15.8)	Print 5
363	However, most `p-` and `q-`functions in R include an optional logical argument, `lower.tail`, which defaults to **`FALSE`**. Therefore, an alternative is to set `lower.tail=TRUE` in any relevant function call, in which case R will expect or return upper-tail areas specifically.	However, most `p-` and `q-`functions in R include an optional logical argument, `lower.tail`, which defaults to **`TRUE`**. Therefore, an alternative is to set `lower.tail=TRUE` in any relevant function call, in which case R will expect or return upper-tail areas specifically.	Print 2
489	`R> BETA.HAT <- solve(t(X)`	`R> BETA.HAT <- solve(t(X)%*%X)%*%t(X)%*%Y`	Print 2
530	$H_0 : \beta_{p+1} = \beta_{p+2} = \ldots = \beta_q = 0$ $H_A : \text{At least one of the } \beta_j \neq 0 \text{ (for } j = p, \ldots, q)$ (22.1)	$H_0 : \beta_{p+1} = \beta_{p+2} = \ldots = \beta_q = 0$ $H_A : \text{At least one of the } \beta_j\ 6 \neq 0 \text{ (for } j = p+1, \ldots, q)$ (22.1)	Print 6
590	After you open the device and **setting** the layout, the plot margins	After you open the device and **set** the layout, the plot margins	Print 6
619	n.b.	*For later versions of `ggplot2`, the commands do not center the title, but have it flush left. In order to center the title, add `theme(plot.title = element_text(hjust = 0.5) )` to the code.*	Print 5
637	`R> axis(2,at=4:1,labels=c("peryel.colors"...`	`R> axis(2,at=4:1,labels=c("puryel.colors"...`	Print 6
671	`install.package("spatstat")`	`install.packages("spatstat")`	Print 6

Page	Error	Correction	Print corrected
698	Figure replacement		Print 6
718	`2.002741e-05`	`2.567628e-05`	Print 6
719	`3.649565e-05`	`4.890472e-05`	Print 6
719	`1.771214e-05 2.964305e-05 4.249407e-05 9.543976e-05`	`2.260448e-5 3.692132e-05 6.086846e-05 1.258873e-04`	Print 6
761	URL update	*http://jse.amstat.org/v9n2/datasets.chu.html*	Print 10