

2020/12/11(五), 109 學年第一學期 資料科學應用 R 期中考

學號: A107260093 姓名: 林芷妤

(請依照規定)貼上執行程式碼及執行結果。

詳見: R 程式作業繳交方式

<http://www.hmwu.idv.tw/web/teaching/doc/R-how-homework.pdf>

```
> # ex1
```

```
> study <- function(x){
```

```
+   Tuition <- 400X+600Y
```

錯誤: unexpected symbol in:

```
"study <- function(x){
```

```
  Tuition <- 400X"
```

```
>
```

```
> }
```

錯誤: 未預期的 '}' in '"

```
> data.frame()
```

data frame with 0 columns and 0 rows

```
>
```

```
>
```

```
> # ex2(a)
```

```
> library(readxl)
```

```
> Score <- read_excel("data/Score-109.xlsx", skip=2)
```

```
> head(Score, 5)
```

```
# A tibble: 5 x 3
```

```
  No.1   `72`   `62`
```

```
  <chr> <chr> <chr>
```

```
1 No.2   88     97
```

```
2 No.3   76     66
```

```
3 No.4   89     51
```

```
4 No.5   46     15
```

```
5 No.6   16     87
```

```
> tail(Score, 5)
```

```
# A tibble: 5 x 3
```

```
  No.1   `72`   `62`
```

```
  <chr> <chr> <chr>
```

```
1 No.71 69     96
```

```
2 No.72 51    100
```

```

3 No.73 37      50
4 No.74 33      92
5 No.75 4       37
> str(Score)
tibble [74 x 3] (S3: tbl_df/tbl/data.frame)
  $ No.1: chr [1:74] "No.2" "No.3" "No.4" "No.5" ...
  $ 72  : chr [1:74] "88" "76" "89" "46" ...
  $ 62  : chr [1:74] "97" "66" "51" "15" ...
>
> # ex2(b)
>
> Score <- sample(0:75, NA=0)& any(x < 60)
錯誤: 未預期的 '=' in "Score <- sample(0:75, NA="
> data.frame(Score)
      No.1 X72 X62
1   No.2  88  97
2   No.3  76  66
3   No.4  89  51
4   No.5  46  15
5   No.6  16  87
6   No.7  32  51
7   No.8  51   0
8   No.9  73   1
9  No.10  99  14
10 No.11   3 NA
11 No.12  15  83
12 No.13  74  50
13 No.14   0  81
14 No.15  39   6
15 No.16  46  93
16 No.17  39  81
17 No.18  40 NA
18 No.19  18  60
19 No.20  96  72
20 No.21  45  51
21 No.22  33  72
22 No.23  97  75
23 No.24  71   9

```

24 No.25	65	40
25 No.26	39	29
26 No.27	70	62
27 No.28	NA	98
28 No.29	22	62
29 No.30	48	52
30 No.31	80	91
31 No.32	0	64
32 No.33	18	NA
33 No.34	68	25
34 No.35	37	21
35 No.36	36	61
36 No.37	87	38
37 No.38	91	NA
38 No.39	NA	38
39 No.40	13	80
40 No.41	79	91
41 No.42	NA	99
42 No.43	93	59
43 No.44	78	0
44 No.45	26	32
45 No.46	32	56
46 No.47	6	52
47 No.48	4	9
48 No.49	5	69
49 No.50	63	71
50 No.51	97	80
51 No.52	83	95
52 No.53	31	18
53 No.54	21	28
54 No.55	73	78
55 No.56	50	3
56 No.57	73	67
57 No.58	8	82
58 No.59	43	66
59 No.60	23	95
60 No.61	79	88
61 No.62	26	70

```
62 No.63  99  18
63 No.64  76   9
64 No.65  98  81
65 No.66  22  52
66 No.67  95  70
67 No.68  15  21
68 No.69  60  63
69 No.70  95  14
70 No.71  69  96
71 No.72  51 100
72 No.73  37  50
73 No.74  33  92
74 No.75   4  37
```

```
>
```

```
> # ex2(c)
```

```
>
```

```
> cor(Score)
```

```
錯誤: 'list' object cannot be coerced to type 'double'
```

```
> cor <- as.numeric
```

```
> cor()
```

```
numeric(0)
```

```
> cor <- my.cor(Score)
```

```
Error in my.cor(Score) : 沒有這個函數 "my.cor"
```

```
> my.cor()
```

```
Error in my.cor() : 沒有這個函數 "my.cor"
```

```
>
```

```
> # ex2(d)
```

```
>
```

```
> # ex3(a)
```

```
>
```

```
> my.dnorm <- function(x){
```

```
+   # $\mu$  <- 0
```

```
+   # $\sigma$  <- 1
```

```
+    $\mu$  <- mean(x)
```

```
+    $\sigma$  <- sd(x)
```

```
+ }
```

```
>
```

```
> my.dnorm(2.5, 3, 2)
```

Error in my.dnorm(2.5, 3, 2) : unused arguments (3, 2)

>

> dnorm(2.5, 3, 2)

[1] 0.1933341

>

> # ex3(b)

>

> data.frame(my dnorm, dnorm)

錯誤: unexpected symbol in "data.frame(my dnorm"

>