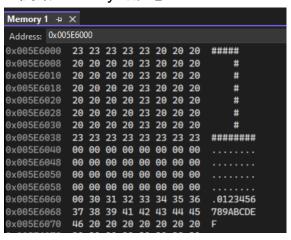
報告標題: HW2

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程式碼與執行流程與記憶體狀態截圖及說明

一開始memory的狀態



轉換後的輸出

```
Microsoft Visual Studio Debug Console

1111 1000
0000 1000
0000 1000
0000 1000
0000 1000
0000 1000
1111 1111

C:\Users\mina6\source\repos\hw2\Debug\hw2.
To automatically close the console when dele when debugging stops.
Press any key to close this window . . .
```

完整程式碼與註解

```
hw2.asm* → X
           TITLE Example of ASM
           INCLUDE Irvine32.inc
                       "#####
           ChStr BYTE
                  BYTE
                             #
                  BYTE
                  BYTE
                            #
                  BYTE
                  BYTE
                  BYTE
                       "#######
                  BYTE
           BitStr BYTE 8 DUP(?)
          change PROC
              mov bl,10000000b
               mov dl,θ
               mov edi,θ
                                        ; 將al定義為ChStr[esi]
              mov al,ChStr[esi]
                                          ; compare al and 2θh
               cmp al,2θh
                                          ; if(al>20h): al=al+07h and continue ; if(al==20h): jump directly to L1
               jz L1
               add al,7h
add dl,bl
shr bl,1
                                          ; add 7h to al
                                          ; add bl to dl
                                          ; bl shift one position right
               jmp L2
                                          ; jump to L2
               add al,10h
                                          ; add 10h to al
              shr bl,1
                                          ; bl shift one position right
                                         ; L2: convert blank to θ and # to l for each byte in ChStr
; 將ChStr[esi]定義為al
               mov ChStr[esi], al
                                          ; add one to esi (move to next position at ChStr)
               inc esi
                                           ; compare bl and \theta
               cmp bl,θ
                                           ; if(bl==0): continue ; if(bl!=0): jump directy to L4
               jnz L4
                                          ; 將BitStr[esi]定義為al
               mov BitStr[edi],dl
                                          ; 將bl定義為10000000b
               mov bl,10000000b
mov dl,0
                                           ; 將dl定義為θ
                                           ; add one to edi
               inc edi
          L4:
               Loop L
               ret
          change ENDP
          main PROC
              mov esi,θ
               mov ecx,64
               CALL change
               mov ecx,8
               mov esi,\theta
          L3:
                                         ; L3: print out the result(BitStr)
               movzx eax,BitStr[esi]
               mov ebx,type byte
call writebinb
               call crlf
               inc esi
               Loop L3
           main ENDP
          END main
```

心得

作業二將之前所學的眾多運算方法綜合起來,我認為非常具有挑戰性,因為需要對每一種指令非常熟悉才能夠加以運用,希望助教能給多一點提示,作業的難度和課堂所學有一定的落差,不過,自己摸索的好處就是能夠對摸索到的知識點印象深刻。