

2020/12/02 C++程式設計

題目

輸入：兩個數字a、b

輸出：a+b的值做反轉後印出

要求：如果相加的數字為負數即退出程式

輸出入範例

輸入 -> 49 、 85

輸出：49+85=134 ，反轉後為431，即輸出為431

實作---使用 C++/CLI

solve1 --- 以遞迴實現

```
#include "pch.h"
#include <iostream>
using namespace System;
using namespace System::Collections::Generic;
int r;

int k(int x)
{
    if (x < 10)
    {
        r = (r * 10) + (x % 10);
        return r;
    }
    else
    {
        r = (r * 10) + (x % 10);
        k(x / 10);
        return r;
    }
    r = 0;
}

int main(array<System::String^>^ args)
{
    int c = 0;
    while (true)
    {
        int a = Convert::ToInt32(Console::ReadLine());
        int b = Convert::ToInt32(Console::ReadLine());
        c = a + b;
        if (c <= 0)
            break;
        r = 0;
        Console::WriteLine(k(c));
        Console::WriteLine();
    }
    std::system("pause");
    return 0;
}
```

solve2 --- 把相加後的數字轉成char陣列，再使用Array::Reverse()函式將要輸出陣列反轉，再用foreach輸出

```
#include "pch.h"
#include <iostream>

using namespace System;
using namespace System::Collections::Generic;

int main(array<System::String ^> ^args)
{
    int c = 0;

    while (true)
    {
        int a = Convert::ToInt32(Console::ReadLine());
        int b = Convert::ToInt32(Console::ReadLine());
        c = a + b;

        if (c <= 0)
            break;
        else
        {
            String^ out = c.ToString();
            array<Char>^ out_chr = out->ToCharArray();
            Array::Reverse(out_chr);
            for each (Char^ k in out_chr)
            {
                Console::Write(k);
            }
            Console::WriteLine("\n");
        }
    }
    std::system("pause");
    return 0;
}
```