```
> #a(1.7)
> rep(LETTERS[1:5], seq(5, 1, -1))
 [1] "A" "A" "A" "A" "A" "B" "B" "B" "B" "C" "C"
[12] "C" "D" "D" "E"
> #b(1.7)
> c(letters[seq(2, 26, 2)], letters[seq(1, 25, 2)])
 [1] "b" "d" "f" "h" "j" "l" "n" "p" "r" "t" "v"
[12] "x" "z" "a" "c" "e" "g" "i" "k" "m" "o" "q"
[23] "s" "u" "w" "y"
> #c(1.7)
> require(mass)
Loading required package: mass
Warning message:
In library(package, lib.loc = lib.loc, character.only = TRUE, logical.return = TRUE,  :
  there is no package called ‘mass’
> b <- rep(c(1,-1),50)
> c <- 1:100
> fractions(b/c)
  [1]     1  -1/2   1/3  -1/4   1/5   -1/6
  [7]   1/7  -1/8   1/9 -1/10  1/11  -1/12
 [13]  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
 [25]  1/25 -1/26  1/27 -1/28  1/29  -1/30
 [31]  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
 [43]  1/43 -1/44  1/45 -1/46  1/47  -1/48
 [49]  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
 [61]  1/61 -1/62  1/63 -1/64  1/65  -1/66
 [67]  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
 [79]  1/79 -1/80  1/81 -1/82  1/83  -1/84
 [85]  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
 [97]  1/97 -1/98  1/99 -1/100
```

```
> #d(1.7)
> c(month.abb[1:12][seq(1, 12, 2)], month.abb[2:12][seq(1, 11, 2)])
 [1] "Jan" "Mar" "May" "Jul" "Sep" "Nov" "Feb"
 [8] "Apr" "Jun" "Aug" "Oct" "Dec"
> #a(1.23)
> X<- c(43, 94, 20, 8, 46, 72, 93, 8, 28, 33, 79, 60, 93, 52, 8)
> #b(1.23)
> length (X)
[1] 15
> #c(1.23)
> (X[1:15][seq(2, 15, 2)])
[1] 94  8 72  8 33 60 52
> mean((X[1:15][seq(2, 15, 2)]))
[1] 46.71429
> #d(1.23)
> id <- 1:length(X)
> cat(pass.id<- id[X>= 60])
2 6 7 11 12 13
> length(pass.id)
[1] 6
> D<- 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")
> #a(1.37)
> A<- factor(sat, levels = c("非常不滿意", "普通", "滿意", "非常滿意"), ordered = TRUE)
> A
 [1] 滿意     非常滿意   非常不滿意 非常滿意
[5] 普通     非常不滿意 普通     滿意
[9] 普通     非常滿意
4 Levels: 非常不滿意 < 普通 < ... < 非常滿意
> #b(1.37)
> F<- (1:length(A))[A>="滿意"]
> length(F)
[1] 5
```

```
> #c(1.37)
> i <- index[age >= 40 & gender == "男"]
> mean(i, na.rm = TRUE)
[1] 33.66667
```