


# C++基礎語法 Unit-9

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- struct 結構
  - 將多個欄位(資料型態可以不同)的相關資料組織在一起
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# struct 把相關資料組織在一起



```
1  #include <iostream>
2  using namespace std;
3
4  struct Point {
5      //平面座標
6      int x, y;
7  };
8
9  int main() {
10     int x, y;
11     cin >> x >> y;
12
13     Point pt = {x, y};
14     cout << "座標：" << pt.x << ", " << pt.y << ")\n";
15
16     return 0;
17 }
```

## 【練習】圓形

Example 9-3

```
5 struct circle {
6     //Struct Members - data
7     double radius;
8     double diameter;
9     double circumference;
10    double area;
11    // constructor (建構子) (初始化)
12    circle (double _r) {
13        radius = _r;
14        diameter = _r * 2;
15        double PI = acos(-1);
16        circumference = 2.0 * PI * _r;
17        area = PI * _r * _r;
18    }
19    //Struct Members: function
20    void print_circle() {
21        cout << "半徑: " << radius << "\n";
22        cout << "直徑: " << diameter << "\n";
23        cout << "圓周長: " << circumference << "\n";
24        cout << "圓面積: " << area << "\n";
25    }
26 };
```