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> #2020/10/23(五), 109 學年第一學期 資料科學應用 R 作業(1)
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> #加分
> #1
> rep(1:5, seq(1, 5, 1))
 [1] 1 2 2 3 3 3 4 4 4 4 5 5 5 5 5
> #2
> rep(5:1, seq(1, 5, 1))
 [1] 5 4 4 3 3 3 2 2 2 2 1 1 1 1 1
> #3
> rep(1:3, time = 3)
[1] 1 2 3 1 2 3 1 2 3
> #4
> print('請輸入長度值：')
[1] "請輸入長度值："
> length = readline()
20
> x <- c()
> for(i in    1 : length){
+        if(i == 1)
+             x[i] <- 0
+        else if(i == 2)
+             x[i] <- 1
+        else
+             x[i] <- c(x[i - 2] + x[i - 1])
+ }
> cat(x)
0 1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597 2584 4181
> #5
> x <- c(1 : 5)
> for(i in 1:5){
+        cat(x[i : 5], "")
+ }
1 2 3 4 5 2 3 4 5 3 4 5 4 5 5
> #6
```

```
> print('請輸入長度值：')
[1] "請輸入長度值："
> length = readline()
20
> x <- c()
> count <-3
> for(i in 1 : length){
+       if(i == 1)
+             x[i] <- 1
+       else
+             {x[i] <- x[i-1] + count}
+       count <- count + 2
+ }
> cat(x)
1 6 13 22 33 46 61 78 97 118 141 166 193 222 253 286 321 358 397 438
> #7
> print('請輸入長度值：')
[1] "請輸入長度值："
> length = readline()
20
> x <- c()
> for(i in    1: length){
+       if(i ==    1)
+             x[i] <- i
+       else if(i == 2)
+             x[i] <- i
+       else if(i %% 2 == 0)
+             x[i] <- x[i - 2] * 2
+       else
+             x[i] <- x[i - 2] * 3
+ }
> cat(x)
1 2 3 4 9 8 27 16 81 32 243 64 729 128 2187 256 6561 512 19683 1024
>
```