

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

> #學號:a107260086 姓名:張允銓

> #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)

> c <- 1

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

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

>

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

```

+       y[i , j] <- 100
+       else if(abs(x[i]- x[j])<300)
+       y[i , j] <- 100 + abs(x[i]- x[j]) -50
+       else
+       y[i , j] <- 400
+   }
+ }
> y
      [,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
>

```