作業一

請描述如何針對該課程進行有效的隨機分組，或者隨機進行點名？

1. 隨機分組

(1)random.shuffle 的語法

使用 shuffle() 將序列中的所有數字隨機排列。

作業1.py * Sc1

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1 作業1.py *

```
import random

list = [1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20];
random.shuffle(list)
print ("隨機排序列表 : ", list)

random.shuffle(list)
print ("隨機排序列表 : ", list)
```

```
>y:\py373\pythonw -u "作業1.py"
隨机排序列表 : [10, 5, 16, 20]
隨机排序列表 : [5, 16, 20, 10]
>Exit code: 0
>y:\py373\pythonw -u "作業1.py"
隨机排序列表 : [1, 2, 17, 12, 7, 14, 10, 15, 9, 18, 8, 13, 19, 6, 3, 16, 5, 4, 20, 11]
隨机排序列表 : [7, 14, 1, 17, 13, 12, 11, 20, 5, 15, 10, 18, 8, 2, 19, 16, 9, 4, 3, 6]
>Exit code: 0
```

(2)for 迴圈

作業1.py - Sc1

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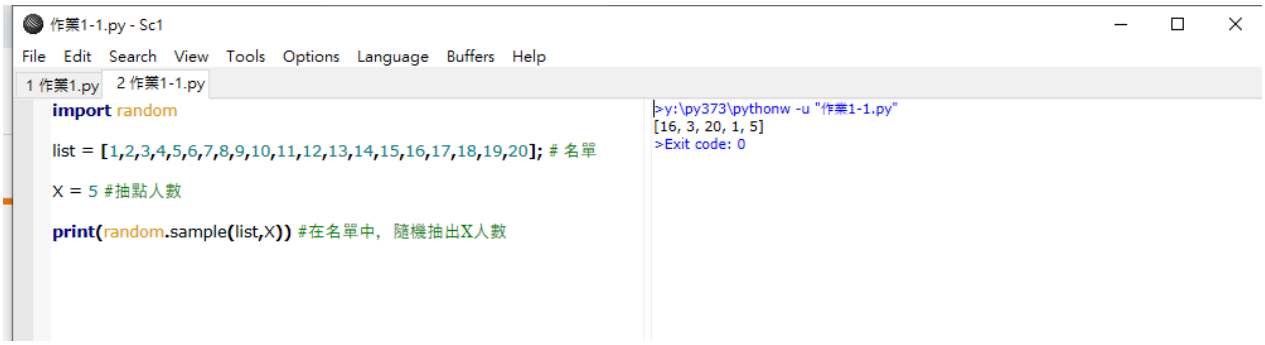
1 作業1.py

```
import random

list = [1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20]; # 分組名單

random.shuffle(list) #打亂名單

print("打亂後的名單=",list) #顯示打亂後的名單

X = 5 #分為幾組

Y=int(len(list)/X) #計算多少人為一組

list_2 = []

for i in range(0,len(list),Y): #執行for迴圈 i，將名單循環列出

    list_2.append(list[i:i+Y]) #依序排列分組人數


print("分組名單=",list_2) #顯示結果
```

```
>y:\py373\pythonw -u "作業1.py"
打亂後的名單= [1, 18, 16, 5, 6, 2, 9, 11, 10, 15, 7, 14, 8, 4, 17, 19, 13, 3, 12, 20]
分組名單= [[1, 18, 16, 5], [6, 2, 9, 11], [10, 15, 7, 14], [8, 4, 17, 19], [13, 3, 12, 20]]
>Exit code: 0
```

2. 隨機進行點名

random.sample(list, X)



參考文獻

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