如何将 R 语言中的表格数据输出为 Excel 文件

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平台的开放性使得 R 语言具有了丰富的运算功能,使得一些表格数据不能在 Excel 中实现的运算(或是较为繁琐的运算)可以在导入 R 语言之后得到快速而容易的实现。然后,R 语言平台本身对于表格的交互性查看和编辑都不是很方便。因此,倘若把两者结合起来就完美至极了,其它的博文我们大致提了一下如何从表格中导入数据,例如 "怎样用 R 语言处理表格导入数据中的缺省值" http://bbs.sciencenet.cn/home.php?mod=space&uid=508298&do=blog&id=548225 所以,本文只是简单的介绍怎样将在 R 语言平台上生成的或是编辑过得表格数据保存为 Excel 文件。

实例一,将R平台上生成的数据保存为 Excel 文件

关例 ,将 K   自工主风的数据保护》 Like 文目						
>	nx <- c(rnorm(10))	随机生成一个包含 10 个正态分布				
		数据的向量(一维表格)				
>	nx	查看向量				
	[1] 0.436219296 -0.003864687 1.666923704	查看结果				
	-0.755768282 1.070840200					
	[6] 0.943247037 0.861156081 -1.083567875					
	-1.137469924 0.303574238					
>	write.csv(nx, file="D:/bear.csv")	将向量保存到表格 bear.csv 中				
	田田	结果				

实例二,将编辑、运算过后的数据导出为 Excel 表格文件

实例一是一个简单的输出操作,旨在让读者掌握输出操作的精髓所在。下面我通过一个稍稍复杂的例子来演示在 R 语言平台和 Excel 表格之间自由交流数据的魅力所在。

>	data<-read.csv("D:\\ziliao\\zhuanye\\R bear\\bearf.csv")	读入表格,存在 data 向量中
>	data	查看向量

F1.Hz.	F2.Hz.	F3.Hz.	F4.Hz.	F5.Hz.	二维向量的查看结果,6列、42
F6.Hz.					行
1 3431.654	4596.179	9642.441	12348.066	3838.552	
7498.416					
2 3461.062	4524.386	10666.409	11647.196	4754.872	
7498.416					
3 3411.314	4415.518	10666.409	11166.294	4773.052	
7498.416					
4 3605.767	3838.552	10666.409	10008.806	4676.657	
7498.416					
5 3445.936	4754.872	10666.409	9935.201	4813.661	
7498.416					
6 3500.930	4773.052	10666.409	10051.817	4686.464	
7498.416					
7 3518.311	4676.657	10666.409	10441.247	4792.689	
9506.292					
8 3536.907	4813.661	7736.680	11894.051	4739.644	
8709.927					
9 3545.723	4686.464	8599.928	12063.672	4861.783	
7913.562					
10 3553.186	4792.689	10824.886	11938.194	4813.760	
7117.197					
11 3552.418	4739.644	10015.512	11809.212	4819.385	
8208.955					
12 3553.105	4861.783	11534.382	12513.075	4688.018	
8278.993					
13 3554.377	4813.760	9760.246	11382.993	4666.107	
8349.031					
14 3539.068	4819.385	7407.902	11420.825	4788.276	
8419.069					
15 3514.625	4688.018	7117.997	11035.042	4794.959	
8489.106					
16 3534.030	4666.107	8525.595	11722.272	4794.926	
8559.144					
17 3521.814	4788.276	8525.595	10939.196	4819.187	
8629.182					
18 3588.896	4794.959	8525.595	10921.920	4789.445	
8699.220					
19 3615.696	4794.926	8525.595	11512.921	4786.146	
8769.257					
20 3595.440	4819.187	7539.253	11756.123	4787.794	
8839.295					
21 3595.121	4789.445	6696.898	12120.326	4810.097	
8909.333					

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23 3603.943 4787.794 7415.122 12355.483 4882.977 9049.409 24 3614.603 4810.097 6935.103 11976.211 4896.201 9119.446 25 3605.269 4784.533 7498.416 11756.809 4909.424 9189.484 26 3594.244 4801.659 7498.416 11148.864 4922.647 9259.522 27 3557.889 4777.278 7498.416 11530.219 4935.870 9329.560 28 3533.653 4769.104 7498.416 11038.150 4949.094 9399.597 29 3524.953 4801.545 7498.416 10680.637 4962.317 9469.635 30 3583.689 4746.466 7498.416 10477.168 4975.540 9539.673			
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23 3603.943 4787.794 7415.122 12355.483 4882.977 9049.409 24 3614.603 4810.097 6935.103 11976.211 4896.201 9119.446 25 3605.269 4784.533 7498.416 11756.809 4909.424 9189.484 26 3594.244 4801.659 7498.416 11148.864 4922.647 9259.522 27 3557.889 4777.278 7498.416 11530.219 4935.870 9329.560 28 3533.653 4769.104 7498.416 11038.150 4949.094 9399.597 29 3524.953 4801.545 7498.416 10680.637 4962.317 9469.635	9539.673		
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23 3603.943 4787.794 7415.122 12355.483 4882.977 9049.409 24 3614.603 4810.097 6935.103 11976.211 4896.201 9119.446		98.410 11730.809 4909.42	*
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23 3603.943 4787.794 7415.122 12355.483 4882.977 9049.409		33.103 11370.211 4030.20	
23 3603.943 4787.794 7415.122 12355.483 4882.977		25 102 11076 211 <i>1</i> 806 20	1
		15.122 12355.483 4882.97	7
22 3596.052 4786.146 6662.958 12316.042 4784.533	22 3596.052 4786.146 66	62.958 12316.042 4784.53	3

		除以 100 之后加上 50
	data	查看运算后 data 向量
>	data	
>	F1.Hz. F2.Hz. F3.Hz. F4.Hz. F5.Hz.	
	F6.Hz.	的繁琐的"公式输入"、"拖曳"、
	1 84.31654 95.96179 146.4244 173.4807 88.38552	新建表格等操作容易多了
	124.9842	
	2 84.61062 95.24386 156.6641 166.4720 97.54872	
	124.9842	
	3 84.11314 94.15518 156.6641 161.6629 97.73052	
	124.9842	
	4 86.05767 88.38552 156.6641 150.0881 96.76657	'
	124.9842	
	5 84.45936 97.54872 156.6641 149.3520 98.13661	-
	124.9842	
	6 85.00930 97.73052 156.6641 150.5182 96.86464	
	124.9842	
	7 85.18311 96.76657 156.6641 154.4125 97.92689	
	145.0629	
	8 85.36907 98.13661 127.3668 168.9405 97.39644	
	137.0993	
	9 85.45723 96.86464 135.9993 170.6367 98.61783	
	129.1356	
	10 85.53186 97.92689 158.2489 169.3819 98.13760	
	121.1720	
	11 85.52418 97.39644 150.1551 168.0921 98.19385	
	132.0896	
	12 85.53105 98.61783 165.3438 175.1308 96.88018	
	132.7899	
	13 85.54377 98.13760 147.6025 163.8299 96.66107	·
	133.4903	
	14 85.39068 98.19385 124.0790 164.2083 97.88276	;
	134.1907	
	15 85.14625 96.88018 121.1800 160.3504 97.94959	
	134.8911	
	16 85.34030 96.66107 135.2559 167.2227 97.94926	;
	135.5914	
	17 85.21814 97.88276 135.2559 159.3920 98.19187	,
	136.2918	
	18 85.88896 97.94959 135.2559 159.2192 97.89445	
	136.9922	
	19 86.15696 97.94926 135.2559 165.1292 97.86146	
	137.6926	
	20 85.95440 98.19187 125.3925 167.5612 97.87794	
	138.3930	
		1

21 85.95121	97.89445	116.9690	171.2033	98.10097
139.0933				
22 85.96052	97.86146	116.6296	173.1604	97.84533
139.7937				
23 86.03943	97.87794	124.1512	173.5548	98.82977
140.4941				
24 86.14603	98.10097	119.3510	169.7621	98.96201
141.1945				
25 86.05269	97.84533	124.9842	167.5681	99.09424
141.8948				
26 85.94244	98.01659	124.9842	161.4886	99.22647
142.5952				
27 85.57889	97.77278	124.9842	165.3022	99.35870
143.2956				
28 85.33653	97.69104	124.9842	160.3815	99.49094
143.9960				
29 85.24953	98.01545	124.9842	156.8064	99.62317
144.6964				
30 85.83689	97.46466	124.9842	154.7717	99.75540
145.3967				
31 86.01696	97.35630	124.9842	159.9915	99.88764
146.0971				
32 85.83889	97.35707	124.9842	158.4101	100.01987
146.7975				
33 85.31654	96 84883	124 9842	157 2653	100.15210
147.4979	30.0.000			
34 85.24498	97 19818	124 9842	162 2646	100 28433
148.1982	37.13010	12 1130 12	102.2010	100.20 .55
35 85.90700	97 94351	145 0629	164 9380	100 41657
148.8986	37.13.1331	113.0023	10 113300	100111007
36 85.33200	97 41003	137 0993	174 8449	100 54880
149.5990	37.41003	137.0333	174.0443	100.54000
37 85.08570	07 35610	120 1256	166 7/137	100 68103
150.2994	37.33010	125.1550	100.7437	100.00103
38 85.44007	06 00262	121 1720	165 2122	100 91227
150.9998	30.33203	121.1720	105.2122	100.61327
	06 2255	112 2002	172 2001	100.04550
39 86.52210	30.22555	115.2083	1/2.2091	100.94550
151.7001	02 50220	145 2442	101 0000	101 07772
40 86.57347	J3.30328	145.5143	191.9069	101.0///3
152.4005	02.40425	455 6655	404 0000	404 20000
41 87.07543	92.40136	155.6052	181.9069	101.20996
153.1009				
42 85.53006	94.80197	165.8961	153.9407	101.34220
153.8013				

write.csv(data, file="D:/bearf2.csv")	将向量保存到表格 bearf2.csv
	中 (下图)
(1) (1) (1) (1) (1)	
开始 插入 页面布局 公式 数据 审阅 视图	
<u> </u>	
□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	
** ★ 本式用 B / U・田・ひ・A・♥・ 三 三 三 達 徳 明合并后居中・ 日・	
製品板 <sup>6</sup> 字体 <sup>6</sup> 对齐方式	
A1 • 6 &	
A B C D E F G H	
F1. Hz. F2. Hz. F3. Hz. F4. Hz. F5. Hz. F6. Hz.	
2 1 84, 31654 95, 96179 146, 4244 173, 4807 88, 38552 124, 9842	
3 2 84, 61062 95, 24386 156, 6641 166, 472 97, 54872 124, 9842 4 3 84, 11314 94, 15518 156, 6641 161, 6629 97, 73052 124, 9842	
5 4 86. 05767 88. 38552 156. 6641 150. 0881 96. 76657 124. 9842	
6 5 84, 45936 97, 54872 156, 6641 149, 352 98, 13661 124, 9842	
7 6 85.0093 97.73052 156.6641 150.5182 96.86464 124.9842	
8 7 85, 18311 96, 76657 156, 6641 154, 4125 97, 92689 145, 0629	
9 8 85, 36907 98, 13661 127, 3668 168, 9405 97, 39644 137, 0993 10 9 85, 45723 96, 86464 135, 9993 170, 6367 98, 61783 129, 1356	
11 10 85, 53186 97, 92689 158, 2489 169, 3819 98, 1376 121, 172	
12 11 85. 52418 97. 39644 150. 1551 168. 0921 98. 19385 132. 0896	
13 12 85. 53105 98. 61783 165. 3438 175. 1308 96. 88018 132. 7899	
14 13 85.54377 98.1376 147.6025 163.8299 96.66107 133.4903	
15 14 85, 39068 98, 19385 124, 079 164, 2083 97, 88276 134, 1907 16 15 85, 14625 96, 88018 121, 18 160, 3504 97, 94959 134, 8911	
17 16 85, 3403 96, 66107 135, 256 167, 2227 97, 94926 135, 5914	
18 17 85, 21814 97, 88276 135, 256 159, 392 98, 19187 136, 2918	
19 18 85. 88896 97. 94959 135. 256 159. 2192 97. 89445 136. 9922	
20 19 86.15696 97.94926 135.256 165.1292 97.86146 137.6926	
21 20 85, 9544 98, 19187 125, 3925 167, 5612 97, 87794 138, 393 22 21 85, 95121 97, 89445 116, 969 171, 2033 98, 10097 139, 0933	
23 22 85. 96052 97. 86146 116. 6296 173. 1604 97. 84533 139. 7937	
24 23 86, 03943 97, 87794 124, 1512 173, 5548 98, 82977 140, 4941	
25 24 86.14603 98.10097 119.351 169.7621 98.96201 141.1945	
26 25 86.05269 97.84533 124.9842 167.5681 99.09424 141.8948	
27 26 85. 94244 98. 01659 124. 9842 161. 4886 99. 22647 142. 5952 28 27 85. 57889 97. 77278 124. 9842 165. 3022 99. 3587 143. 2956	
29 28 85, 33653 97, 69104 124, 9842 160, 3815 99, 49094 143, 996	
30 29 85, 24953 98, 01545 124, 9842 156, 8064 99, 62317 144, 6964	
31 30 85, 83689 97, 46466 124, 9842 154, 7717 99, 7554 145, 3967	
32 31 86.01696 97.3563 124.9842 159.9915 99.88764 146.0971	
33 32 85. 83889 97. 35707 124. 9842 158. 4101 100. 0199 146. 7975 34 33 85. 31654 96. 84883 124. 9842 157. 2653 100. 1521 147. 4979	
34 33 03.31004 96.04003 124.9042 137.2003 100.1321 147.4979	
N Deartz	1

看到了这里有什么启发吗?呵呵,祝你科研愉快。