

## 1. Random grouping

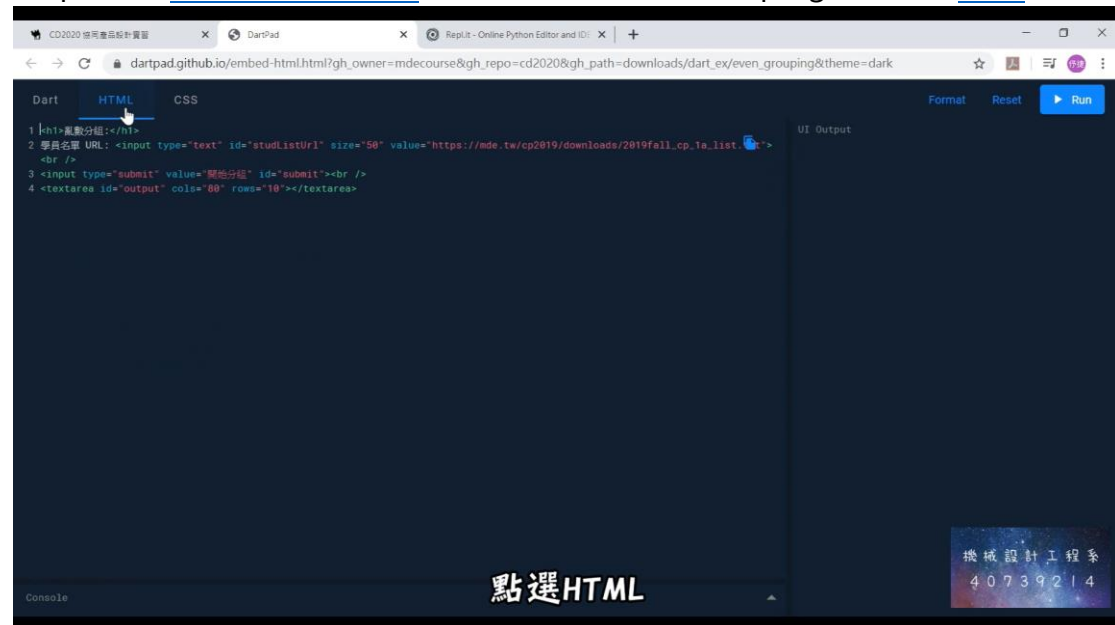
Describe how to do an efficient random grouping for this course or do the roll calling randomly?

**\*在亂數分組及隨機點名的程式中，利用 Dart 內的 HTML 進行操作**

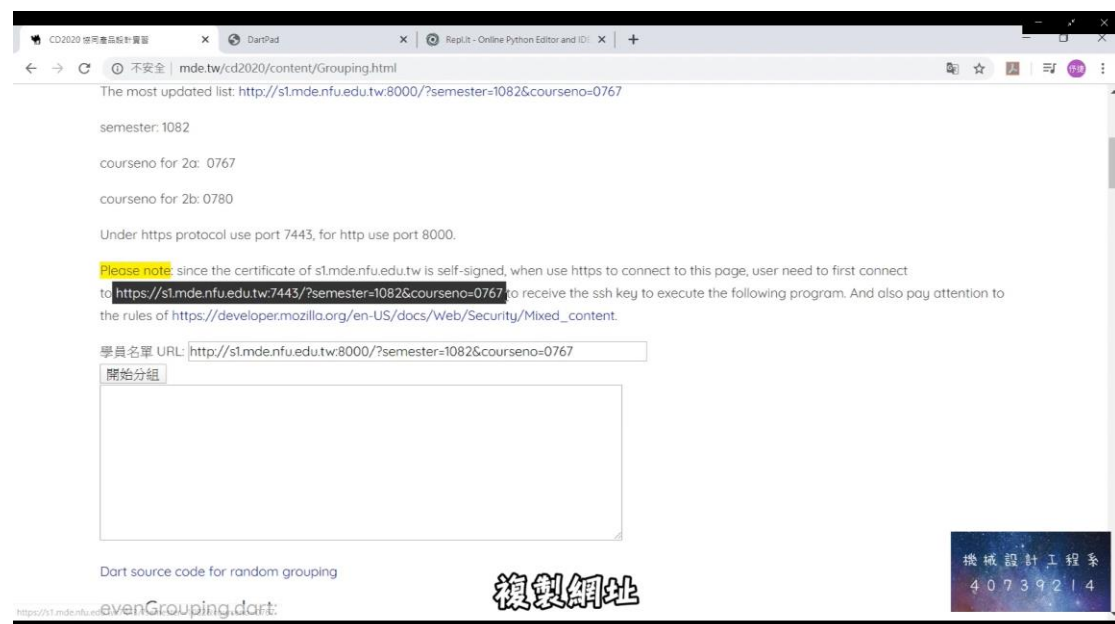
影片連結：<https://www.youtube.com/watch?v=8DPiM75fRQQ>

### 亂數分組

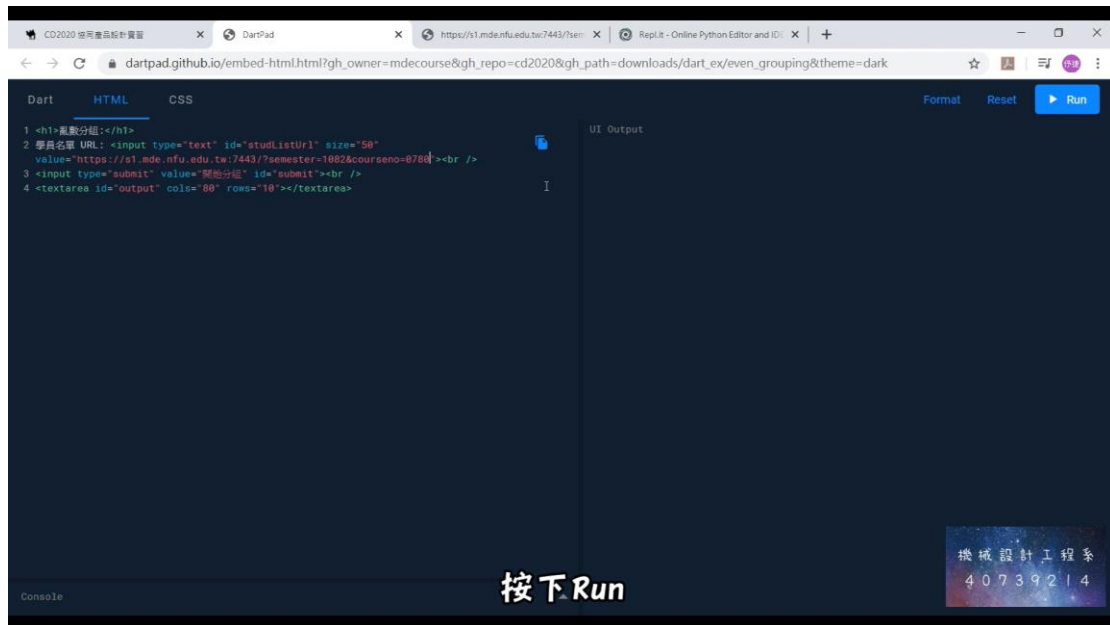
Step1：至 [mde.tw](https://mde.tw) 課程網頁 ( [mde.tw/About/Grouping](https://mde.tw/About/Grouping) ) 點選 “[Dart](#)”



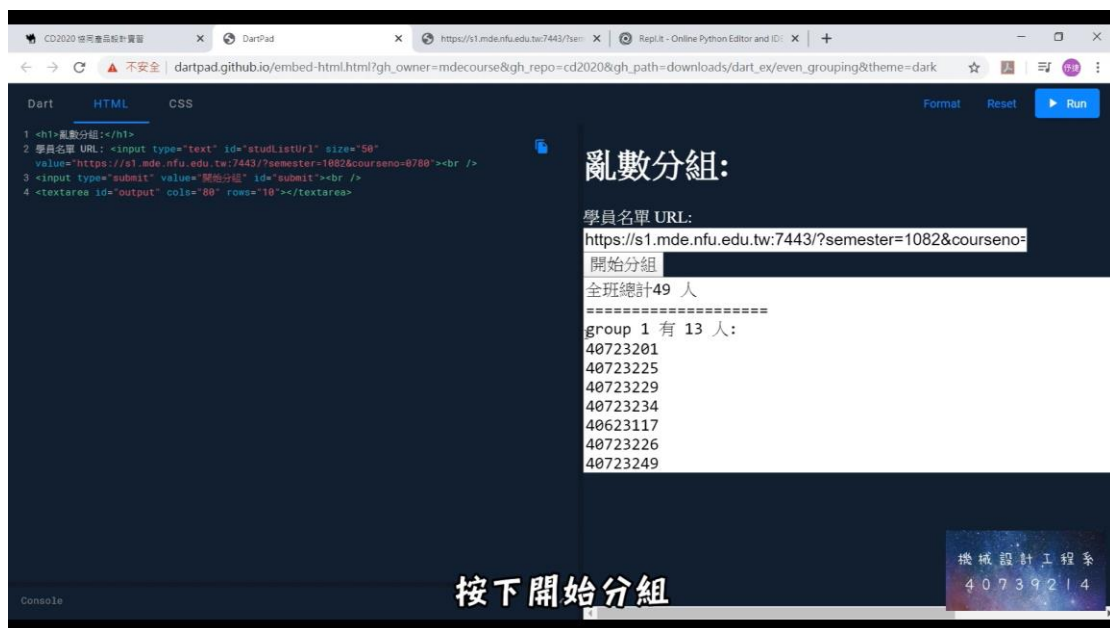
Step2：複製 note 那邊的網址，並將 0767(2a)改成 0780(2b)



Step3：複製更改後的網址貼上 HTML，並按下 Run



Step4：按下開始分組，即可完成亂數分組！

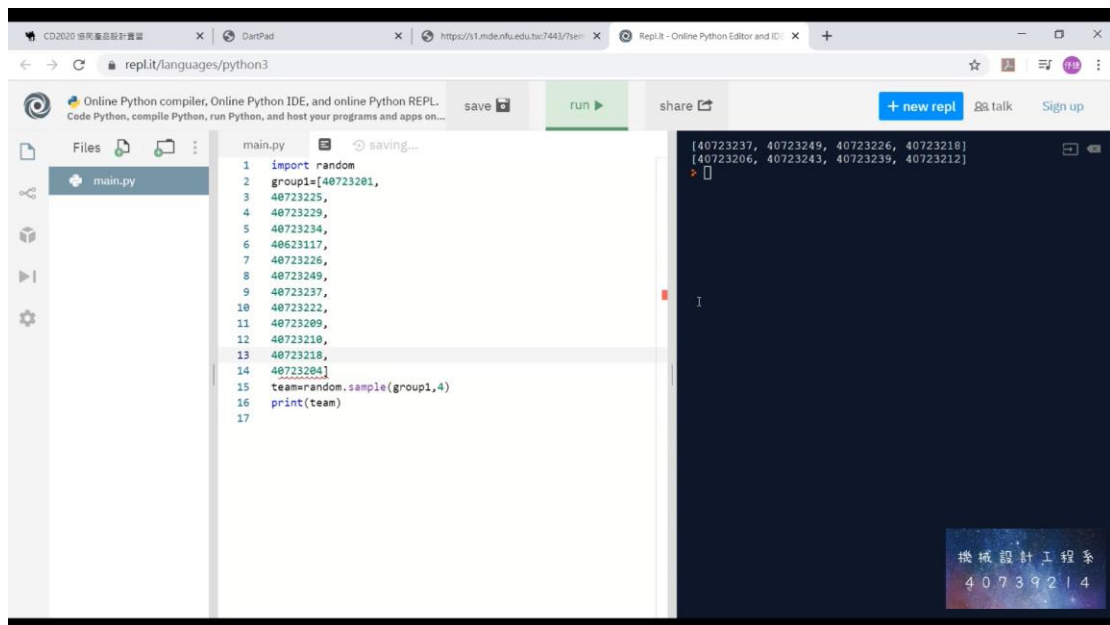


隨機點名 [參考連結](#) \*利用 random.sample

random.sample(sequence, k) · 從指定序列中隨機獲取指定長度的片斷。

Step1：複製剛產生的分組成員名單，貼到 [Python3 線上編譯器](#)

Step2：輸入圖片中的語法，在一個 group 中進行抽點，group2、group3、group4 以此類推



The screenshot shows the Repl.it Python IDE interface. On the left, a file explorer shows 'main.py'. The main editor displays the following Python code:

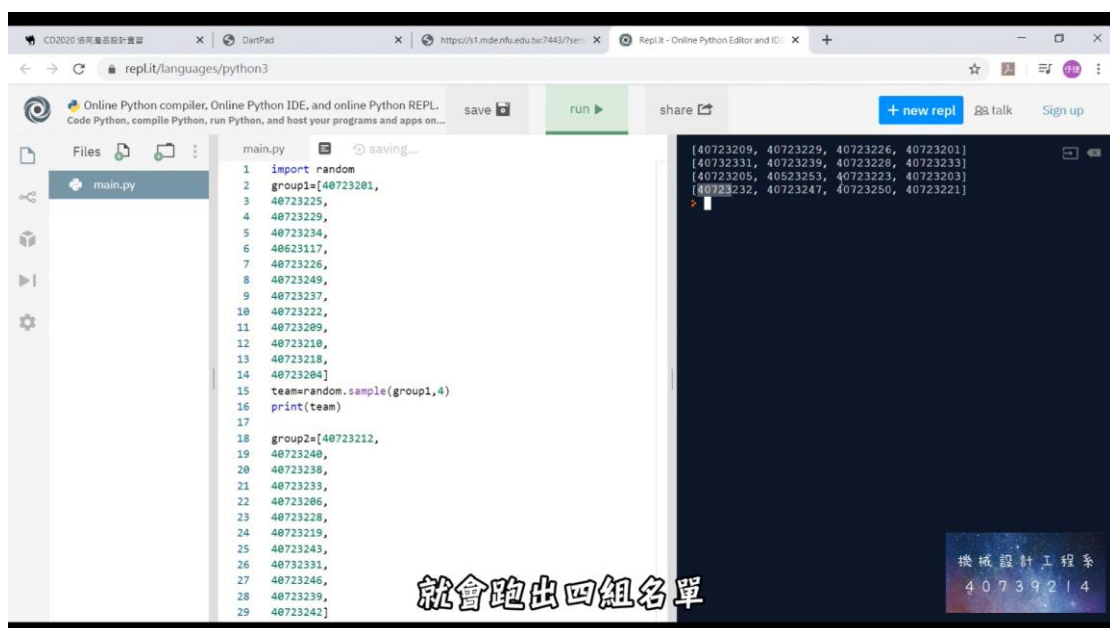
```
1 import random
2 group1=[40723201,
3 40723225,
4 40723229,
5 40723234,
6 40623117,
7 40723226,
8 40723249,
9 40723237,
10 40723222,
11 40723209,
12 40723210,
13 40723218,
14 40723204]
15 team=random.sample(group1,4)
16 print(team)
17
```

The output console on the right shows the result of the code execution:

```
[40723237, 40723249, 40723226, 40723218]
[40723206, 40723243, 40723239, 40723212]
```

At the bottom right, there is a small graphic with the text '機械設計工程系' and '40739214'.

Step3：輸入完畢確認無誤後按下 run，即可完成隨機點名！



The screenshot shows the Repl.it Python IDE interface with the same Python script as before, but with additional code added to the editor:

```
1 import random
2 group1=[40723201,
3 40723225,
4 40723229,
5 40723234,
6 40623117,
7 40723226,
8 40723249,
9 40723237,
10 40723222,
11 40723209,
12 40723210,
13 40723218,
14 40723204]
15 team=random.sample(group1,4)
16 print(team)
17
18 group2=[40723212,
19 40723240,
20 40723238,
21 40723233,
22 40723206,
23 40723228,
24 40723219,
25 40723243,
26 40723231,
27 40723246,
28 40723239,
29 40723242]
```

The output console now shows the results of the first two groups:

```
[40723209, 40723229, 40723226, 40723201]
[40723231, 40723239, 40723228, 40723233]
[40723205, 40623253, 40723223, 40723203]
[40723232, 40723247, 40723250, 40723221]
```

At the bottom center, there is a text overlay that says '就會跑出四組名單' (It will output four groups of names).

At the bottom right, there is a small graphic with the text '機械設計工程系' and '40739214'.