



# Week 2 loop 回圈

## 1. for loop 固定次數

- 當需執行次數不確定時

```
for ... in ...:
```

```
    do ...
```

- 用于記錄次數

```
for i in range( ):
```

```
    do ...
```

### • for c in s:

依序取出字符串中個元素  
(str, list...)

\* dictionary

```
    for key in fruit:
```

print ... (印出 key)

```
    for k in fruit.items():
```

print ... (印出對應的值)

## 2. range function

- 作用於控制 for loop

- range(start value, end value, step value)

ex. for i in range(1, 10, 2):

```
    print(i, end='')
```

\* 1 3 5 7 9

## 3. 繼狀迴圈 (蓋可能不執行3層)

```
for i in range( ):
```

```
    for i in range( ):
```

```
        do ...
```

- 常用於處理二維結構 (ex. 矩陣, 加乘法表)

## 4. break, continue

- break: 中斷並跳出最層 loop

- continue: 跳過 loop 內 continue 後的 code, 並執行下次 loop

## 5. while loop 指定條件不固定次數

```
while (condition):
```

```
    do ... when condition == True
```

- while True: 無窮 loop (用 break 離開)

```
    do ...
```