

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

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> #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)

> count <- 1

```
> for(i in 4:0){  
+   for(count in count ){  
+     cat(rep(" ", each = i))  
+     cat(rep((count), (each = count)))  
+     count <-count +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

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

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

>

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

```

+           a[i , j] <- 100 + abs(x[i]- x[j]) -50
+       else
+           a[i , j] <- 400
+   }
+ }
> a
      [,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

```