

# HW3\_numpy\_1\_題目

應用numpy，寫出產生以下各題output之程式碼，上傳ipynb檔案

## 1. 應用numpy，寫出產生此陣列之程式碼

In [2]:

```
Out[2]: array([[ 1,  2,  3,  4,  5,  6,  7,  8,  9, 10],
               [11, 12, 13, 14, 15, 16, 17, 18, 19, 20],
               [21, 22, 23, 24, 25, 26, 27, 28, 29, 30],
               [31, 32, 33, 34, 35, 36, 37, 38, 39, 40],
               [41, 42, 43, 44, 45, 46, 47, 48, 49, 50],
               [51, 52, 53, 54, 55, 56, 57, 58, 59, 60],
               [61, 62, 63, 64, 65, 66, 67, 68, 69, 70],
               [71, 72, 73, 74, 75, 76, 77, 78, 79, 80],
               [81, 82, 83, 84, 85, 86, 87, 88, 89, 90],
               [91, 92, 93, 94, 95, 96, 97, 98, 99, 100]])
```

## 2. 應用numpy，寫出產生此陣列之程式碼

In [3]:

```
Out[3]: array([0.          , 0.05263158, 0.10526316, 0.15789474, 0.21052632,
               0.26315789, 0.31578947, 0.36842105, 0.42105263, 0.47368421,
               0.52631579, 0.57894737, 0.63157895, 0.68421053, 0.73684211,
               0.78947368, 0.84210526, 0.89473684, 0.94736842, 1.          ])
```

## 3. 應用numpy，寫出產生此陣列之程式碼

In [4]:

```
Out[4]: array([[ 1,  2,  3,  4,  5],
               [ 6,  7,  8,  9, 10],
               [11, 12, 13, 14, 15],
               [16, 17, 18, 19, 20],
               [21, 22, 23, 24, 25]])
```

## 4. 延續第3題，找出以下陣列

In [5]:

```
Out[5]: array([[12, 13, 14, 15],
               [17, 18, 19, 20],
               [22, 23, 24, 25]])
```

## 5. 延續第3題，找出以下陣列

In [6]:

```
Out[6]: array([[ 2],
               [ 7],
               [12]])
```

**6. 印出第3題中，所有數值之總和**

In [7]:

Out[7]: 325

**7. 印出第3題中，所有數值之標準差**

In [8]:

Out[8]: 7.211102550927978