**用排版格式輸出容器資料**

**目的:**將資料按照成績排序後,依字串格式化,加入適當的間隔與換行,並將字串傳回。

**程式碼:**

import operator

def sorted\_grades():

grades=[

('Alice','Wooding',89),

('Bob','Johnson',86),

('Cindy','Letterman',93),

('David','Moor',86),

('Eddie','Williams',91)

]

for first,last,grades in sorted(grades,key=operator.itemgetter(2),reverse=True):

print(**f'{last:12s}{first:12s}{grades:1}'**)

sorted\_grades()

**f-string的樣式設定:**

將grades的每個tuple元素直接拆開成三個變數

for first,last,grade in grades:

print(f’{last:**12s**}{first:**10s** }{grade: **.1f** }’)

格式為字串(s), 12格 字串, 10格 浮點數(f)

**延伸技巧:使用format()格式化結合容器解包:**

用索引0,1,2來存取format()內的參數:

for first,last,grade in grades:

print(’{**1**:12s}{**2**:10s }{**3**:.1f }’**.format(first,last,grade)**)

不指定索引,就依傳入參數的順序來取值:

for first,last,grade in grades:

print(’{:12s}{:10s }{:.1f }’**.format(last, first,grade)**) #last會放在第一個{}

正因format()是個函式所以可以用 \* 號來**解包(unpack):**

for grade in grades:

print(’{1:12s}{0:10s }{2:.1f }’.format(\*grade))

**程式碼:**

import operator

def sorted\_grades(grades):

output=[]

for grade in sorted(grades,key=operator.itemgetter(2),reverse=True):

output.append**('{1:12s}{0:12s}{2:.1f}'.format(\*grade))**

return '\n'.join(output)

grades=[

('Alice','Wooding',89),

('Bob','Johnson',86),

('Cindy','Letterman',93),

('David','Moor',86),

('Eddie','Williams',91)

]

print(sorted\_grades(grades))