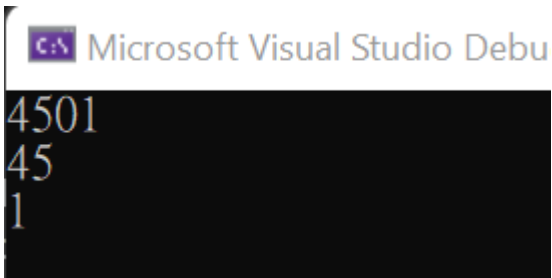**報告標題: lab7, 組別: 48, 姓名學號: 曾千芸109504501 賈子悅110502514**

程式碼截圖:

```
1    include Irvine32.inc
2
3  | divide MACRO dd,dr,q,r                         ; a macro named divide with parameter named dd, dr, q, r
4  |     mov edx,0                                  ; define edx = 0
5  |     mov ecx,100                                ; define ecx = 100
6  |     div cx                                     ; divide
7  |     mov q,ax                                   ; move ax to q
8  |     mov r,dx                                   ; move dx to r
9    ENDM
10   .data
11 | dividend WORD 4501
12   divisor WORD 100
13   quotient WORD 1 DUP(?)
14   remainder WORD 1 DUP(?)
15   .code
16   main PROC
17       movsx eax,dividend
18       call WriteDec                              ; display it
19       call Crlf                                  ; output a CR/LF
20 |     divide dividend,divisor,quotient,remainder ; macro divide
21       movsx eax,quotient                         ; move quotient with sighn-extend into eax
22       call WriteDec                              ; display it
23       call Crlf                                  ; output a CR/LF
24       movsx eax,remainder                        ; move remainder with sign-extend into eax
25       call WriteDec                              ; display it
26       call Crlf                                  ; output a CR/LF
27       exit
28   main ENDP
29   END main
```

Microsoft Visual Studio Debu

```
4501
45
1
```

心得:

這次實驗學習到macro的應用, 了解macro和procedure的差異與各地優缺點, 課堂中教授有請大家在實驗課心得回答macro和procedure比較哪一個運行速度比較快,我們這組認為macro的運行時間比procedure還要短,速度較快,因為macro不需要浪費時間jump只需要複製指令,就可以執行程式碼。這次學習到的指令我覺得call WriteDec 和 call Crlf很有趣,因為可以將結果顯示在console window,很有成就感。