

The Book of R

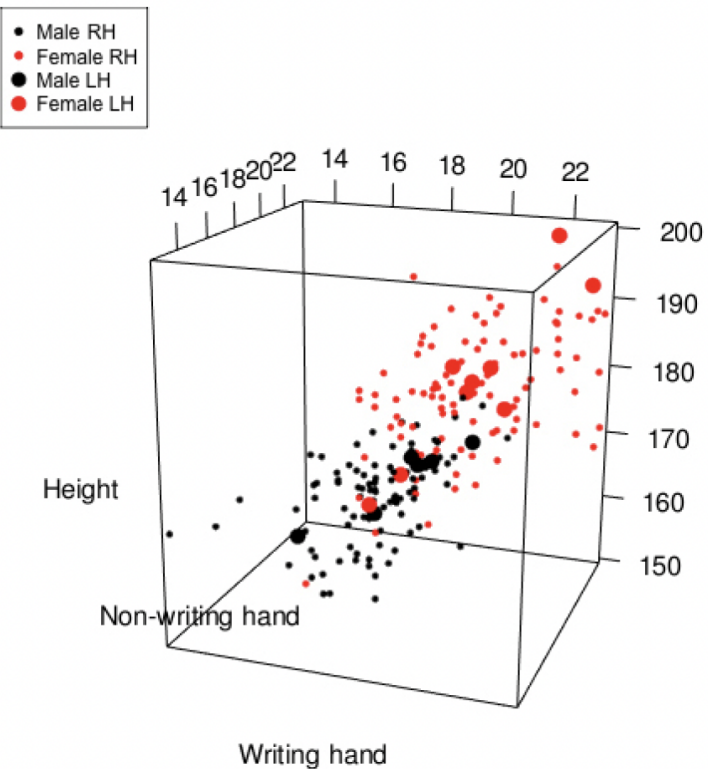
A First Course in Programming and Statistics

by Tilman M. Davies

errata updated to print 10

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	<i>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.</i>	Print 2
135	This line of code adds two separate horizontal lines, one at $y = 5$ and the other at $y = 5$, using <code>h=c(-5,5)</code> .	This line of code adds two separate horizontal lines, one at $y = -5$ and the other at $y = 5$, using <code>h=c(-5,5)</code> .	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	<pre>R> dia.url <- "http://www.amstat.org/publications/jse/v9n2/4cdata.txt"</pre>	<pre>R> dia.url <- "http://www.amstat.org/publications/jse/v9n2/4Cdata.txt"</pre>	Prints 2 & 6
213	That is, produce the same vector as <code>loop2.result</code> in the text.	That is, produce the same vector as <code>loop1.result</code> in the text.	Print 5
213	ii. Obtain the same result as <code>loop3.result</code> , the example concerning next, using an <code>ifelse</code> function instead of a loop.	ii. Obtain the same result as <code>loop2.result</code> , the example concerning next, using an <code>ifelse</code> function instead of a loop.	Print 5
214	<pre>matlist1 <- list(matrix(1:4,2,2),matrix(2:5,2,2) matrix(1:16,4,2))</pre>	<pre>matlist1 <- list(matrix(1:4,2,2),matrix(2:5,2,2) matrix(1:16,8,2))</pre>	Print 2
238	120 factorial is 479,001,600.	20 factorial is 479,001,600.	Print 2
280	$r_{xy} = \frac{1}{n-1} \sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y}) \quad (13.6)$	$r_{xy} = \frac{1}{n-1} \sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y}) \quad (13.6)$	Print 4

Page	Error	Correction	Print corrected
307	Resource file update	<p><i>The answer for Exercise 14.1 (i) has been updated in the resource file. It should read:</i></p> <pre>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)</pre>	Print 9
317	$\sigma_X^2 = \text{Var}[X] = (x_1 - \mu_X)^2 \times \Pr(X = x_1) + \dots + (x_k - \mu_X)^2 \times \Pr(X = x_k)$ $= \sum_{i=1}^k (x_i - \mu_X)^2 \Pr(X = x_i) \quad (15.4)$	$\sigma_X^2 = \text{Var}[X] = (x_1 - \mu_X)^2 \times \Pr(X = x_1) + \dots + (x_k - \mu_X)^2 \times \Pr(X = x_k)$ $= \sum_{i=1}^k (x_i - \mu_X)^2 \Pr(X = x_i) \quad (15.4)$	Print 9
325	$\mu_W = \text{Var}[W] = \int_{-\infty}^{\infty} (w - \mu_W)^2 f(w) dw \quad (15.8)$	$\sigma_W^2 = \text{Var}[W] = \int_{-\infty}^{\infty} (w - \mu_W)^2 f(w) dw \quad (15.8)$	Print 5
363	However, most p- and q-functions in R include an optional logical argument, <code>lower.tail</code> , which defaults to FALSE . Therefore, an alternative is to set <code>lower.tail=TRUE</code> 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, <code>lower.tail</code> , which defaults to TRUE . Therefore, an alternative is to set <code>lower.tail=TRUE</code> in any relevant function call, in which case R will expect or return upper-tail areas specifically.	Print 2
489	<pre>R> BETA.HAT <- solve(t(X))</pre>	<pre>R> BETA.HAT <- solve(t(X)%*X)%*t(X)%*Y</pre>	Print 2
530	$H_0 : \beta_{p+1} = \beta_{p+2} = \dots = \beta_q = 0$ $H_A : \text{At least one of the } \beta_j \neq 0 \text{ (for } j = p, \dots, q) \quad (22.1)$	$H_0 : \beta_{p+1} = \beta_{p+2} = \dots = \beta_q = 0$ $H_A : \text{At least one of the } \beta_j \neq 0 \text{ (for } j = p + 1, \dots, q) \quad (22.1)$	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.	<i>For later versions of ggplot2, the commands do not center the title, but have it flush left. In order to center the title, add <code>theme(plot.title = element_text(hjust = 0.5))</code> to the code.</i>	Print 5
637	<pre>R> axis(2,at=4:1,labels=c("peryel.colors"...</pre>	<pre>R> axis(2,at=4:1,labels=c("puryel.colors"...</pre>	Print 6
671	<pre>install.package("spatstat")</pre>	<pre>install.packages("spatstat")</pre>	Print 6

Page	Error	Correction	Print corrected
698	Figure replacement		Print 6
718	<div style="background-color: black; color: green; padding: 2px;">2.002741e-05</div>	<div style="background-color: black; color: green; padding: 2px;">2.567628e-05</div>	Print 6
719	<div style="background-color: black; color: green; padding: 2px;">3.649565e-05</div>	<div style="background-color: black; color: green; padding: 2px;">4.890472e-05</div>	Print 6
719	<div style="background-color: black; color: red; padding: 2px;">1.771214e-05 2.964305e-05 4.249407e-05 9.543976e-05</div>	<div style="background-color: black; color: red; padding: 2px;">2.260448e-5 3.692132e-05 6.086846e-05 1.258873e-04</div>	Print 6
761	URL update	<a href="http://jse.amstat.org/v9n2/datasets.chu.html">http://jse.amstat.org/v9n2/datasets.chu.html	Print 10