考試計算紙

考試計算紙

Tuesday, July 13, 2021   1:55 PM

綱要

- C Data Types
  - → Boolean
  - → Floating Points
  - → Character Array as C string
  - → Multidimensional Array.
- Function Call by Name/Reference
  - → Array
  - → Reference.

C Data Types - sizeof()

- sizeof()

    作用對象

        變數 (variables) 或型別 (types)

    回傳值

        所佔用記憶體大小.

        以 Byte 為單位.

C Data Type - sizeof()

sizeof()

→ Examples:
cout << "size of int " << sizeof(int);.

C data type floating point

C Data type Boolean. (size 1).

C Data Type - Floating Point.

※ -1.011101×2^{19}.

※ 正負號. 指數 尾數. Significant.

C 語言定義的浮點數.   ※ 使用.

double	64-bits / 8 byte.
long double.	128-bits / 16 byte.
float.	32-bits / 4 byte.

C Data Type Character Array

```
char str [16],
    name1 [8] = "Alice"
    name2 [ ] = "Bob"
```

cout << sizeof (str) << endl;   →16

cout << sizeof (name1) << endl;   →8

cout << sizeof (name2) << endl;   →4.

'\0" 結束字元.

Functional Call

Function call by Value ———→ 參數會被複製.
Function call by Name/Reference.
Function call by Adress.

Call by Name / Call by Reference

影響到外部.

```
void increase ( int &a, int &b){
    a+=b;
    b= 0;
}
```

📄 0A24BA...

Function Call by Name - Array

```
int input(double xyz[][3]){          int main(void){
    double v ;                           double point[1024][3] ;
    int N ;                              int N = input(point) ;
    for( N=0 ; cin >> v ; N++ ){
        xyz[N][0] = v ;                  return 0 ;
        cin >> xyz[N][1]             }
            >> xyz[N][2] ;
    }
    return N ;
}
```

21

直接用 array 是會影響到 scope 外的.