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# (請依照規定)貼上執行程式碼及執行結果。

詳見: R程式作業繳交方式

http://www.hmwu.idv.tw/web/teaching/doc/R-how-homework.pdf

> #2.4(a)

> for(i in 1:5){

+ cat(sequence(i),"\n")

+ }

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

>

>

> #2.4(b)

> for(i in 0:4){

+ cat(rep(" ", 5-i), (rep(i\*2+1,i\*2+1)),"\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 9

>

>

> #2.5

> #建立矩陣

> dist.matrix <- matrix(0,7,7)

> rownames(dist.matrix) <- c("A","B", "C", "D", "E", "F", "G")

> colnames(dist.matrix) <- c("A","B", "C", "D", "E", "F", "G")

> dist.matrix

A B C D E F G

A 0 0 0 0 0 0 0

B 0 0 0 0 0 0 0

C 0 0 0 0 0 0 0

D 0 0 0 0 0 0 0

E 0 0 0 0 0 0 0

F 0 0 0 0 0 0 0

G 0 0 0 0 0 0 0

>

> #導入距離差距

> city <- c("A","B", "C", "D", "E", "F", "G")

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

> for(k in c(25, 49, 95, 178,264, 327, 373)){

+ error <- abs(k - dist)

+ price <- ifelse((error <= 50), 100,

+ ifelse((error >50) & (error <=300), (100+(error/50)\*1),

+ ifelse(error >300, 400,

+ NA)

+ )

+ )

+ cat(price, "\n")

+ dist.matrix[] <- price

+ }

100 100 101.4 103.06 104.78 400 400

100 100 100 102.58 104.3 105.56 400

101.4 100 100 101.66 103.38 104.64 105.56

103.06 102.58 101.66 100 101.72 102.98 103.9

104.78 104.3 103.38 101.72 100 101.26 102.18

400 105.56 104.64 102.98 101.26 100 100

400 400 105.56 103.9 102.18 100 100

>

> dist.matrix

A B C D E F G

A 400.00 400.00 400.00 400.00 400.00 400.00 400.00

B 400.00 400.00 400.00 400.00 400.00 400.00 400.00

C 105.56 105.56 105.56 105.56 105.56 105.56 105.56

D 103.90 103.90 103.90 103.90 103.90 103.90 103.90

E 102.18 102.18 102.18 102.18 102.18 102.18 102.18

F 100.00 100.00 100.00 100.00 100.00 100.00 100.00

G 100.00 100.00 100.00 100.00 100.00 100.00 100.00

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