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# (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>

```
> # ex1.7(a)
> rep(LETTERS[1:5], c(5,4,3,2,1))
[1] "A" "A" "A" "A" "A" "B" "B" "B" "B" "C" "C" "C" "D" "D" "E"
>
> # ex1.7(b)
> c(letters[seq(0, 26, 2)], letters[seq(1, 26, 2)])
[1] "b" "d" "f" "h" "j" "l" "n" "p" "r" "t" "v" "x" "z" "a" "c" "e" "g"
[18] "i" "k" "m" "o" "q" "s" "u" "w" "y"
>
> # ex1.7(c)
> require(MASS)
> fractions(1*(1/1:100))*c(1,-1)
[1]      1  -1/2   1/3  -1/4   1/5  -1/6   1/7  -1/8   1/9
[10] -1/10   1/11 -1/12   1/13 -1/14   1/15 -1/16   1/17 -1/18
[19]  1/19  -1/20   1/21 -1/22   1/23 -1/24   1/25 -1/26   1/27
[28] -1/28   1/29 -1/30   1/31 -1/32   1/33 -1/34   1/35 -1/36
[37]  1/37  -1/38   1/39 -1/40   1/41 -1/42   1/43 -1/44   1/45
[46] -1/46   1/47 -1/48   1/49 -1/50   1/51 -1/52   1/53 -1/54
[55]  1/55  -1/56   1/57 -1/58   1/59 -1/60   1/61 -1/62   1/63
[64] -1/64   1/65 -1/66   1/67 -1/68   1/69 -1/70   1/71 -1/72
[73]  1/73  -1/74   1/75 -1/76   1/77 -1/78   1/79 -1/80   1/81
[82] -1/82   1/83 -1/84   1/85 -1/86   1/87 -1/88   1/89 -1/90
[91]  1/91  -1/92   1/93 -1/94   1/95 -1/96   1/97 -1/98   1/99
[100] -1/100
>
> # ex1.7(d)
> c(month.abb[seq(1, 12, 2)], month.abb[seq(0, 12, 2)])
[1] "Jan" "Mar" "May" "Jul" "Sep" "Nov" "Feb" "Apr" "Jun" "Aug" "Oct"
[12] "Dec"
>
> # ex1.23(a)
> math.score <- c(43, 94, 20, 8, 46, 72, 93, 8, 28, 33, 79, 60, 93, 52, 8)
```

```

>
> # ex1.23(b)
> length(math.score)
[1] 15
>
> # ex1.23(c)
> mean(math.score[seq(0, 15, 2)])
[1] 46.71429
>
> # ex1.23(d)
> seats = 1:15;seats[math.score >= 60]
[1] 2 6 7 11 12 13
> length(seats[math.score >= 60])
[1] 6
>
> # ex1.37(a)
> age <- c(54, 64, 75, 21, 66, 49, 25, 72, 50, 72)
> gender <- c("女", "男", "男", "女", "女", "男", "男", "女", "男", "女")
> index <- c(86, 30, NA, 43, 35, 42, 31, 7, 29, 80)
> sat <- c("滿意", "非常滿意", "非常不滿意", "非常滿意", "普通", "非常不滿意", "普通", "滿意", "普通", "非常滿意")
> sat.f.l <- ordered(factor(sat), levels = c("非常不滿意", "普通", "滿意", "非常滿意"))
>
> # ex1.37(b)
> length(sat.f.l[which(sat.f.l >= "滿意")])
[1] 5
>
> # ex1.37(c)
>

```