

程式設計教學

迴圈

吳智鴻

Chih-Hung Wu

國立臺中教育大學 數位內容科技學系



chwu@mail.ntcu.edu.tw

Website: chwu.weebly.com

Department of Digital Content and Technology NTCU

加總 $1+2+\dots+n$

```
n = int(input('Please input N : '))
sum = 0
for i in range(1, n+1):
    sum = sum + i
print('1 + .. ', n, ' = ', sum)
```

```
Please input N : 5
1 + .. 5 = 15
```

可以改用 while 迴圈

while迴圈

```
n = int(input('Please input N : '))
sum = 0
i = 1
while (i <= n):
    sum = sum + i
    i = i + 1

print('1 + .. ',n , ' = ', sum)
```

Please input N : 5

1 + .. 5 = 15

9x9乘法表

```
for i in range(2,10):  
    for j in range(1,10):  
        print('%2d x %2d = %2d ' % (i, j, i*j),end="")  
    print()
```

2 x 1 = 2	2 x 2 = 4	2 x 3 = 6	2 x 4 = 8	2 x 5 = 10	2 x 6 = 12	2 x 7 = 14	2 x 8 = 16	2 x 9 = 18
3 x 1 = 3	3 x 2 = 6	3 x 3 = 9	3 x 4 = 12	3 x 5 = 15	3 x 6 = 18	3 x 7 = 21	3 x 8 = 24	3 x 9 = 27
4 x 1 = 4	4 x 2 = 8	4 x 3 = 12	4 x 4 = 16	4 x 5 = 20	4 x 6 = 24	4 x 7 = 28	4 x 8 = 32	4 x 9 = 36
5 x 1 = 5	5 x 2 = 10	5 x 3 = 15	5 x 4 = 20	5 x 5 = 25	5 x 6 = 30	5 x 7 = 35	5 x 8 = 40	5 x 9 = 45
6 x 1 = 6	6 x 2 = 12	6 x 3 = 18	6 x 4 = 24	6 x 5 = 30	6 x 6 = 36	6 x 7 = 42	6 x 8 = 48	6 x 9 = 54
7 x 1 = 7	7 x 2 = 14	7 x 3 = 21	7 x 4 = 28	7 x 5 = 35	7 x 6 = 42	7 x 7 = 49	7 x 8 = 56	7 x 9 = 63
8 x 1 = 8	8 x 2 = 16	8 x 3 = 24	8 x 4 = 32	8 x 5 = 40	8 x 6 = 48	8 x 7 = 56	8 x 8 = 64	8 x 9 = 72
9 x 1 = 9	9 x 2 = 18	9 x 3 = 27	9 x 4 = 36	9 x 5 = 45	9 x 6 = 54	9 x 7 = 63	9 x 8 = 72	9 x 9 = 81