M034030039 財管碩三 羅竑宇 財金程式設計

**1. 1+3+…+N**

***for做法***

rm(list=ls())

Sum=function(n){

if (n%%2!=1){

print('error:input must be positive odd integer')

return()

} else{

sum=0

for (i in seq(1,n,2)){

sum=sum+i

}

return(sum)

}}

***while做法***

rm(list=ls())

Sum=function(n){

if (n%%2!=1){

print('error:input must be positive odd integer')

return()

} else{

i=1

mysum=0

while(i<=n){

mysum=mysum+i

i=i+2

}

return(mysum)

}}

**2. 1\*2\*…\*N**

***for做法***

rm(list=ls())

Mypord=function(n){

if (n%%1!=0||n<1){

print('error:input must be positive integer')

return()

} else{

myprod=1

for (i in 1:n){

myprod=myprod\*i

}

return(myprod)

}}

***while做法***

rm(list=ls())

Mypord=function(n){

if (n%%1!=0||n<1){

print('error:input must be positive integer')

return()

} else{

i=1

myprod=1

while(i<=n){

myprod=myprod\*i

i=i+1

}

return(myprod)

}}

**3. 评分**

rm(list=ls())

student=1:12

grade=c(80,95,70,64,53,42,15,60,99,78,88,43)

score=cut(grade,breaks = c(0,60,70,80,90,100),right = F,labels = LETTERS[5:1],include.lowest = T)

(table=data.frame(student,grade,score))

student grade score

1 1 80 B

2 2 95 A

3 3 70 C

4 4 64 D

5 5 53 E

6 6 42 E

7 7 15 E

8 8 60 D

9 9 99 A

10 10 78 C

11 11 88 B

12 12 43 E