

> #2020/12/04(五), 109學年第一學期 資料科學應用 R作業(5)

> #學號:a107260012 姓名:江鴻麟

> #ex2.4(a)

```
> for(i in 1:5){  
+   for(j in 1:i){  
+     cat(j)  
+   }  
+   cat("\r\n")  
+ }
```

1

12

123

1234

12345

> #ex2.4(b)

> day <- 1

```
> for(i in 4:0){  
+   for(day in day ){  
+     cat(rep(" ", each = i))  
+     cat(rep((day), (each = day)))  
+     day <-day +2  
+   }  
+   cat("\n")  
+ }
```

1

3 3 3

5 5 5 5 5

7 7 7 7 7 7 7

9 9 9 9 9 9 9 9

> #ex2.50

> y <- c(25, 49, 95, 178, 264, 327, 373)

> c <- matrix(0, 7, 7)

```
> for(i in 1:7){  
+   for( j in 1:7){  
+     if(abs(y[i]- y[j])<50)  
+       c[i , j] <- 100  
+     else if(abs(y[i]- y[j])<300)  
+       c[i , j] <- 100 + abs(y[i]- y[j]) -50  
+     else  
+       c[i , j] <- 400  
+   }  
+ }
```

> c

[,1] [,2] [,3] [,4] [,5] [,6] [,7]

[1,] 100 100 120 203 289 400 400

[2,] 100 100 100 179 265 328 400

[3,] 120 100 100 133 219 282 328

[4,] 203 179 133 100 136 199 245

[5,]	289	265	219	136	100	113	159
[6,]	400	328	282	199	113	100	100
[7,]	400	400	328	245	159	100	100