

系級：資電二

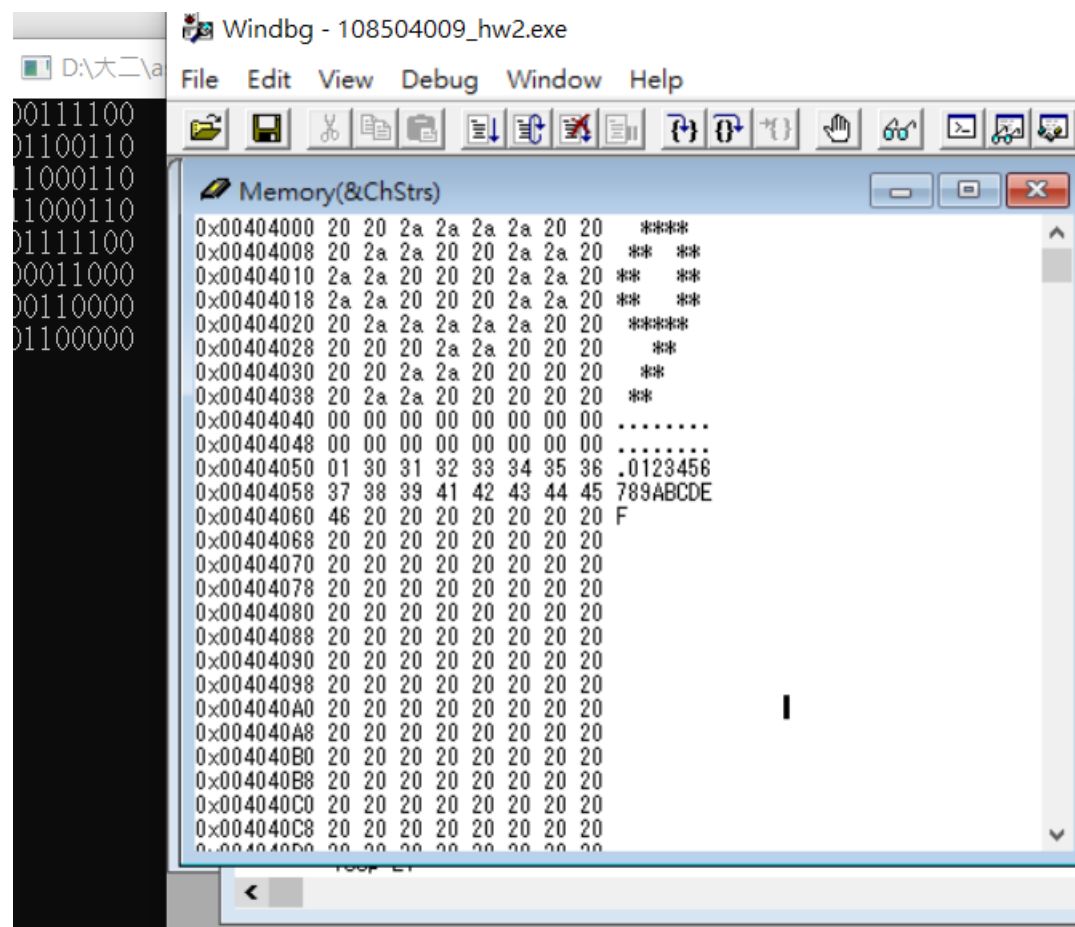
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程式碼及解釋：

```
15 .data
16     ;some data
17     ChStrs BYTE "   * * * * "
18             BYTE " * *   * * "
19             BYTE " * * *   * "
20             BYTE " * * *   * "
21             BYTE " * * * * * "
22             BYTE "   * *   "
23             BYTE "   * *   "
24             BYTE "   * *   "
25     BitStrs BYTE 8 dup(?)
26
27 .code
28
29 change PROC
30     push eax
31     push ecx
32     mov ecx, 8
33     ; let loop time outside the function can be save
34     ; the loop time for each character in line
35
36 L2:
37     cmp ChStrs[esi], 42 ; check if it is * or not
38     je L4
39
40 L3:
41     mov al, '0'
42     call WriteChar
43     jmp L5
44
45 L4:
46     mov al, '1'
47     call WriteChar
48
49 L5:
50     inc esi
51     ; move to next position in the array
52     loop L2
53     ; do this process 8 times
54
55     pop eax
56     pop ecx
57     ; take ecx back
58     ret
59 change ENDP
60
61 main PROC
62     xor eax, eax
63     ; eax = 0
64     mov esi, 0
65     ; let the position of array to be 0
66     mov ecx, 8
67     ; set loop time 8 times
68
69 L1:
70     call change
71     call Crlf
72     ; jump to next line
73     loop L1
74
75     exit
76 main ENDP
77 END main
```

程式完成截圖：



作業心得：在這次的作業中，我學習到了如何在 CMD 中印出東西，還有如何換行，同時利用了 push 和 pop 指令完成了巢狀迴圈，也極更熟悉的利用陣列。